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How can A Research-informed Approach to the Integration of Self-Regulated Learning Strategies Support Sustainable Assessment Practices at a College of Education, Oman?

by

SHARIFA SAID ALI AL'ADAWI

ORCID ID: 0000-0002-9657-9875

Thesis for the degree of Doctor of Philosophy in Education

[April 2020]

University of Southampton

Abstract

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How can A Research-informed Approach to the Integration of Self-Regulated Learning Strategies Support Sustainable Assessment Practices at a College of Education, Oman?

Sharifa Said Ali Al'Adawi

Using a socio-cognitive theory, this PhD thesis investigated the effect of modelling self-regulated learning strategies (SRLS), as highlighted by Zimmerman's (2002) model of self-regulation of learning, in a writing course, in a foundation year programme at a college of Education in Oman, on sustaining assessment practices (SAPs). SAPs are defined as practices that enable learners to take responsibility for their learning as part of developing their self-regulation learning strategies especially their self-evaluation skills and promote transfer of learnt skills and strategies to new learning situations over time. Self-regulation is widely discussed as a key factor for success in higher education, including improving students' academic writing performance. This research hypothesised that the majority of students enter higher education with limited awareness and use of SRLS, and that the integration of SRLS has a positive effect on students' academic performance and on sustaining assessment practices.

To test the hypotheses, a post-positivist paradigm was adopted, as reflected in the choice of the quasi-experimental, three-point measurement design. SRLS were implemented via teacher modelling in a writing course. A convenience-purposive sample of 46 pre-intermediate foundation level students, assigned into two intact groups, was selected to measure the effect of the intervention on one group (experimental) compared to the other (control) group. Students' awareness and use of the strategies were measured by a self-regulated learning multi-items scale, and the effect of the implemented strategies was explored through students' writing scores, observations, semi-structured interviews and field notes. The longitudinal element of the study

intended to measure the effect of such implementation beyond the intervention stage (sustainability) via the SRL scale (post-post-test) and semi-structured interviews was a major feature of this study. Teachers' views on the assessment design, students' SRLS and transferability of skills were also explored through semi-structured interviews.

Findings revealed that the impacts of the intervention on the experimental group were evident in that the students' use of SRLS were stable across the academic year compared to their counterparts in the control group who experienced a general decrease in their perceptions of SRLS across the year. Moreover, a delayed effect of SRLS were detected in the experimental group essay writing scores which were statistically significantly higher than their counterparts in the control group. However, both groups performed equally in more complex writing tasks i.e. writing a research paper. Moreover, Students' reflections of their SRLS use and teachers' reflections of their assessment practices based on Evan's EAT framework identified the importance of scaffolding students' 'transition from school to college', the 'teaching approach' , 'students and teachers' beliefs and values', and 'task demands and cognitive load' as key factors affecting the development of students' SRLS. Furthermore, students' use of SRLS is unique and affected by different factors, one of which is their self-efficacy and their perceived value of the task, and this implies that the existing SRLS models do not represent, as closely as previously thought, the cognitive, behavioural, and affective strategies students utilise whilst performing a writing task, and thus new models are needed.

A key contribution of this piece of research is a framework for training teachers in SRLS theories and models to support students' development of writing skills and overarching self-regulation strategies, emphasising the importance of the addition and/or removal of scaffold as required and highlighting the relation between perceived task demands and the related cognitive load, especially as changes targeting beliefs requires a sufficient period of time to take place. Moreover, implications from this research in relation to the successful implementation of SRLS requires looking at assessment holistically including raising students' and teachers' awareness of their roles, discussing assessment criteria and procedures, identifying the role of students in their learning and assessment process, and continuous evaluation of the assessment objectives and procedures based on students' needs, taking into account contextual enablers and barriers and students' individual learning differences.

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Research Thesis: Declaration of Authorship

Print name: SHARIFA SAID ALI AL'ADAWI

Title of thesis: How can A Research-informed Approach to the Integration of Self-Regulated Learning Strategies Support Sustainable Assessment Practices at a College of Education, Oman?

I declare that this thesis and the work presented in it are my own and has been generated by me as the result of my own original research.

I confirm that:

1. This work was done wholly or mainly while in candidature for a research degree at this University;
2. Where any part of this thesis has previously been submitted for a degree or any other qualification at this University or any other institution, this has been clearly stated;
3. Where I have consulted the published work of others, this is always clearly attributed;
4. Where I have quoted from the work of others, the source is always given. With the exception of such quotations, this thesis is entirely my own work;
5. I have acknowledged all main sources of help;
6. Where the thesis is based on work done by myself jointly with others, I have made clear exactly what was done by others and what I have contributed myself;
7. None of this work has been published before submission.

Signature: Date:

Dedication

To the soul of a leader and a father figure, Sultan Qaboos bin Said, who placed Oman at the heart of all his deeds and inspired Omanis to follow his lead. To my beloved father and mother for their love and support. Last but not least, to the learners, dedicated teachers and academics in schools and higher education, I hope this thesis will enhance your understanding and practice of SRLS and SAPs in your workplace and beyond.

Acknowledgements

This thesis illustrates my learning journey to get my PhD degree. First, and foremost, I thank Allah Almighty for inspiring me with patience and determination to complete this thesis even during times of uncertainty, confusion and doubt.

I would like to extend my sincere appreciation to the Omani government represented in the Ministry of Higher Education for sponsoring my PHD journey. My heartfelt gratitude goes for my family for their unlimited support and encouragement throughout this journey, especially my sister, Turkiya, *for being there when I need you, and for my grandmother whose understanding of distance is 'just a phone call away'*. I am also grateful to my friends in the UK and in Oman, for their prayers and good wishes.

At the academic front, I would also like to express my sincere and deepest graduate and appreciation to a number of people without whom completing this thesis would not be possible. First, I am indebted to Prof. Carol Evans for our thought-provoking discussion in the field of assessment and self-regulation and for her constant guidance and advice. Her influence in my PhD journey goes beyond the completion of this thesis to introducing me to a whole new experience in research and new perspectives of seeing the world. I similarly express my deep appreciation to Dr. Andri Christodoulou for her constructive feedback and professional supervision. Her positive support and guidance were invaluable to the completion of this thesis. Thank you both for your dedicated supervision; you have been a source of inspiration and encouragement for me and I aspire to follow your example in my future career.I also thank Dr. David Galbraith for his constructive and insightful feedback at different points during my thesis writing and for his guidance on statistics. I also thank my examiners, Prof. Maureen Andrade and Dr. Vasilis Strogilos, for a stress-free and an enjoyable viva voca experience. Your recommendations to improve the quality of this thesis were considered and highly appreciated.

I also owe thanks to the participants of this study whether academic stuff or students; without their participations, thoughts and insights, this thesis would not have been completed. I especially thank the experimental and control group teachers who have been patient and

supportive allowing me to observe their classes and intervene in the flow of their lectures' progress whenever needed (in the case of the experimental group).

Definitions and Abbreviations

Definitions

A Semi-structured interview is an interactional exchange of dialogue or topics based on a pre-set questions or topics that are specified in an interview guide (Edwards & Holland 2013; Kajornboon, 2005; Margaret, Harrell, Melissa & Bradley, 2009).

A theme "captures something important about the data in relation to the research question, and represents some level of patterned response or meaning within the data set" (Braun & Clarke, 2006, P. 82).

Assessment Feedback incorporates all types of feedback a student uses to inform the development of their work such as self, others, physical and/or online.

Assessment Literacy is the awareness and knowledge of assessment requirements such as standards of quality, what quality looks and feels like situationally and what constitute quality (Sadler, 1989, 2010, 2013), students and teachers roles in assessment and how assessment elements fit together within a particular course and within their major of study (Evans, 2016).

Assessment Partnership means establishing students as partners, which could mean students' engagement throughout the whole or in some aspects of the assessment process, providing that roles of all partners are clear, integrated and agreed (Evans, 2016).

Authentic assessment activities reflects "real assessment" that one is likely to encounter within professional life and being relevant to areas one might be employed in.

Data corpus "refers to all data collected for a particular research project, while **data set** refers to all the data from the corpus that are being used for a particular analysis" (Braun & Clarke, 2006, P. 79).

Field note: The process of taking notes and writing down information about different parts of the data collection or analysis, i.e. descriptive and factual information about the study, participant, physical setting and challenges during interviews, observations or filling in questionnaires. Field notes can include the researcher's reflections, concerns, to do lists etc. Field notes enrich and

enhance data for context analysis, supplement language-focused date, document emotions, behaviours and identification of bias, facilitate preliminary coding of qualitative data, and increase rigor and trustworthiness (Creswell, 2014).

Modelling: Schunk (2003) defined modelling as "parenting one's thoughts and behaviours after those displayed by one or more models" (p. 160, cited in Mullen, 2011). It refers to cognitive, affective and behavioural changes driven by observing models, which are "real or symbolic individuals or characters, whose behaviours, verbalisations, and nonverbal expressions are attended to by observers and serve as cues for subsequent modelling" (Schunk, 2009, P. 128). Consequently, observers can acquire new behaviour, strengthen or weaken behavioural inhibitions and performance of previously learned behaviours (Bandura, 1986, cited in Schunk, 2009).

Multi-item scale: a data collection tool that contain more than one statement and could aim to collect data about several facets of the same construct. Scales are used to assess people's social characteristics, such as attitudes, personalities, opinions or emotional states (Bergkvist & Rossiter, 2007).

Nvivo is a software that help organise, manage and interpret qualitative data.

Self-regulated Learning Strategies is an overarching construct that encompasses different cognitive, metacognitive, affective and behavioural aspects, whereby learners positively select, structure and create advantageous learning environment to maximise learning. In this research, SRLS is viewed as a construct, a process and an ability that can be developed within a supporting and an engaging learning environment, which in turn highlights SRLS as unique for each learner and even for the same learner from one learning task to another.

SPSS is a statistical package for social sciences: a software that help organise and analyse quantitative data and can provide descriptive and statistical analysis of the data.

Sustainable Assessment Practices enable learners to take responsibility for their learning as part of developing their self-regulation learning strategies especially their self-evaluation skills and promote transfer of learnt skills and strategies to new learning situations over time (my definition).

Thematic analysis is a method for identifying, analysing and reporting patterns (themes) within data. It minimally organizes and describes data sets in (rich) detail (Braun & Clarke, 2006, P.79).

Abbreviations

AES: Academic English Skills

CASs: Colleges of Applied Sciences

CLT: The Cognitive Load Theory

DELL: Department of English Language and Literature

EAP: English for Academic Purposes

EAT: The Effective Assessment Tool; Equity, Agency and Transparency

ELT: English Language Teaching

GCC: Gulf Cooperation Council

HE: Higher Education

HEA: Higher Education Academy

HEAC: Higher Education Admission Centre

HEIs: Higher Education Institutions

ICTs: Information and Communication Technologies

IELTS: International English Language Testing System

IP: Information Processing Theory

KSA: Kingdom of Saudi Arabia

Level A: Intermediate

Level B: Pre-intermediate

Level C: Elementary

Level D: Beginners

MOE: Ministry of Education

MOHE: Ministry of Higher Education

MSLQ: Motivational Strategies Learning Questionnaire

OAAA: Oman Academic Accreditation Authority

PT: Placement Test

SA: Sustainable Assessment

SAPs: Sustainable Assessment Practices

SCT: The Social Cognitive Theory

SPSS: Statistical Package for Social Sciences

SR: Self-regulation

SRL: Self-regulated Learning

SRL-A: Self-regulated Learning-Al'Adawi Scale

SRLS: Self-regulated Learning Strategies

Ss: Students

T: Teacher

TRC: The Research Council

UAE: United Arab Emirates

XCoE/XCAS: X College of Education/previously X College of Applied Sciences.

Chapter 1   Introduction

1.1   Context of assessment

Over the past three decades, there has been a considerable amount of research on assessment including feedback. Key themes emanating from the research data base include discussions on formative and summative assessment, assessment literacy, the nature of assessment and feedback, the role of technology in assessment, authentic assessment, students' engagement in assessment, and lately, sustainable assessment practices (SAPs). Literature indicates ongoing discussion, by Boud (2000, 2007, 2010, 2014, 2015), Evans (2013, 2016, 2018) Evans, Kandiko Howson and Forsythe (2018), Nicol & Macfarlane-Dick, (2006), and Sadler (1989, 2009a, 2009b, 2010, 2012, 2013), on what makes assessment effective and integral to the teaching and learning processes. Theoretical models (i.e., Boud, 2000) were proposed to explain the nature of effective assessment and frameworks have been suggested to support effective assessment practices in the classroom environment (i.e. Evans, 2016; Hounsell, 2007; Nicol & Macfarlane-Dick, 2006).

Many of these approaches consider feedback as the fulcrum that promotes effective assessment practices. Key to this discussion is the concept of sustainable assessment. For example, Boud's (2000) sustainable assessment utilizes self-assessment as key to achieve sustainability, and Nicol & Macfarlane-Dick (2006) and Sadler (1989, 2010, 2012 2013) focused on "effective feedback", and Hounsell's (2007) used the term ''sustainable feedback'' based on Boud's (2000) sustainable assessment article and Nicol & Macfarlane-Dick (2006) work, to characterise and define affective feedback. Moreover, Evans (2016) focused on the central role of assessment design in shaping all assessment processes and interactions. This research defines **SAPs as those that enable learners to take responsibility for their learning as part of developing their self-regulation learning strategies, especially their self-evaluation skills, and promote transfer of learnt strategies to new learning situations over time; integration of self-regulated learning strategies into higher education institutions (HEIs) courses is proposed to promote sustainable assessment practices** (see section 3.2).

1.2   Problem and significance of study

This study contributes to the existing literature in assessment and self-regulation as it highlights the importance of investigating assessment practice holistically and sheds light on the role of self-

regulated learning strategies in sustaining assessment practices; it is key to this argument to indicate that for the purpose of this study SAPs are considered effective, sustainable and transferable in/to new learning contexts (effective assessment and SAPs are used interchangeably). This research is also of a continuing significance to students, teachers and policy makers who are directly or indirectly affected by SAPs in scaffolding students' learning and improving the quality of education at HEIs.

To begin with, aiming for sustainable assessment practices solely through feedback may leave other key aspects of assessment marginalised, under-investigated or investigated in isolation, such as assessment literacy, design and assessment role in promoting self-regulated learning strategies (SRLS). This may be attributed to contextual limitations such as time, resources and/or policy, which are likely to be affected if major changes in the assessment practices are suggested. Consequently, effective assessment practices (hereafter, sustainable assessment practices-SAPs) are often misinterpreted as a task delivered in the classroom for which students receive feedback. In fact, assessment is poorly researched in terms of assessment and feedback classroom interventions in language teaching. Reports on the effectiveness of actual implemented assessment practices are few in comparison to the conceptual and theoretical discussions surrounding learning and assessment (Farley-Ripple, May, Karpyn, Tilley & McDonough, 2018; Schneider& Preckel, 2017; Panadero, 2017). Approaching SAPs through a single focus on feedback neglects assessment literacy, assessment design and SRLS, which are all essential elements in sustaining assessment practices (Evans, 2016). SRLS, for instance, provide enlightening answers for stakeholders to questions such as 'why do some students succeed in school, seem interested in the content of a subject, put effort and keep to regular schedules while others do not?' (Zusho & Edwards, 2011). Since SRLS help learners succeed academically (i.e. Bembenutty & Chen, 2005; Bembenutty &White, 2013), there is no reason to suggest that SRLS' impact diminishes by the end of an academic course. Despite the recent focus on SRLS to achieve academic success, the concept and its application is rarely discussed as a means to achieve SAPs. In support of SRLS, a contention of this thesis, is that they can be implemented in a curriculum using resources efficiently, if planned appropriately, to support students' current and future learning.

This research proposes implementing SRLS to sustain assessment practises during and after graduation, by transferring learnt strategies beyond a course of time, as implementing SRLS is likely to be conducive for students, teachers, policy makers and researchers in the context of this study involving implementation of SRLS in Higher Education in Oman. Students, for example, can gain confidence knowing that learning is not all about being intelligent (a mental ability), but about intelligently planning, monitoring and reflecting on the learning process (Zimmerman,

1989). Realising that SRLS are not a 'fixed personality trait' (McCombs, 1989; Vermunt & Verloop, 1999), but a cyclical process of adapting and training and that any student, including low-achievers, can learn to be self-regulated (Clark, 2012; Pintrich & Zusho, 2002), is likely to increase motivation and academic achievement and foster future skills. Accordingly, failure can become a learning experience, which allow students to discover strengths and weaknesses, and a motive for working hard on adapting SRLS instead of surrendering to the assumption that an individual does not have the ability or intelligence to pass a course, regardless of the individual differences (i.e. intelligence, personality traits, learning patterns and background experience).

Moreover, the expansion of the amount and sources of information learners are bombarded with today makes learning to self-regulate an urgent matter (Cash, 2016). In post-secondary education, more than in school, students are required to be proactive, responsible, focused and to direct their learning on their own (Cash, 2016). Parents and teachers, who may have taken that responsibility, are encouraged to pass it on to the learners to prepare them for lifelong learning beyond formal instruction and graduation (Bembenutty, 2011). Expecting school graduates to take full responsibility for their learning without training, after years of depending on adults to do it for them is illogical and unfair. Thus, there is a percentage of these students, who fail or drop out of higher education for their inability or unwillingness to take responsibility of their learning, which emphasises the need to train college/university new intakes of students on self-regulation to prepare them for the college/university life and beyond (Bembenutty, 2011; Cash, 2016; Biggs &Tang; 2011; Weinstein, Acee & Jung, 2011; Zusho & Edwards, 2011). Following from the discussion of SRLS' importance for university students, it is even more salient for teacher trainees to foster self-regulation emphasising self-assessment, self-reflection and self-directed learning, as they will be required to foster these sustainable skills in their future students (Bembenutty, 2011). Selecting English teacher students for the investigation of the effect of the implementation of SRLS into a writing course corresponds with these learners' future professional role as educators, preparing learners to be future educators and the need to self-regulate their learning and their life to be successful models for their students.

Furthermore, this study is significant for teachers, who are likely to gain the fruits of their hard work: gaining satisfaction from observing the change in students' attitudes, represented in students' genuine interest in the academic content, is rewarding for teachers. This coincides with prioritising students' learning and transferability of the learnt skills as the main objective of assessment instead of streaming students according to a continuum of grades (the traditional summative view of assessment) or merely subjecting students to teachers' judgment or peers' feedback (formative) (Boud, 2014). In addition, getting students to understand that they are

responsible for their own learning is practical for teachers, in enabling them to focus on enriching the teaching/learning environment instead of directing students on how to learn and study every academic semester. Additionally, in the longer term it is likely to save teachers time and effort, trying to justify students' marks, as self-regulated learners can accurately attribute their success or failure to their choice of SRLS, adapt and improve their performance accordingly. Importantly, understanding of SRLS can enhance the teaching and the learning process (Waring & Evans, 2015).

This study may also be significant for policy-makers who are usually seeking accountable measures, facts, numbers and statistics that prove the effectiveness of the teaching and learning approaches and methods in context and that investment on education is paying off, which can be achieved by supporting that all students can learn with effort from, and training for the teachers and students. The speed of the learning process may differ between learners, as some may need more intensive training than others may; intelligence quotient (IQ) is but one factor that affects SRLS. Therefore, the low achievers admitted to the Colleges can perform better by being trained on SRLS during their first year at college. This ensures that financial, human and environmental resources are not wasted, successfully met and positively exploited. In other words, providing it is the right choice of study, student retention is likely to increase if both teachers and students believe in the student's ability to learn and both parties are equally committed to the process of learning and teaching. Resources are, therefore, not wasted on students who may drop out of college even in their final year of academic study because these students cannot manage and meet college requirements (personal observation and experience). The gains are even more encouraging knowing that the impact of acquiring SRLS is not limited to the duration of students' academic programmes but could extend to learners' future jobs and lives.

SRLS implementation in the foundation programmes in higher education in Oman is even more urgent as college-level students learning English as a Foreign language need to foster skills that promote their active and confident participation especially as research findings have indicated that high school graduates lack linguistic and communicative skills (Al-Issa, 2005, 2011; Al-Mahrooqi, 2012a). This is also in line with Al-Issa (2011) findings concluding that despite the large amounts of investment in teaching English and the reform undertaken in 1998/1999, the school curriculum has not met the key objective in graduating well-equipped students with lifelong learning and communicative skills that are required in the workplace. This issue becomes even more prominent after college graduation as research findings (i.e., Al-Badawawi, 2011; Al-Issa, 2005, 2006, 2011; Al-Mahrooqi, 2012a, 2012b) have indicated that students graduate from college with inadequate language and communicative skills, which result in unemployment or lack of productivity in the workplace. In this thesis, part of the problem is attributed to the foundation

programmes not being effective in their mission to scaffold students' learning, which could be minimised by integrating SRLS within the curriculum.

1.3   Research questions and approach

Published research on SRLS and SAPs in assessment practices within the Arab world (especially Oman) is limited (i.e. AL Barwani et al. 2012; Al Kharusi et al., 2012; Al-Rawahi & Al-Balushi, 2015). The potential impact of implementing SRLS in a foundation programme, in a higher education institution in Oman, on sustaining assessment practices has considerable potential to inform the teaching practices and the students' learning outcomes.

This research aims to answer the following key question:

How can A Research-informed Approach to the Integration of Self-Regulated Learning Strategies Support Sustainable Assessment Practices at a College of Education, Oman?

By exploring the following research Sub-questions (RQs):

RQ1: What are students' perceptions of their SRLS at entry level?

RQ2: Would a SRL intervention in a writing Academic English Skills (AES) course, involving teacher modelling of SRLS improve students' writing academic achievement?

RQ3: What evidence is there that the impacts of the intervention are sustained beyond the immediate assessment task(s)?

This chapter introduced current debates and issues related to assessment and specifically considers sustainable assessment practices (SAPs). It highlights the lack of research associated with SRLS and SAPs, the significance of exploring the relationship between both constructs and the potential impacts of combining these constructs on developing assessment practices. In addition, the nature of assessment in the context of Oman higher education system and colleges of applied sciences is explored in Chapter 2, drawing attention to the lack of research in the area. Subsequently, Chapter 3 explores misinterpretations in relation to SAPs and argues for investigating assessment as a whole-package construct (holistic approach) that tackles assessment literacy, SRLS, feedback and design of assessment, which reveals similar characteristics of SAPs and SRLS. Reflecting on the literature of assessment, the potential gaps worthy of exploration are explored through a focus on SRLS. This research outlines a conceptual framework in which SRLS are implemented in a writing course in order to measure the impacts of

SRLS on sustaining assessment practices (transferability of learnt strategies). Then, the adoption of post-positivist, quasi-experimental design, the selection of sample size and instruments, illustrating the timeline of data collection and potential data analysis tools, predicting threats to validity and ways to overcome them in the context of study are discussed in Chapter 4. Chapter 5 presents the findings and analysis of the data collected during Autumn 2017 and Spring 2018 via a multi-items scale, observations and semi-structured interviews. Discussion of the findings in relation to the literature of assessment and self-regulated learning is presented in Chapter 6. Finally, Chapter 7 highlights important findings and consequently provides recommendation for practice and research.

Chapter 2 Context of the study

This chapter provides a contextual overview of the Sultanate of Oman, where the study was conducted, to set the scene and shed light on the significance of this study on SRLS and its effects on SAPs. This chapter is structured to introduce the Sultanate of Oman within the Gulf Countries Council (GCC) and the Arab world, Oman's Educational System, the status of its higher education (HE) such as Colleges of Applied Sciences (CASs) and X College of Education (XCoE) within CASs, the foundation year programme and the status of writing courses within it and whether these courses promote SRLS. Finally, the significance of this study in relation to previous research findings in Oman is discussed.

2.1 Sultanate of Oman

Oman is the oldest independent country in the Arab world, and it is located in the south-eastern coast of the Arabian Peninsula (Peterson & Crystal, 2016). It is the second largest country in the Gulf Countries, bordered by the United Arab Emirates (UAE), the Kingdom of Saudi Arabia (KSA), Yemen, Gulf of Oman and the Arabian Sea. It has a strategic position being located at the mouth of the Arabian Gulf. Oman has a long history as its empire reached its peak in the 19th century and stretched down the east coast of Africa (Peterson & Crystal, 2016). With a population of about 4676377 persons, 2681448 of which are Omanis (NCSI, 2019), Oman is considered a small country in population; however, it is larger than the UK in size. Arabic is the official Language and Islam is the majority's religion in Oman.

Oman's economy has been heavily dependent on oil but recent drops in the price of oil have led to diversification of the economy to include emphasis on other sources of income such as tourism, education, agriculture and mines. Oman's investment in Education goes back to 1970, the year that marked the beginning of Oman's renaissance in which education was the cornerstone as emphasized by His Majesty's stating that "Education is the cornerstone for the progress of society which the state fosters and endeavours to spread and make accessible to all" (Royal Decree 101/96, Article 13, November 1996). Principles of Education are driven from the Islamic law and Sharia and these are influenced by political and world changes. This philosophy stresses that the government, is responsible for providing all people with a basic-education in primary-school (age 7-11) (Al-Lamki, 2009).

Even though Education was his Majesty's (Sultan Qaboos, ruler of Oman) main concern as soon as he came to the Crown, education has not paid off the huge amount of investment spent on teaching. In particular, Oman has invested heavily in the teaching of English as the only foreign language starting from grade one (age 7) to postgraduates as English became the fundamental tool for world communication and modernisation and an access-gate to knowledge and science (Al-Issa, 2006). Teaching the English Language gained a special place in the renaissance as it was and still is considered a gateway to the development of the country.

Teaching English at school has undergone an overall reform (Table 2.1) that covers not only the curriculum, years of teaching English but also objectives. Prior to 1998/1999, the aim of teaching English to school students was equipping these students with basic knowledge of English that enables them to continue studying English after they left school (Al-Lamki, 2009). Thus, the 1998/1999 reform aimed at major changes in the English Curriculum in school emphasizing teaching English from grade one within a student-centred environment and integrating assessment into learning and teaching (Al-Lamki, 2009) and yet students continue graduating from high school with limited English proficiency skills (Al-Mahrooqi, 2012a).

Table 2.1 Education Reform of English in the Omani national curriculum (Al-Issa & Al-Balushi, 2011, P.144).

Before 1998/1999	Since 1998/1999
General education Primary school (grade 1-6), Preparatory school (grade 7-10) & High school (grades 11-12).	Basic education school: cycle I (grade 1-4) & cycle II (grade 5-10) caused substantial changes in the school system, curriculum content, textbook development, means of assessment.
Teacher training: mostly 2-year diploma teacher training programme	Teacher training (minimum 4-year BA degree)
English is taught in grades 4-12 Teaching approach: teacher-centred, technology is rarely used, rote learning, assessment: tests	English is taught from grade one More student-centred approach to teaching, different oral, written and project-based assessment means
Mostly in-house textbooks	Post-basic education (high school) (grade 11-12) designed to continue developing basic skills like proper communication skills, problem solving skills, use of mathematics skills personal and social skills, and information technology literacy
All courses are obligatory	Offer of optional courses such as English Language Skills, Graphic Design, Economic Geography, Artistic Skills, Computer Business, Computer science, Geography and Modern Technology, Musical Skills, Physical Education

2.2   Higher Education in Oman

Reforms in the school curriculum, over the last 40 years, indicate the steady steps that school education has taken, outpacing higher education (Al-Jadidi, 2009; Al-Lamki, 2002). Higher education is still on its baby steps suffering from defects such as a lack of research and associated lack of credibility (Al-Issa, 2011). In other words, Oman and other GCC countries have given the teaching of English importance over establishing a research culture and practice, which can be clearly inferred from the large amounts of investment in the teaching of English as a foreign language represented in the curriculum reforms, foreigners-native speakers of English recruitment to teach the language, scholarships and English foundation programmes.

Consequently, English has occupied a very prestigious position in Oman's higher education as the majority of the scientific majors are taught in English (Al-Badwawi, 2011). Moreover, English was the key to 'Omanisation', the gradual replacement of the foreign force by Omani well-equipped graduates, as 'white-collar jobs' (Al-Issa, 2006), well-paid jobs, require very good command of the language. Because higher education is the engine of the national growth, English status as the only high standard foreign language in Oman becomes a sign and a requirement for development.

There are about 65 institutions of higher education in Oman classified into public and private universities, colleges and vocational and health institutes (HEAC, 2017). These different institutions are strong in different art and scientific majors. Some of these are associated with Ministry of Health and thus they tackle scientific majors and aim to sustain health institutions with specialists such doctors, nurses and lab technicians. Others such as Military Technical College is associated with Ministry of defence and thus aim to sustain that field with the required specialists. Oman developed a diverse system of higher education and Table 2.2 represents the higher education governance in Oman.

Table 2.2 The structure of higher education governance in Oman (Al-Badwawi, 2011).

Governing Authority	Institutions
Council of Higher Education	All institutions of higher education
University Council	Sultan Qaboos University
Ministry of Higher Education	Colleges of Applied Sciences & private institutions
Ministry of Health	Health Institutions & Nursing Institutions
Ministry of Manpower	Higher Colleges of Technology, Vocational and Fishermen Qualifying Institutes
Central Bank of Oman	College of Banking and Financial Studies
Ministry of Tourism	Oman Academy of Tourism & Hospitality
Ministry of Awqaf and Religious Affairs	Institute of Sharia Sciences
Ministry of Defence	Military Technological College

As indicated in Table 2.2, the Council of Higher Education governs all institutions of Higher Education even those governed by Ministry of Higher Education (MOHE), which is the body responsible for providing and supervising Colleges of Applied Sciences and many private higher education institutions in Oman. MOHE aims to provide education of quality that "meets the requirements for sustainable development and keeps pace with the world changes and technology" (MOHE, 2016b), however, there is not a precise definition of sustainable development provided in the MOHE website or MOHE official documents. The colleges and universities have been established by royal decrees and students are admitted to these institutions via a well-established electronic system called Higher Education Admission Centre (HEAC), which identifies entry standards and sorts admitted students into institutions based on their preferences and Omani General Education Diploma results (XCAS, 2013). HEAC was established by Royal Decree 104/2005 and Ministerial Decree No. 8/2011; consisting of 39 articles which regulated the admission and acceptance of Higher Education Admission procedures (HEAC, 2016). HEAC presents the options available for high school graduates and the governing body the institution is associated with. These institutions are classified into public and private higher education institutions and they may differ in the nature and levels of degrees they offer (for details see heac.gov.om).

2.3   Colleges of Applied Sciences

Colleges of Applied Sciences (CASs), as indicated in Table 2.2, are under the jurisdiction of MOHE and have been established by virtue of Royal Decree 62/2007 (MOHE, 2016a) to meet the labour market needs of specialists in International Business Administration (IBA), Information Technology (IT), Communication Studies, Design, Engineering and Biotechnology. CASs offer diploma and bachelor degrees and the medium of instruction is English. These colleges started in 1975/1976 and were called 'pre-service teacher training institutes' and then converted to middle colleges for teachers offering diploma degree in 1984/1985 (MOE, 2002, cited in Al-Lamki, 2009). There are six CASs distributed in different regions in Oman. Each college is a centre for one of the applied sciences majors offered across the colleges. Duration of study at CASs range between 4-6 years, which depends on whether students need to take foundation programme (1-2 years) or not. The majority of students need foundation programme to improve their mathematics, computer, language and study skills.

2.4   X College of Education (XCoE)

Out of the six colleges, X is the only CAS offering a Bachelor Degree in English Teacher Training (B.ED). Recently, as from the academic year 2016/2017, XCAS has become a College of Education (XCoE) offering BA degrees in English and some scientific majors (chemistry, mathematics, biology and physics) in response to the change in the labour market needs, which requires changing the medium of instruction to Arabic except for the English major. Consequently, IBA & IT are going to phase out in the coming two years at XCoE. X is similar to the other colleges in its organisational structure (see Appendix A) with the dean at the head of the organisation. There are different administrative and academic departments (currently-2019, IT Department, IBA Department, Physics, Biology, Mathematics, Chemistry, General Requirements Department (GR), Scientific Research, Educational Studies and English Department).

According to 2019/2020 college statistics, there are 89 administrative staff, and 33 Omanis and 73 non-Omani, seven on study leave and one on delegation, academic staff assigned according to their specialisations into seven departments: IT, IBA Physics, Biology, Mathematics, Chemistry and Department of English Language and Literature (henceforth, DELL). There are 1526 students at the college in Autumn 2019, 807 of which are females. Students are admitted to XCoE via HEAC based on its entry standards. Students at XCAS/XCoE are from different parts/regions in Oman and they are financially supported by the MOHE/college (just like other public institutions that offer free education) by providing textbooks, access to computers and internet, accommodation and monthly allowance.

CASs emphasize students' employability after graduation in the third strategic goal of the college by advancing students' learning via ensuring that the programmes are relevant to the students' needs and to the job market demands and that they help graduate students of international standards (Oman Academic Accreditation Authority (OAAA), 2014). However, 2012-2013 self-study report of the college, most recent report, indicated that less than 50% of 2011-2012 English Language Teaching (ELT) graduates, 16% of 2013 IT graduates and only 10% IBA graduates of the same year were employed. CASs hopes for its graduates to be in demand and employable in the local and regional markets, were not fully met due to various reasons that may include not attaining IELTS (International English Language Testing System) score for ELT graduates or lack of the required skills for the job, limited job vacancies, graduates' disinterest in the available jobs or the commuting distance especially for girls.

2.5   ELT degree

As the English language became the language of science, communication, business and technology (Al-Issa, 2006), the majority of the scientific majors in Oman are taught through the medium of English and CASs are no different except for XCoE (after becoming a college of education). Therefore, and in order to make the content of the courses, taught in each degree offered at CASs, accessible to students, Departments of English at the colleges are responsible to offer academic and general English courses (Al-Badwawi, 2011). The academic and general English courses are offered in the foundation programme to students scoring equivalent to less than band 5 in IELTS and streamed into different levels of English proficiency based on a placement test (MOHE, 2011; MOHE, 2013, pp.11-13) designed under the supervision of MOHE. English for Academic Purposes (EAP), however, are offered by the English department at the colleges, for the first and second year of the academic applied majors.

The English department at XCoE offers a Bachelor of Education degree (B. ED) in English Language and Literature, in addition to the general and academic courses for the other majors. The department aspires to provide the labour market with academically and educationally well-qualified teachers to teach English in Omani schools (XCAS, 2016a). B. ED in English was first offered in 2003 at the college and carries on sustaining the Ministry of Education (MOE) with teachers of English since then. It is a four-year programme, in which students are taught a mixture of skills, linguistic and literary courses (Appendix B: study plan), preceded by a 1-2 years of foundation programme for students of inadequate English proficiency skills. Attaining a B. ED in English Language and Literature requires from students to complete 132 credit hours and pass all compulsory and elective modules covering theoretical and practical subjects within the major.

Graduates with a B. ED in English have different options for employment: teaching at school, applying for a postgraduate scholarship and teaching at higher education institutions afterwards or seeking other government or private sector opportunities. Getting a job as a school teacher requires completing 132 credit hours, passing all courses and scoring a minimum of band 6 in IELTS regardless of their college grade point average (GPA). Recently, the Ministry of Education (MOE) proposed a 2-year temporary teaching license for new teachers, after which teachers receive permanent licenses if they meet the required conditions (MOE, 24 January 2017). The proposal is still under study and steps are been taken to implement it.

2.6   Foundation Year programme for ELT

As more students continue to graduate from high school with insufficient English proficiency and competency skills (Al-Hajri, 2014; Al-Issa, 2006; Al-Mahrooqi; 2012a,b), foundation programmes are essential for students admitted to HEIs to compensate for the lack in students competency level and prepare students to embark on the academic programmes (Al-Badwawi, 2011). Foundation programmes are considered an integral part of all HEIs in Oman, as they aim to provide a solid foundation of language proficiency, study skills, computer and numeracy skills required for academic study (Al-Badwawi, 2011; Al-Hajri, 2014). Therefore, foundation programmes at CASs comprises of English language, Numeracy, Computer skills and Study skills (MOHE, 2011; MOHE, 2013, pp. 11-13). English is the medium of instruction for the programme that extends from one semester to four semesters according to the students' levels of English, math and computer skills indicated via placement test results. However, study skills are not taught as a separate course as English, math or computer skills, but is claimed that "the Foundation Program offers an integrated English and study skills" (MOHE, 2011, p. 2; MOHE, 2013, p.11).

The Foundation year placement test (PT) has three different parts: English language placement test, Computer and Mathematics. English Language placement test includes grammar, reading and writing sections (Al-Adawi & Al-Balushi, 2016). It is an hour and a half exam out of 75 marks divided between the three sections. Students are streamed into four levels according to their performance in the exam (A, B, C & D). A is equal to Intermediate level and D Beginners (For more details on the English Language PT see Al-Adawi & Al-Balushi, 2016). Students study the four language skills in these four levels but the level of the materials taught increase in difficulty as students' progress from one level to a more advanced level (see Table 2.3). For the purpose of this study, SRLS is implemented in Level B (further details are discussed in the Methodology section).

Table 2.3 The English foundation programme levels and requirements at XCoE (MOHE Foundation
    Programme, 2011, P.2).

Code	Name	Contact hours/week	Prerequisite
English and Study Skills			
ENGL 3001 (Level D)	General English Skills: Beginners	20-24	None
ENGL 4001 (Level C)	General English Skills: Elementary	20	Completion-not passing – of ENGL 3001 or equivalent PT entry sore
ENGL 5001 (Level B)	General English Skills: Pre-intermediate	10/11	Pass in ENGL 4001 or equivalent PT entry score
ENGL 5002 (Level B)	Academic English Skills: Pre-intermediate	9/10	Pass in ENGL 4001 or equivalent PT entry score
ENGL 6001 (Level A)	General English Skills: Intermediate	10/11	Overall pass in ENGL 5001+ 5002 or equivalent PT entry score
ENGL 6002 (Level A)	Academic English Skills: Intermediate	9/10	Overall pass in ENGL 6001+ 6002 or equivalent PT entry score

2.7   Writing skills for ELT

During the foundation year, students take up to 20-24 hours of English language classes every
week in which they are taught the four language skills. There is a huge emphasis on the writing
during each level especially the pre-intermediate (B) and intermediate (A) levels in which students
are expected to summarise, produce short to long texts, and interpret graphs and written texts
(Al-Badwawi, 2011; MOHE, 2011). These foundation programme-writing courses are aimed to
serve as springboards bridging high school and undergraduate academic requirements. Students
are required to write longer texts that implement critical thinking skills in their academic
programmes such as Advanced Writing I (year 1/ autumn semester), Advanced Writing II (year 1/
spring semester), Report Writing and Creative Writing (year 2). While Advanced Writing I aims to
introduce students to the different genres of writing, brainstorming, writing and editing,
Advanced Writing II prepares students to write well-annotated and well-written proposal and
written papers. Report Writing supports students' work on a particular area of interest from
taking notes, researching, writing and drafting to the final written and oral presentation of the
report.

Such courses demand that students have some background in the writing process and research
skills, ability to identify task requirements and familiarity with context and resources to produce a
good written text (Al-Badwawi, 2011). These skills are assumed to be integrated within the writing
courses and sometimes teachers assume that students have already acquired these skills in their

foundation programmes along with study skills. Writing task requirement, writing performance, self-evaluation and strategies for handling feedback are part of self-regulated learning strategies (SRLS), which can have great effect on students' performance if implemented properly in the foundation programme (in theory).

2.8   Self-regulation strategies and writing skills

SRLS refers to the strategies individuals should have in order to be proactive and regulate their learning activities in or outside the learning environment. These strategies include setting goals within time frames, implementing all emotional and environmental resources to achieve tasks economically and effectively and developing a sound judgement of one's academic performance (Zimmerman, 1989, 2000, 2001, 2002, 2011; Zimmerman & Campillo, 2003). Examining level B Academic Writing course outline of the English Language major foundation programme indicates that these skills are not really emphasised (see Appendix C: Level B AES Course outline in Autumn 2017, which indicates study skills and critical thinking skills as an objective but does not elaborate on these skills). For instance, self-evaluation is rarely practiced in Level B writing course as it is not within course objectives. According to the foundation programme document, study skills are integrated into the programme in the different levels and courses.

However, SRLS are not intensively tackled in the foundation programme. The so-called 'study skills integrated in the English foundation courses', stated in the foundation programme document (MOHE Foundation Programme, 2011), are the closest form of self-regulation, students experience through the foundation programme, if implemented. The researcher, as part of her responsibilities as a lecturer and a previous foundation programme coordinator, encountered many students in their second or even final year at the academic programme, who did not know how to interpret the requirements of the task properly or lacked the research skills required to write well-annotated and well-supported arguments. These students were either oblivious of the support system available for them, or they tended to consider it a sign of weakness to seek help. Therefore, students' results and teachers' observations indicated that there was no actual integration of study skills or self-regulation strategies and if there were any, these skills and strategies were not transferred to other subjects or advanced levels of the same subject.

At the college there seems to be a misguided perception among some teachers and students that 'effective assessment practices' means that the majority of students score high regardless of their progress during the course, degree of students' utilisation of the resources available or how well students use the acquired skills after completing the course. This is indicated in how students

classify teachers into those who give high marks and those who do not, which can also be attributed to students lack of self-judgement and poor self-reaction to the assessment, as they attribute their performance to the teacher personality or style of teaching and tend to forget their role in the assessment process.

Lack of SRLS among the foundation and academic major students appears also in their lack of commitment to attend classes except to avoid failing the course if they reached 20 percent of absence. Students may feel that they do not have to attend classes as materials are available as hand-outs or soft copies. Students' lack of ability to time-manage their learning is also indicated in the late submission of written tasks. In spite of the calculated measures implemented to reduce late submission and encourage students to use a process-approach to writing (i.e., structured graded assessment during the course time), some students still submit only the final draft even when the process writing is allocated some grades. These students aim for the pass-grade only. Integrating SRLS into the foundation programme, however, can develop students' goal setting and motivational beliefs strategies, can develop students' writing skills, and promote transfer of learnt strategies to new learning tasks which are important skills and strategies for academic achievement.

2.9   Status of SRLS and assessment research in Oman

There is a lack of research in education, especially in SRLS and assessment, in Oman. Akkari (2004, cited in Al-Issa, 2011) criticised the status of research in the Arab world, of which Oman is a small part, and he described it as being limited and inadequate. This was reported again by the UNESCO (2005, cited in Al-Issa, 2011), which ranked the Middle East countries, including Oman, at the bottom of the hierarchy in terms of research, in spite of the large amount of money invested in teaching.

XCAS (2013) attributed the lack of research at XCAS to lack of funding, lack of research culture, lack of time and inadequate research facilities, and to add to this, X college did not have any clear policy or procedures in relation to research ethics (OAAA, 2014), up until October 2018 where a document of CAS policies procedures, including research ethics, has been formulated and its English translation was circulated among academics in May 2019; to be reviewed in October 2020. The lack of research funding is a logical consequence to the lack of funding organisation in Oman as The Research Council (TRC), initiated in 2005 by royal decree 54/2005 to support and fund innovative research projects in Oman (TRC, 2011), is the only official funding organisation. Thus, a culture of research is still new in Oman and most of the research done is unpublished and in

compliance with study degrees' requirements. For instance, DELL contribution to research in 2019 is limited to 6 published research papers, some are still in print and 4 of these were written by the same author. However, there is a growing interest in research represented by the growing number of conference presentations (25, 13 of which are presented by the same person) and workshop facilitation and participation (8).

Literature indicates that many fields are under-researched of which education constitutes a large part. Classroom research, for instance, and even if frequently conducted as part of the teaching development process, is self-initiated and funded by teachers, and is rarely published. Therefore, education failure to meet its objectives of graduating skilled and well-equipped individuals, who satisfy the job market (Al-Issa, 2005, 2011; Al-Lamki, 2009) can be directly attributed to the lack of published research in education. Moreover, if published research exists, teachers are seldom provided with institutional access to research databases and journals of quality to keep up-to-date with recent advancement in research. This aligns with the limited research of SRLS and assessment conducted in Oman (i.e. Al-Rawahi & Al-Balushi, 2015; AlBarwani et al., 2012; Al Kharusi et al., 2012). The little research that tackle how students manage their learning is written in English and conducted in different contexts, which may not be accessible for Arabic speaker teachers or applicable to Arabic teaching context.

2.10   Summary of context

To sum up, research in SRLS and assessment in Oman, GCC and the Arab world is inadequate and suffers from lack of funding and research facilities, and lack of a research culture. Considering that development, fundamentally, requires research and publication to discover deficiencies and rectify them, GCC countries need to pay special attention and invest in research to take the right steps towards development (Al-Issa, 2011). The next chapter explores the literature on SRL and assessment practices in the world, highlighting the gaps in research with special reference to the Omani context.

Chapter 3   Review of the literature

The implementation of SRLS to promote SAPs is advocated. In this chapter, the current status of assessment in higher education (HE) with special reference to the Omani context is discussed. The key premise is that assessment should lie at the heart of the learning process (Boud & Falchikov, 2007), and that sustainable assessment (SA) involving self-regulation (SR) is fundamental in support of students' learning. The first section provides a short overview of current debates within assessment and feedback. Then, the nature of SAPs, its features and frameworks for implementation are discussed. Section 3 sheds light on the cognitive, emotional and behavioural SRLS and its cyclical processes, which are later linked to SAPs in section 5. Section 4 discusses the impact of SRLS on academic achievement and in particular on writing skills development. Then, the significance of this research is highlighted in relation to current gaps within the literature and the conceptual framework underpinning this research is presented in sections 6 and 7. Finally, major issues, and theoretical and methodological considerations are summarised in Section 8.

3.1   Overview of assessment

There are different perspectives about what constitutes self-regulation and approaches on how to implement self-regulation in the classroom are even more diverse. Concepts such as formative and summative assessment, the role of technology in assessment, authenticity of assessment, assessment feedback, assessment literacy, students as partners, theory and practice of assessment and sustainable assessment are often discussed in relation to self-regulation. This section aims to highlight the emerging gap in the literature between theory and practice and suggests sustainable assessment, through the implementation of self-regulation, as a way to bridge this gap.

3.1.1   Formative and summative assessment

Formative and summative assessment debates are central to the implementation of self-regulation (i.e. Hawe & Dixon, 2017). The separation or integration of formative and summative assessment, the feasibility of such integration, and its effects on students and teachers, continue to dominate among educationalists and policy makers (see Boud, 2014; Clark, 2012; Sadler, 2010). A simplistic understanding and interpretation of summative assessment suggests that assessment is a teacher's

secret business through which students are subjected to teachers' judgement in comparing students' performance for accountability purposes (Boud, 2014). Formative assessment, however, was proposed to create a sense of learning ownership in students by emphasising the concept of assessment for learning, where students are expected to participate in the assessment process. Students are expected to help teachers evaluate their own learning and support other students by providing feedback (Clark, 2012).

This view of formative and summative assessment positions the two types of assessment at opposite ends of the assessment continuum, which makes integrating the two, hard to conceptualise. In support of differentiating the functions of the two types of assessment, Grosas, Raja, Schuett, chuck and Miller (2016) found that formative tests were not effective in improving summative assessment results and they recommended using formative assessment to address bad habits rather than providing exam practices. Moreover, Harlen and James (1997) criticised the traditional view of summative assessment as an end-evaluation of the learning process occurring at the end of a learning course. They pointed out that summative and formative assessment have been confused in practice and that assessment has failed to inform students' learning, which should be the main objective of assessment. They stressed that summative assessment should be summing up evidence about student learning rather than summing across a series of judgement on completed assignments, to provide a comprehensive understanding of students' learning and to function as a means of informing students' learning.

Reflecting on the previous arguments, however, stresses that a realistic understanding of assessment indicates that there is not a clear border between summative and formative assessment as formative assessment can be used summative-ly and vice versa (National Research Council, 2001), and that they both should inform students' learning in their own capacity and through different means, whether feedback or tests. This integration of formative and summative assessment to inform students learning within context is suggested to develop self-regulated learners.

3.1.2 Authentic assessment

Authenticity in assessment has been widely discussed as an essential factor in implementing self-regulation in education. There has been an ongoing discussion on what is considered to be authentic assessment and what is not. Wiggins (1993, cited in Swaffield, 2011), for instance, argued that authentic assessment activities reflect the kind of problems and obstacles a professional of a certain

field may encounter and thus they should learn how to solve such problems, or it is the 'practical application of tasks in real-world settings' as defined by Fook and Sidhu (2010, P. 154). However, natural settings are not always practical in certain environments for ethical issues such as in medicine or education where the participants are human beings and assessment could negatively affect individuals' lives. For example, in the context of the classroom, assessment should fit within the students' schedules and abilities ensuring that it does not affect students physically. The emotional factor, however, is hard to control, therefore, the assessment process should be carried out ensuring the consent and readiness of the participants, which requires 'preparing students for assessment' by clarifying assessment objectives, procedures and processes.

Hetzner, Brna, Dimitrova, Steiner and Colnan (2011), for example, suggested simulated environments as a solution for such cases, as in medicine and education, nevertheless, simulated environments have their own drawbacks in terms of cost, and the limited scenarios they can offer, and/or their lack of responsiveness to unexpected incidents that occur in real situations and cannot be controlled (Hetzner et al., 2011). Swaffield (2011) comments that such assessment activities are still summative in essence and she argues that authentic assessment for learning is formative engaging both teachers and students and focuses on the present or immediate future that can expand to the far future.

In developing curriculum experiences that promote 'closeness to practice', it is equally important to prepare students for such experiences; this requires appropriate scaffolding and removal of it which demands an in-depth understanding of students' starting points and their learning dispositions. For instance, Grossman, Hammerness, and McDonald (2009) suggested approximation of practice for teacher education/preparation programmes to avoid the separation between theoretical and practical parts and align school and university involvement in forming the professional identity. Grossman et al. (2009) suggested approximating professional practices for novices via evolving curricula around a core set of practices in which novices learn to incorporate knowledge, skill and professional identity. These sets of practices may include 'learning about students', 'understanding' and 'orchestrating classroom discussion', which requires attaining to several critical skills such as learning how learners learn and being sensitive to individual differences and contextual limitations. The authors argued that this practical implementation of knowledge and skills should be integrated and emphasised because they should be part of the common language of novices, or automatically and straightforwardly utilised by them. Grossman's and his colleagues' understanding, and implications of authentic assessment aligns with how authenticity is tackled in this research as part of

the promotion of self-regulation. Therefore, a practical definition and implications of authentic assessment in the teaching/learning environment are essential to support self-regulation.

Within this context, and drawing on the literature mentioned above, authentic assessment in this thesis is defined as that which closely attends to current and future requirements in the workplace and in life more generally as part of life-long learning. In the context of writing skills, it is about honing assessment to best measure acquisition of such skill sets, and the development of competencies to enable this, i.e. writing what matters to teachers such as essays, reports and/or feedback emphasising quality of writing including accuracy, fluency and clarity of message, in addition to building a professional identity and the ability to report research findings.

3.1.3   The role of technology in assessment

The role of technology in supporting assessment practices is fundamental to the integration of self-regulation development, as information and communication technologies (ICTs) are expected to assist students' monitoring, integration and evaluation of their learning as they engage in learning tasks (Mooij, Steffens& Andrade, 2014). Today, learners encounter a wide variety of information from different sources and they have to make informed decisions on what categorises as useful or useless, on their own. Some researchers (i.e., Aoki, Setaa & Okamoto, 2010; Bennett, Dawson, Bearman, Molloy & Boud, 2016; Bort-Mir, 2015) have recommended using technology to overcome the drawbacks of current assessment practices, supporting students' ownership, engagement, and/or independence and to offer time flexibility (Bennett et al., 2016).

Technology has the potential to assist assessment and feedback processes, and student engagement and ownership but it is not without issues i.e. expenses and reliability. Using technology to support assessment requires financial and human resources reflected in the infrastructure, i.e., technology, tools, and training staff on their uses and benefits. Additionally, technology is not always reliable as a minor power outage could stop its functionality. It is important to emphasise that technology implementation should be for the purpose of achieving assessment objectives and enhancing assessment not burdening teachers and students to an extent where using technology becomes an objective not a means. It is important to differentiate technologies that are designed to replace the traditional classrooms from those that can complement and enhance the learning processes and interactions. Schenider and Preckel (2017), in their systematic review of meta-analysis of variables affecting academic achievement, stated that online learning was as effective as classroom learning,

however, they found that a blended learning using a mix of online and classroom learning was more effective than online learning as they complement each other to enhance classroom interaction, i.e. when digital online tools are utilised as a mean to reflect social, cultural and work realties (see Mooij et al., 2014).

Therefore, the purpose, timing, means and techniques for using technology should align with the general objectives, plans and context of assessment. In summary, the pedagogy should lead discussions about the best and most appropriate use of technologies, and research should focus on the wide varieties of ICTs conditions and procedures that can enhance the development of SRL and improve educational processes and stimulate desirable outcomes (for a detailed discussion and suggestions on enhancing the use of ICTS to develop self-regulation and enrich learning see Mooij et al., 2014). Key potentials of ICT includes provision of instant feedback to learners and teachers (Schaffer, Young, Ligon, & Chapman, 2017), through use of data analytics to explore how people learn (i.e. Spector et al., 2016)) and through personalisation enabled via artificial intelligence applications (i.e. Spector et al., 2016; Schaffer et al., 2017, cited in Evans, forthcoming).

3.1.4   Assessment literacy

Assessment literacy, defined as the awareness and knowledge of what quality looks and feels like situationally and what constitutes quality (Sadler, 1989, 2010, 2012, 2013), is central to the effectiveness of assessment and the integration of SRLS (Evans, 2016, 2018). Novice learners are often unable to understand and access criteria of success on their own; they often need explicit information and guidance about assessment standards and how to use them (Dargusch, Harris, Reid-Searl & Taylor, 2017). Assessment support quality needs to be explicit, straightforward and signpost important information in order to assist students' understanding of the assessment process, otherwise it may just increase students' cognitive load trying to navigate through a load of information that might be complicated and irrelevant.

Moreover, students' cue consciousness as identified by Yang and Carless (2013) and Dargusch et al. (2017) is essential to the assessment process as it indicates students' ability to identify signals from the teacher discourse and from the environmental interaction of what is important and leads to maximise learning in the assessment process. These signals may include highlights and discussions of standards and expectations of success, assessment outline and timeframes, advice on how to start and regulate learning and assessment, links to assessment resources including quality support from

teachers and peers. Cue consciousness can develop students' competency to understand and evaluate the quality of the assessed work (Sadler, 1989; Dargusch et al., 2017), which is a critical skill and strategy for the development of self-regulation, and enhanced understanding of assessment and learning was found influential in the transfer performance of knowledge and skills (see Hoogerheide, Loyens & van Gog, 2014).

Boud (2014), Sadler (2010) and Vermunt and Verloop (1999) pointed to the potential effect of past experiences of assessment on both teachers and students. Expectation of assessment is usually hugely influenced by the learner and teacher past experiences, both of which Vermunt and Verloop (1999) discussed within the affective factors of self-regulation. Trying to engage students in the design of the assessment, writing criteria and the assessment process itself, might be challenging to students who have been on the receiving end of the assessment all their academic life, assuming that students' school experiences were heavily teacher-dependent. Therefore, it is important to familiarise all stakeholders with assessment objectives and procedures (Clark, 2012; Nicol & Macfarlane-Dick, 2006; Evans 2016, 2018), which should take place at the beginning of and throughout the assessment process.

Training teachers (as in Perels, Merget-Kullmann, Wende, Schmitzz & Buchbinder, 2009), and subsequently, training students (i.e., Bembenutty, 2011; Black & Wiliam, 1998) on the assessment practices, writing criteria and giving or receiving feedback is another important consideration for developing assessment literacy. Training teachers on assessment aspects and practices is important including raising their awareness of the importance of being transparent, straightforward and considerate to all levels of students when it comes to assessment literacy, feedback and design. Training can be delivered pre-service or in-service to develop teachers' self-regulation of their own learning and subsequently assist students' development of their self-regulation. Training may take different forms, formal or informal, and its timing and amount depends on the context and on the teachers' and students' past experiences (Moos & Ringdal, 2012; Panadero, 2017). Therefore, students' and teachers' awareness and mutual understanding and expectations of assessment practices and processes, criteria of success, roles and entitlement in the learning and assessment process, assessment design and evaluation are essential elements to enhance the development of self-regulated learners (Evans, 2016, 2018; Nicol & Macfarlance, 2006; Sadler, 1989, 2010).

3.1.5   Assessment feedback

The implementation and development of self-regulated learning largely depends on the nature, timing and amount of feedback generated during the learning process (Boud, 2014) and importantly, the role of the learner in this 'feedback exchange' (Evans, 2013, 2016, 2018). Feedback has been interpreted and classified differently according to its nature; formative or summative-feedback (i.e., Clark, 2012; Kearney, Perkins & Kennedy-Clark, 2016; Vermunt & Verloop, 1999; William, 2014), agent giving feedback: for example, learner (i.e., Beck, Skinner, & Schwabrow 2013; Boud & Soler, 2015; Evans, 2016; Fastré, van der Klink, Sluijsmans, & van Merriënboer, 2013), peers (see Boud and Flachikov, 2007; Boud & Soler, 2015; Kearney et al. 2016), and/or the teacher; (i.e., Boud, 2014; Clark; 2012; Kearney et al., 2016; Nicol & Macfarlane-Dick, 2006; Sadler, 1989, 2010), and timing: Immediate or delayed; synchronous or asynchronous feedback (Clark, 2012).

In order to decide on the type of feedback for classroom implementation, to encourage self-regulation, we need to define what constitutes feedback. Boud (2015) defined feedback as a process by which learners obtain information about their performance in a task in order to assess and compare their current performance against standards of quality, to generate improved and enhanced performance meeting expected standards. Boud (2014) stated that if feedback means what information students receive on their work, and their response to it and what happens subsequently, teachers' current practices do not reflect this process. Consequently, students frequently report dissatisfaction with current practices (Boud, 2014; Evans, 2013; Nicol & MacFarlane-Dick, 2006; Sadler, 2010). Boud (2015) argued that feedback is a process that cannot be delivered in a single point of time but it is an ongoing dialogue, where frequent observations and monitoring occurs in order to assist students' use of feedback. Using feedback implies, students' understanding, analysis and application of feedback in future activities and tasks; feedforward should inform and direct future learning as well as current learning, which entails students seeing its relevance, to their current and future learning. Boud (2015) further elaborated that a sustainable view of assessment involves the learner as a central agent in the assessment and feedback process, which entails awareness of criteria of success, awareness of role and practice to develop competency in self-assessment.

Students can generate their own feedback about their performance and progress when they are aware of standards and have had sufficient training and practice in self-assessing their performance, by increasing their effort, motivation, and engagement and control over their learning. When the learner is the agent in the feedback process, self-assessing and self-generating feedback on one's own

knowledge and performance, his/her use of feedback becomes more effective, which leads to improved time management and effective goal setting process (see Becher, 2012). While feedback can be generated internally be the learner, it is commonly provided externally by teachers or other people such as peers or family (Butler & Winne, 1995). External feedback may confirm, add to or conflict with a learner's understanding of a task and task completion strategies. External feedback can be considered a social support technique that can enhance learning and develop students' self-regulation if directed towards enhancing performance, its value is understood and its utilised effectively by learners, sought by the students, and is of quality. This kind of feedback can assist student academic achievement, build their self-efficacy and enhance their motivation for learning, and develop their self-regulation, depending on students' needs (Zumbrunn, Tadlock & Roberts, 2011). Besides the agent giving feedback, feedback is characterised by the time at which it is provided or generated and where it is structured and positioned in a course plan.

Feedback time and structure can differ based on the purpose of feedback. While summative delayed feedback provides grades and verification of correct answers at the end of an assessment, formative feedback which is provided through the performance process to improve students' learning and performance, which was found more effective than summative feedback. Butler and Winne (1995) stated that outcome feedback or postdictive judgements (summative), which occurs after completion of tasks is less effective than cognitive feedback, defined as recursive occurring during the performance of a task to inform performance, in promoting self-regulated learning. However, both postdictive and cognitive feedback can make predictive insights and judgement of future performance. According to Clarks' (2012) discursive landscape feed-up on the progress of learning and assessment performance, formative feedback feed-back on what have been achieved, and feed-forward on the next steps to enhance performance. In formative synchronous feedback, the learner is engaged in a process of listening to feedback, questioning its meaning, utility and relevance, observing, imitating, answering questions about clarity and standards, demonstrating comprehension of standards, criticizing and generating own feedback to sustain the dialogue of feedback.

Feedback is viewed in the literature as central to the enhancement of the learning process (Hawe & Dixon, 2017), and the development of self-regulated learning, and it has been studied by cognitive scientists, learning theorists, and educational psychologists alike (see Fyfe & Rittle-Johnson, 2016). One major issue of feedback highlighted in the literature is the degree of inadequacy of feedback provided by the teacher to the students (Bose & Rengel, 2009). This issue is common in higher

institutions (Boud, 2015), for two main reasons: (1) as students' background varies and their number and class size increase, the teacher's working load increase which provides limited opportunities to offer effective individualised feedback to students (Bose & Rengel, 2009) and (2) the quality and amount of external feedback provided by the teacher fails to bridge the gap between students' performance and desired outcomes. In line with this argument, inadequate feedback can be characterised as "too late, of limited value, without explanation, of "one-off" nature, and non-progressive" (Bose & Rengel, 2009, P.30). Considering that teachers' rarely receive feedback from students and colleagues about their teaching approach and methods, their assessment practices and procedures, and their feedback quality, they may not be aware of students' expectation and thus have had little chance to meet them.

Another issue is feedback use and how to measure it, which has been interpreted differently by different researchers. Winne and Butler (1994), for example, summarised uses of feedback, stating that feedback can "confirm, add to, and overwrite, tune, or restructure information in memory, whether that information is domain knowledge, meta-cognitive knowledge, beliefs about self and tasks, or cognitive tactics and strategies" (p.5740, cited in Clark, 2012). Zimmerman (2008), however, related the use of feedback to students'' self-regulation stating that students who make use of and act on feedback are considered self-regulated learners because they take responsibility for their learning. However, in relation to feedback use in future assessment and learning, the issue is that what students learn from feedback might not be aligned with future assessment and course objectives but with their own future goals. Therefore, students' use of feedback may not be observed or traceable in practice (Brown et al., 2016).

Furthermore, most research in the literature focused and investigated the type and nature of feedback or the time and structure of feedback, however the mechanism and procedures of implementing formative feedback strategies to enhance self-regulation was rarely discussed (Bose & Rengel, 2009). Bose and Rengel (2009) proposed a model of formative assessment strategy that integrated both external and internal feedback to promote SRL. They claimed that the model implementation requires minimal time input from the teachers. Moreover, Evans' EAT (2016, 2018) provided a working framework for teacher implementation of effective feedback to enhance students' and teachers' understanding of and engagement with the assessment and learning process to support students development of self-regulated learning. EAT emphasised the role of the teachers and students in the assessment and feedback process characterising good feedback as timely and

targeted towards students' needs. The role of feedback in the development of students' SRLS is highlighted in this thesis for a successful integration of SRLS into the assessment practices as it scaffolds learning and assist students' goal setting and performance evaluation process.

3.1.6 Assessment partnerships

Training teachers and students in a shared understanding of assessment literacy and feedback is a vital step towards involving students in the assessment process (Evans, 2016). Therefore, establishing students as partners could mean students' engagement throughout the whole or in some aspects of the assessment process. Engagement refers to learners' active participation and involvement in a learning activity (see Reeve, 2013), or more generally in the learning community where they are members of. It is increasingly sought by educational institutions as a desired outcome along with academic progress and achievement (Reeve, 2013). Students' engagement has been highlighted as proxy for learning gain (Evans, Howson & Forsythe, 2018), and suggested as a better measure of quality of teaching and learning than tests and satisfaction surveys in HE (Evans et al., 2018). The engagement construct is multidimensional and it consists of three aspects that are interconnected, yet distinct, namely, cognitive, behavioural and emotional aspects (Reeve, 2013).

Cognitive engagement refers to students' use of deep learning and higher thinking strategies to understand what they learn, behavioural indicates learners' engagement in the activity and in the learning community using attention, effort and persistence, and emotional management tackles the positive emotions induced by learning including self-efficacy, motivation and interest in learning. Cognitive, behavioural and emotional engagement works collaboratively to enhance students' learning and assist the development of their self-regulation. In relation to self-regulated learning, which is a self-initiated, proactive and intentional regulatory process (Zimmerman & Cleary, 2009), self-regulatory behavioural engagement would mean paying attention to cues and sources of information, investing effort in the task and persisting in learning, self-regulatory emotional engagement would require enhancing curiosity and self-efficacy and minimising anxiety and frustration, and self-regulatory cognitive engagement implies utilising sophisticated and higher thinking strategies, regulating cognitive load and stimulating cognition to diagnose and solve problems.

Students' engagement in the assessment process can be implemented gradually and may involve engaging with students in different activities. Students can participate in writing assessment criteria,

deciding on the feedback procedure, evaluating the assessment process, and/or improving the design of assessment (The Higher Education Academy (HEA), 2014). A teacher's instructional behaviour in turn affects change in and transforms the quality and quantity of the student's engagement (Reeve, 2013). Therefore, training and careful planning to make assessment integral to the teaching/learning process instead of an endpoint to be conducted after the teaching process (HEA, 2014) can support and enhance students' engagement, i.e. assessment for learning. Creating positive learning environments that enhance students engagement in HE requires staff, whether academic or non-academic, awareness of their role in enhancing students learning, fostering high quality relationship between staff and students, articulating expectations clearly and valuing diverse perspectives (Seifert, Gillig, Hanson, Pascarella and Blaich, 2014).

Establishing students as partners, also requires investigating the boundaries to such engagement and being transparent on what students can be involved in and what counts as restricted in a certain context (Evans, 2016). Raising students' expectations about their engagement and their role in the assessment process without emphasising the possible boundaries, is likely to be counter effective resulting in conflict and disappointment, which hinders implementing students-teachers' partnership. Balancing the benefits and boundaries to students' engagement in the learning process is crucial to the implementation of self-regulation in the classroom. **It is also important to highlight that the students' engagement and partnership discussed here is a characteristic of and a mean to develop self-regulation, emphasising that it is students' agentic engagement is a related not a separate construct to self-regulation as proposed by Reeve (2013).**

3.1.7 The state of Assessment in theory and practice

It is essential to conduct intervention studies in assessment to investigate assessment techniques/models to bridge the gap between theory and practice in order to scaffold students' self-regulated learning. Despite the extensive work on assessment and its implications, practice indicates that the majority of assessment practices still focus on students demonstrating current knowledge of the content, and teachers providing inadequate feedback, but not preparing students for life after graduation (Boud & Falchikov, 2007). However, blaming the teachers for the ineffectiveness of the current practices of feedback is immature and inadequate to explain the current state of assessment.

My personal experience, based on my previous position as a lecturer and a foundation programme coordinator, revealed to me that some teachers might be giving extensive and intensive feedback,

which students tend to overlook or ignore. Reasons for such behaviour from students can be attributed to misunderstanding and ignorance of the value of assessment because they lack self-regulation strategies and study skills that may also highlights students' perceptions of feedback utility and its relevance to current and future learning (see Feedback Landscape model, Evans, 2013). Moreover, students' approaches to feedback utility could be attributed to the purpose of assessment feedback, as feedback provided by the teacher is usually directed towards future learning and successful achievements in assessment, while students learning from feedback can be related to personal goals and unaligned with the assessment focus and course objectives (see Brown et al., 2016).

In fact, many of the ineffective practices of assessment and feedback can be attributed to a lack of a joined-up and a holistic approach to assessment. Assessment is often investigated as distinct, separate areas rather than in an integrated manner, which is unhelpful. For example, the literature indicates a particular interest in assessment feedback, often overlooking other aspect of assessment such as assessment literacy and design, not to mention their role in supporting the development of self-regulated learning (i.e. Sadler, 1989, 2010; Nicol & Macfarlance, 2006). Moreover, students' perceptions of assessment practices and techniques has been widely explored, while teachers' views are relatively marginalised, reflecting only one side of the story (Evans, 2013; Dargusch et al., 2017).

Furthermore, much research on assessment tackles the theoretical considerations (see, for example, Boud 2000, 2014; Boud & Soler, 2015; Zimmerman, 2001) suggesting ways to improve assessment or they are exploratory studies of stakeholders' perceptions of assessment and learning practices. Testing these theories and frameworks, however, is what judges its effectiveness in real learning and teaching environments, while considering contextual factors, i.e., resources, experience, expectations and perceptions. Thus, what might be the right approach to assessment in theory, can be confronted with contextual barrier and result in failure. Additionally, what seems to indicate effectiveness when implemented and tested in one context, does not necessarily, and directly, translate into other contexts where stakeholders and resources are different. Therefore, there is an urgent need for action and experimental research where interventions aim to investigate the effectiveness of a particular model, technique or approach to assessment in context, as assessment cultures matter (James, 2014).

For instance, sustainable assessment proposed by Boud (2000) is one of the theoretical considerations to bridge the gap between teaching, learning and assessment and bridge the gap

between current and future learning. However, reviewing the literature reveals the lack of studies that have actually tested sustainable assessment in practice (i.e., Beck et al., 2013), probably because sustainable assessment has not been thoroughly researched and conceptualised. The past 20 years or so has raised the notion of sustainable assessment (Boud & Soler, 2015), in alignment with sustainable learning and/or sustainable education.

Sustainable assessment within the education field has been interpreted in many different ways and different researchers tackled whether the overall or particular aspects of assessment. For instance, Boud (2000) defined it as meeting graduation requirements and beyond and emphasised that it should develop informed judgements within individuals, construct reflexive learners, and form the becoming practitioners. Nicol & Macfarlane-Dick (2006) and Evans' (2016, 2018) focus on assessment literacy, feedback and assessment design as key factors for sustainability in supporting students' self-management of assessment as preparation for the current and future contexts, which aligns with Boud's work.

To summarise, the current state of assessment urges researchers and practitioners to review the different types, procedures and techniques of assessment that are available, review the effectiveness of the current feedback practices and define authenticity of assessment and assessment literacy within context. Literature, also, reveals a special interest in students' engagement and the contextual boundaries, which may restrict students' engagement and its impact on students' self-regulation. This section concluded by indicating the gap between theory and practice, by theoretically proposing sustainable assessment practices as a bridge between teaching, learning and assessment, to support students' development of self-regulated learning.

3.2   Sustainable Assessment Practices

Sustainable assessment invokes different interpretations in education. Sustainability as a term has been attached to different fields (for example, sustainable development, sustainable environment) and different concepts in education such as sustainability education/schools (Warner & Elser, 2015), sustainable development and sustainable assessment (Boud, 2000; Boud & Soler, 2015). While sustainability schools or interconnectedness is a widely spread project in the United States of America (USA) that aims to solve environmental and global problems through education, sustainable development seems to be an objective to be achieved across vital sectors aiming to sustain

productivity of the sectors across crises and time. Evans, (Forthcoming), for example defines sustainability within education as the institution's manageability to achieve aims and objectives within context and taking into account the contextual barriers and limitations to aspire for more. Sustainable assessment practices in the learning environment indicates the role of assessment in learning, the relation between current, future learning and assessment, and assessment role in enabling important skills and strategies for learning.

Boud and Soler (2015) defined sustainable assessment as a bridge between teaching and learning, repositioning assessment as an integral part of curriculums and pedagogies. Sustainable assessment aims to meet "the needs of the present and prepares students to meet their future needs" (Boud, 2000, 151). According to Boud (2000), assessment effects should not be limited to university life, but expanded to students' future lives, beyond graduation: in their future jobs and everyday life. Boud stresses that sustainable assessment should prepare learners to develop informed judgements, construct reflexive learners of their own performance and form the becoming practitioners of future jobs (Boud & Soler, 2015). From Boud's (2000) definition and defined features of sustainable assessment, it is obvious that sustainable assessment targets both the knowledge and skills of the learners. After graduation when learners identify their lack of knowledge of a particular issue, learners should have the skills and motivation to search for the required knowledge, which makes them more competent and successful. Building on this discussion, this thesis defines SAPs as the assessment practices that enable students' development as self-regulated learners, especially developing their self-evaluation skills, and that promote the transfer of learnt strategies to new learning situations and tasks.

Therefore, sustainable assessment tasks should have certain features such as being transparent, continuous/periodical and engage students. Firstly, it is a priority to make assessment requirements and criteria of good work transparent to students (assessment literacy). Transparency can be achieved through demonstrations, discussions, negotiation between the teacher and students or even engaging students in writing the assessment criteria at the beginning of the course (Boud, 2014; Nicol & Macfarlane-Dick, 2006; Sadler, 2010). Secondly, assessment tasks should be distributed throughout the academic semester because it is essential that students receive feedback during the learning process when they most need feedback to improve their learning (Black & Wiliam, 1998). Thirdly, these tasks should engage students in deep learning, frequently emphasising critical thinking and decision-making skills, especially when confronted by an unfamiliar task. Students can be

engaged before (assessment literacy), during (feedback) and after the assessment process (reflection and evaluation) (see Evans, 2016; Nicol & Macfarlane-Dick, 2006). Feedback can accelerate and optimise the quality of learning, which is empowering to students (Hounsell, 2007). This requires students' engagement in the process of assessing their own performance via self-assessment, peer-assessment and teacher-students dialogues. The assessment tasks should also be informative for the teacher (during and after instruction) to improve their teaching and focus on what students need most (Boud & Falchikov, 2007; Nicol & Macfarlane-Dick, 2006). Therefore, transparency, continuity and learners' involvements are key features of sustainable assessment practices.

3.2.1   Achieving sustainable assessment

The assessment literature indicates that interpretation of SAPs varies and realising sustainable assessment in practice has been approached in different ways. While some have suggested using particular methods of assessment (i.e. Beck et al., 2013; Boud & Soler, 2015; McDonald & Boud, 2003), Carless, Salter, Yang and Lam (2011), Evans (2016), Fastré et al. (2013) and Hounsell (2007) have translated Boud's definition of sustainable assessment into frameworks suitable for classroom implementation.

Beck et al. (2013), for example, suggested using tutorials as an assessment tool to promote sustainable assessment as they found that tutorials help students develop independent thinking, intellectual maturity and creativity. Tutorials' success as an assessment method requires one-to-one or small group discussions. Their success is likely to be due to the consequences of their frequency, intensity, being needs specific, and continuity. The small discussion involving a student-teacher, or small number of students and their teacher, meeting frequently to discuss progress and focus on particular issues are conducive to learning and students' engagement. However, tutorials are time and resource consuming and may not be practical with large groups of students especially if they are not sufficiently intellectually mature to initiate and/or sustain discussions and conversations or if they are accustomed to, and familiar with large groups lecturing mode of teaching. Taking context, financial and human resources into account, tutorials can be a practical realisation of sustainable assessment theory as they can encourage cognitive thinking and promote learner's maturity (Beck et al., 2013).

McDonald and Boud (2003) and Boud and Soler (2015), have suggested self-assessment as a means to achieve sustainable assessment. Developing self-assessment skills is a necessity especially after

graduation where learners may not have the luxury of a mentor/teacher or peer-assessment, and where they would have to make informed judgements and decisions to succeed (Boud & Soler, 2015). Therefore, developing self-assessment should be positioned as an integral and a central objective of the assessment, learning and teaching process (Boud, 2007). Self-assessment is deemed to be ineffective if utilised as an accessory/add-on to assessment and is not allocated any grades of the course's overall assessment (Boud, 2007; Boud & Soler, 2015), as students' commitment and engagement are not guaranteed. Moreover, self-assessment requires training on the part of the teacher and students equally, as students need to have a clear picture of the objective of self-assessment and the criteria of assessment and help decide on these criteria. Consequently, students are more engaged in the assessment process and more prepared to self-regulate and to make future informed decisions (Boud, 2007).

Hounsell (2007), Carless et al. (2011) and Evans (2013) focused on effective sustainable feedback. Hounsell (2007), for example, suggested that sustainable feedback is significant because it enables students to learn faster, optimise the quality of learning in terms of scope, depth, precision and complexity, maximise learning relation to the real world, and/or raise individual and collective awareness and achievement of standards. Hounsell argues that sustainable feedback can be attained by providing high-quality feedback, transforming students' role in feedback and enhancing the congruence of guidance and feedback. Hounsell identifies high-quality feedback as 'anticipatory', 'feedforward', 'evoking evidence', 'providing response to the evidence', 'uses exemplars of good work', and 'substantive, timely and directly usable' (2007, p. 105). Sustainable feedback transforms students' passive role in assessment to an engaging active role through self-assessment or peer-assessment, which requires grasp of assessment criteria and a blend of exemplars. The third pathway identified by Hounsell (2007) to develop sustainable feedback is congruence between guidance and feedback, which implies that feedback should be feasible and practicable in a given educational context. The practice of giving feedback should fit within the instructional and cultural context in which productive dialogue arises, i.e. a teacher's and students' understanding and expectation of feedback to avoid conflict.

Subsequently, Carless et al. (2011) framework of sustainable feedback was built on the previous work on feedback (i.e., Hounsell 2007; Nicol & Macfarlane-Dick, 2006) and places the development of students' self-regulation at the core of the feedback process. Carless et al. (2011) claimed that Hounsell (2007) did not provide a working definition of sustainable feedback, thus, they defined

sustainable feedback as 'dialogic processes and activities, which can support and inform the student on the current task, whilst also developing the ability to self-regulate performance on future tasks' (Carless et al., 2011, p. 397), which reflects Boud's (2000) definition of sustainable assessment of which feedback forms an important aspect. Carless et al. (2011) identified three characteristics of sustainable feedback, based on Nicol and Macfarlane-Dick's (2006) seven principles of feedback practices: 1) raise students' awareness through engagement (engagement and literacy), 2) stimulate students' self-monitoring and evaluation of their own performance capacities (engagement, self-assessment & self-monitoring and regulation) and 3) enhance students' ability for ongoing learning after graduation through the development of goal-setting and strategic planning skills (sustainable assessment skills/ SRLS). Carless and his colleagues added a fourth aspect to their proposal of sustainable feedback, which is task design. They argue that the design of the assessment task should facilitate the development of sustainable feedback overtime, generating feedback from different sources provided at different stages of the learning process. Noticeably, Carless et al.'s (2011) four aspects/ character-istics of sustainable feedback, namely students' engagement, assessment literacy, self-regulation and task design, aligns with Boud (2000), Hounsell (2007), Nicol and Macfarlane-Dick (2006) and Sadler (1989) that identify self-regulation as an important factor in learning. It, also, roughly discusses the three aspects of Evans (2016, 2016) effective assessment framework/wheel: Assessment literacy (AL), assessment feedback (AF) and assessment design (AD).

Evans' (2016) Equity, Agency and Transparency in Assessment (EAT) framework presented in the form of a wheel is a working tool for both teachers and students that emphasise students' engagement to develop students' self-regulation and provide useful and sustainable feedback. Evans (2016, 2018) definition of assessment and feedback corresponds with that provided by Boud (2000), which caters to students' current and future needs. Evans (2016, 2018) draws on the extensive assessment feedback literature base having reviewed 2000 articles on assessment feedback (Evans, Forthcoming), but importantly, also draws on the individual differences literature (Evans & Waring 2012, Kozhevnikov, Evans, and Kosslyn, 2014) including the work of Vermunt and Verloop (1999). A key part of her framework is the integration of these different bodies of work to create a self-regulatory framework (EAT) that has at its core the importance of inclusive assessment practices and attention to metacognitive, cognitive and affective dimensions of learning. EAT is constructed around principles of inclusive, meaningful, integrative and holistic assessment, shared beliefs and values, students-staff partnership and agentic engagement of students', sensitivity to context, research-informed, self-regulatory and sustainable assessment (Evans 2016 & 2018). Evans created EAT, highlighting three

important aspects of assessment: Literacy, Feedback and Design, to translate theories of effective assessment into a workable framework for individuals and higher education intuitions (HEIs). In assessment literacy, Evans (2016) discusses the importance of sharing expectation and understanding of assessment requirement and criteria of good performance. The feedback aspect, tackles students' entitlement and engagement in providing feedback and limitation to such engagement. The third aspect of the wheel is design, in which Evans points out transparency, meaningfulness, collaboration and equal opportunities as important factors to consider while creating effective sustainable assessment practices.

Similarly, Fastré et al. (2013) proposed an integrated model that highlights three areas: 1) the conditions necessary for the development of sustainable assessment including Constructive alignment with course objectives, scaffolding students as active learners and students' understanding of assessment literacy, 2) the elements of sustainable assessment, which include the ability to access one's own learning, resources and performance, and ability to generate goals for future learning and performance, and 3) the instructional methods required to promote it in the classroom (i.e. modelling, coaching and scaffolding development of sustainable assessment skills). These three areas emphasise important aspects of assessment including literacy, strategies, and support and scaffold, which are essential for supporting students' SRL. Moreover, this model and its areas are similar to that suggested by Zimmerman (2002) to promote self-regulated learning, in which contextual factors are as important as personal and institutional factors, and by which he suggested areas related to self-regulation and its developmental stages.

In summary, previous interpretations and approaches tackled some aspects of sustainable feedback/assessment that makes self-regulation a central element of sustainability. For example, Boud's (2000) self-assessment highlighted students' active role in the assessment process, and Hounsell (2007) emphasised the significance of high-quality feedback, students' active role and context, positioning self-regulation at the core of the development process. Carless et al. (2011) discussed assessment literacy and design, students' engagement and self-regulation as the defining characteristics of sustainable feedback, which later was further explained and made accessible to classroom environment by Evans (2016). The inclusion of self-regulation features such as self-monitoring, goal-setting, self-evaluation and students' active role in the process of assessment supports this thesis view of SAPs as those that enable students' development as self-regulated

learners as well as highlights the relationship between sustainable assessment and self-regulation that is argued for in this research and which will be explored in section 3.5.

3.3   Self-Regulated Learning (SRL)

This section provides a comprehensive overview of SRL. The assumed relationship between sustainable assessment practices (SAP) and self-regulated learning (SRL), is highlighted by 1) providing a constructive definition of, and justifying the need for SRL, 2) tracing back its origins, 3) discussing SRL strategies (SRLS), 4) presenting the most common models representing SRL, 5) discussing the nature of SRL whether it is a developmental or an instructional entity/process, and 6) how to measure it.

3.3.1   Definition of, and the need for, SRL

In this research, SRLS is viewed as a construct, a process and an ability that can be developed within a supporting and an engaging learning environment, whereby learners positively select, structure and create advantageous learning environment to maximise learning. This view of SRLS highlights SRLS as unique for each learner and even for the same learner from one learning/assessment task to another.

Self-regulated learning is a learner's ability to regulate his/her learning in different contexts. It involves a learner's activation and 'sustainability' of cognition, behaviour and emotions directed towards achieving goals (McMahon & Luca, 2001). Even back then, Brooks (1997) identified behaviours and emotions as important factors in combination with cognition for sustaining self-regulated learning. This aligns with Zeinder, Boekaerts and Pintrich (2000) definition of SRL as an 'overarching construct' that encompasses aspects such as regulating cognitive and metacognitive skills by managing one's own health and stress. Zeidner and his colleagues emphasised the Educational Psychology Information Processing theory (IP) of cognitive and metacognitive aspects as the main factors directing learning. However, they did not neglect the importance of an individual's control over stress (fits within emotions management) and health (by managing environment and behaviour). Several concepts have been attached to SRLS such as motivation, affect, cognition, metacognition, social context, active learning and strategic action (Andrade & Bunker, 2011). Active learning and strategic planning can be achieved via a mixture of cognitive, metacognitive and behavioural and affective strategies.

The European Parliament (2006, cited in Mooij et al, 2014) stressed learning to learn as a key competence for learning in the twenty-first century, which accordingly highlights the importance of individual's responsibility for ones' own learning (or SRL). Black and Jones (2006) stressed that self-regulation is a powerful tool for becoming a responsible and effective learner if steered within an individual to oversee and activate learning. Self-regulated learning can impact an individual's academic and personal life positively. IP, for instance, assumes that students can improve their learning abilities through an active selection of cognitive and metacognitive strategies, which were expanded by the social cognitive theory (SCT) to include emotional and contextual strategies. Consequently, students can proactively select, structure and create advantageous learning environments to maximise their learning. Learners can also play a major role in the amount, time and form of instruction for their learning especially after graduation (Zimmerman, 1998). Self-regulated learning becomes of critical importance especially for less privileged learners who were deprived of important strategies and skills to succeed in HE (Mooij et al, 2014). Therefore, it is essential to make learning objectives and features of good performance transparent to learners to nurture within them a sense of ownership of, and control over their own learning (see Clark, 2012).

Self-regulated learning had positive effects on learning, personality and academic achievement. Winne (1995) for instance, highlighted self-regulation benefits on individuals behaviour and processing of learning indicating, "self-regulating learners allocate resources to tasks, seek Information in the task domain, monitor progress toward study goals, and adjust their plans as needed" (P.511 , cited in Evans, Kirby & Fabigar, 2003). Bouffard et al. (1995, cited in Evans et al., 2003) found that within their sample of university students, reported use of SR was the best predictor of academic performance, and that students who were more likely to use SRLS were also preoccupied with knowledge attainment and achieving a certain level of performance, which are characteristics of the deep approach to learning described by Biggs (1987). This aligns with Vermitten et al. (2001, cited in Evans et al., 2003) findings self-regulated students in HE reported use of more deep learning strategies than externally-regulated learners. Moreover, SRLS were found to affect some personality traits or personality affective aspects positively, such as motivation (Pintrich & DeGroot, 1990), self-efficacy (Pintrich, 2000), and other motivational beliefs such as self-image, self-concept and self-worth relating to a general belief about self (Bandura, 1994; Van Dinthera et al., 2011). Likewise, self-regulated learning had positive impact on academic achievement (i.e. Bembenutty & Chen, 2005; Bembenutty &White, 2013), including improvement of writing skills (i.e. Abbas, 2016; Castello, Inesta

& Monereo, 2009; Harris & Graham, 2016; Zimmerman & Bandura, 1994; Zimmerman & Kitsantas, 2002).

Considering the effects of SRLS on learning and achievement, proposal for implementation appeared aiming to actualise SRLS for classroom and individuals application such as scaffolding SRL through self-assessment and peer-assessment (Panadero, Jonsson & Strijbos, 2016), Implementing EAT framework (Evans, 2016, 2018),and through formative assessment (Bose & Rengel, 2009; Clark, 2012). Andrade and Bunker (2011) emphasised the six dimensions highlighted by Zimmerman (1994) as key for the development and conceptualisation of SRL –namely, motive (why advocate SRL), methods (how to implement it), time (when and at which stage of learning), physical environment (where in actual or virtual classrooms and for which learning and assessment tasks), social environment (with who: academic or non-academic staff, peers), and performance (what type of performance is needed, including the nature of the activity or task). Awareness, knowledge and practical implications of these six dimensions facilitate the application of SRLS in actual and virtual classrooms and support learners' self-regulation in HE.

3.3.2   Origins of SRL

There are six main theories that explain self-regulated learning: Operant, phenomenological, social cognitive, volitional, Vygotskian and cognitive constructivist (Table 3.1). The origins of these theories vary from psychology to the social sciences. Zimmerman (2001) suggested four theoretical considerations to compare between these theories such as source of motivation (i.e., internal/external), the processes learners go through while self-regulating (i.e., awareness, reactivity, evaluation), their expected social and physical effect on self-regulation (i.e., environment, modelling), and the utilised methods for acquiring SRL (i.e., developmental/ internal/ external). A comparison between the six theories of SRL in the four areas suggested by Zimmerman (2001) is presented in Table 3.1.

Table 3.1 A synthesis of the theoretical considerations and theories explaining SRL (Zimmerman, 2001, p.9).

Theories	Common issues in self-regulation learning				
	Motivation	*Self-awareness*	*Key processes*	*Social and physical environment*	*Acquiring capacity*
Operant	Reinforcing stimuli are emphasised	Not recognised except for self-reactivity	Self-monitoring, self-instruction and self-evaluation	Modelling and reinforcement	Shaping behaviour & fading adjunctive stimuli
Phenomenological	Self-actualisation is emphasised	Emphasise role of self-concept	Self-worth and self-identity	Emphasise subjective perceptions of it	Development of self-system
Information processing	Motivation is not emphasised historically	Cognitive self-monitoring	Storage and transformation of information	Not emphasised except when transformed into information	Increases of capacity of system to transform information
Social cognitive	Self-efficacy, outcome expectations and goals are emphasised	Self-observation and self-recording	Self-Observation, self-judgement and self-reaction	Modelling and enactive mastery expectances	Increases through social learning at four successive levels
Volitional	It is a precondition to volition based on one's expectancy/ values	Action controlled rather than state controlled	Strategies to control cognition. Motivation and emotions	Volitional strategies to control distracting environments	An acquired ability to use volitional control strategies
Vygotskian	Not emphasised historically except for social contexts effects	Consciousness of learning in ZPD/ zone of professional development	Egocentric and inner speech	Adult dialogue mediates internalisation of children's speech	Children acquire inner use of speech in a series of developmental levels
Constructivist	Resolution of cognitive conflict or a curiosity drive is emphasised	Metacognitive monitoring	Constructing schemes, strategies or personal theories	Historically social conflict or discovery learning are stressed	Development constrains children's acquisition of self-regulatory processes

Studying the comparison provided by Zimmerman (2001) indicates that the social cognitive theory (SCT), which informs this thesis, is inclusive of the features of self-regulated learning highlighted by the other five theories. For instance, while external stimuli is the main source of motivation in the operant theory and inner motivation is fundamental in the phenomenological theory and a precondition to the volitional theory, SCT emphasises both external (i.e. expectations represented in job, grades, praise) and internal (i.e. self-efficacy and personal goals) motivation. Both sources of motivation are likely to occur in a classroom's social and interactive environment. In addition, SCT is inclusive to cognitive self-monitoring highlighted by the information processing theory, and utilise self-talk as a form of inner speech, emphasised by the Vygotskian theory, as a valuable strategy for task planning, self-control and monitoring, self-reflection, and overall task completions and achievement

Moreover, SCT and the operant theory share similar key processes as self-observation, judgement and reactions, and similar effects of the social and physical environment on the development of self-regulation such as modelling and reinforcement. Likewise, SCT emphasises the importance of the personal aspects of self-regulation (i.e. motivation, awareness, control and evaluation), advocated by the phenomenological theory. According to SCT, the personal aspects (intellectual development and self-system) of SRL develop and flourish within context (the social and physical environment) as SCT favours social interactions in the classroom environment where emotions and context are valued and have an undeniable effect on performance (Bandura, 1971; Zimmerman, 2000, 1989; Cassidy, 2011). Therefore, choosing SCT to guide the work on this thesis was based on its inclusivity of the key processes developed during self-regulation, incorporating the role of motivation and affect and/or personality and context.

Self-regulated learning theory (incorporating cognitive, metacognitive, emotions and context) was developed from the social cognitive theory (SCT) by Bandura 1986 which he developed from the social learning theory (1971). SCT appeared as a reaction to the previous theories in educational psychology, which stated that individuals are subject to environmental stimuli only (operant). People's behaviours must be stimulated by an external stimulus such as the environment, to which Bandura responded that individuals learn through interaction with the context/environment and that their behaviours affect the environment just as the environment affects their behaviours (Bembenutty et al., 2015; Boekaerts, 1999). SCT defines regulation as a multi-component process,

which involves "proactively initiated thoughts and behaviours that are planned and cyclically adapted based on self-generated or performance feedback in order to attain personal goals" (Cleary and Chen, 2009, P.292), and it is a process of 'goal-directed actions' according to Boekaerts (1999). Social cognitive theory is founded upon four core properties of human agency: intentionality, forethought, self-reactiveness, and self-reflectiveness (Bandura, 2001).

Bandura (1994, 2001) emphasised that learners become active agents who have the power of change in order to enhance their learning, and to adapt and exploit the environment positively to accelerate their learning. Learning in such circumstances occurs because students exercise control over their behaviours, emotions, and environment, and have more involvement in their learning, which results in better performance and efficient achievement of goals. Bandura's greatest contribution to the field of self-regulation was the introduction of self-efficacy as an essential factor of success in academic performance (Bembenutty & Chen, 2005; Cleary & Chen, 2009; DiBenedetto & Zimmerman, 2010; Greene & Azevedo, 2007; Bembenutty & White, 2013), and personal and professional life (Cleary, Zimmerman & keating, 2006; Tschannen-Moran & Hoy, 2001). Being aware of one's own beliefs, and perceptions of one's capabilities has a major effect on the process of setting realistic and achievable goals within a realistic timeframe to perform the tasks required. Knowing one's own strengths and limitations enables individuals to set goals within their own capabilities, by utilising the resources available and strategies most effective to achieve these goals (Zimmerman & Cleary, 2009).

To sum up, SRL is not a new notion as different fields and theories contributed to the understanding of SRL such as educational psychology and the social cognitive theory. It has developed over the years and its focus has expanded to include the social and emotional aspects of learning to prepare self-regulated learners for independent and future learning. Likewise, models conceptualising self-regulation within the same theories varies and thus, the stages/phases and areas of self-regulated learning varies from one model of SRL to the other, which are discussed in section 3.3.3.

3.3.3 Self-regulated learning strategies (SRLS)

Self-regulated learning can develop by improving learners' abilities in the use of cognitive/metacognitive, affect and social/contextual strategies before, during and after completing a task. Figure 3.1 indicates self-regulated learning strategies (SRLS), as organised in different phases/stages in the SRL model suggested by Zimmerman (2002; Zimmerman & Campillo, 2003). As illustrated in Zimmerman's model, there are task analysis, self-motivation, self-control, self-observation, and self-judgement and self-reaction strategies.

Performance phase

Self-control

- Imagery
- Self-instruction
- Attention focusing
- Task strategies

Self-observation

- Self-recording
- Self-experiment

Self-reflection phase

Self-judgement

- Self-evaluation
- Causal attribution

Self-reaction

- Self-satisfaction/ Affect
- Adaptive/defensive behaviour

Forethought phase

Task analysis

- Goal setting
- Strategic planning

Self-motivation

- Self-efficacy
- Outcomes expectations
- Task value/interests
- Goal orientation

Figure 3.1 Zimmerman's model of self-regulation (Zimmerman, 2002; Zimmerman & Campillo, 2003)

3.3.3.1   Forethought strategies

In the first phase of self-regulation (forethought), according to Zimmerman's model, learners' analyse and plan for the task. Task analysis strategies are usually confronted first by learners as they are expected to become familiar with the task at hand: requirements, criteria of success, setting goals and strategically plan how to perform the task within the time and resources available (Cleary & Chen, 2009; Schunk, 2005; Zimmerman, 2002; Zimmerman & Cleary, 2009).

Goal-setting involves identifying specific reference points or desired outcomes based on criteria for success or personal targets (see Burnette, O'Boyle, VanEpps, Pollack& Finkel, 2013). Goals enhance self-regulation through their influence on motivation, learning, self-efficacy and self-monitoring (Zimmerman, 2002; Zimmerman, 2008; Zimmerman & Campillo, 2003; Hawe & Dixon, 2017), as students take ownership over their learning when they have clear goals and understand 'where they are going' (Hattie & Timperley, 2007). Therefore, goal setting is highlighted as an essential metacognitive strategy of self-regulated learning in most models of self-regulation (Dent & Koenka, 2016).

Goals can be outcome-oriented (i.e. performance or learning goals) or time-oriented (short-term or long-term goals) categorised as performance (also called ego-involved, normative or ability goals) and learning goals (also called task or mastery goals), and their effect on motivation and learning (see Burnette et al., 2013; Zimmerman, 1989, 2000, 2002, 2008). Students' setting performance goals, for instance, aimed to demonstrate their ability (i.e. grades) in relation to others (Burnette et al., 2013). However, mastering a skill and gaining internal satisfaction from acquiring knowledge is associated with pursuing learning goals (Evans et al., 2003; Zimmerman, 1989, 2000, 2002, 2008).

Both performance and mastery goals are linked to success, as there is evidence that both can contribute to students' learning (Zimmerman and Kitsantas, 1997, 2005). To illustrate, performance, ego-driven goals were found effective in exerting powerful motivational effects and learning goals were found effective in enhancing self-efficacy and self-regulations (Bandura, 1994; Bembenutty & Chen, 2005; Hawe & Dixon, 2017; Zimmerman, 2000). Accordingly, adopting one or more types of goals is actually common and preferable and it depends on the learning situations (Butler & Winne 1995; Zimmerman 2008), and task demands. Goal setting is often regarded as part of the planning that involves activating metacognitive knowledge to design a course of action (Dent & Koenka, 2016; Pintrich 2000, 2004).

Analysing a task involves also a stage of planning to achieve the pre-decided goals. Strategic planning makes completing tasks attainable and it starts by analysing tasks characteristics and activating prior knowledge to achieve learning goals (Dent & Koenka, 2016). Winne (1996, cited in Dent & Koenka, 2016) notes that analysing a task carefully influences how well the task is addressed and mastered, as defining a task correctly, assist students' selection of the most appropriate and effective strategies to approach and complete task and limits their need to modify their approach and strategies (Zimmerman, 1989, 1998, 2001, 2011). In their meta-analysis of relationship between SRL and academic performance in or across childhood and adolescence, Dent and Koenka (2016) reported that planning, as a metacognitive strategy had strongest correlation with achievement. Although overall correlation was small, they concluded that careful strategic planning can develop academic performance, highlighting the importance of planning to the successful achievement of a task.

Task analysis strategies largely depend on learners' self-motivation beliefs such as learners' knowledge of their abilities-self-efficacy, having clear expectations of the outcome and deciding what drives them to complete a task-task value, whether intrinsic values or external rewards-goal orientation (Zimmerman, 1998; Zimmerman & Cleary, 2009). Motivation plays an important role in initiating and sustaining self-regulated learning (Dent & Koenka, 2016; Schunk and Zimmerman, 1994; Zimmerman, 2001, 2008, 2011). Cassidy (2011) argued that motivational preconditions (internal parameters) could prevent or enhance learning by exploiting learners' full potential to self-regulate their learning effectively. Being familiar with their own motives, assists learners in setting personal goals and planning the task according to their ability, pace and expectations.

Self-efficacy is a key element of SCT and it is a significant factor in student learning as it affects students' motivation and learning (see van Dinther, Dochy & Segers, 2011). 'Self-efficacy refers to individuals' beliefs about their capability to perform designated tasks (Bandura, 1994; Bembenutty, 2011). Self-regulated learners possess a strong sense of perceived self-efficacy (Bandura, 1994, 1997; ARG 1999; Zimmerman 2000, 2002; OECD 2005, cited in Clark, 2012). According to Bandura, successful goals attainments and their outcomes depends on individuals' perceptions of their capabilities of achieving tasks, which specifies the extent of environmental control and resources needed to achieve tasks. Moreover, Chong (2007, cited in Bembenutty, 2011) highlighted the importance of self-efficacy and personal agency as a self-regulatory strategy especially as the learning situation and learning tasks' demands increase, as Zimmerman (2000) found that students who had strong perceived self-efficacy select challenging task, are more persistent and productive, and are resistant to depression, anxiety and stress.

Outcome expectation is another element that affect self-motivational beliefs and enhances the development of SRL. While self-efficacy reflects judgement of one's competency and capability to execute a task within a timeframe with the available resources, outcomes expectations represents a judgement of the possible consequences a performance will produce (Bandura, 1997, cited in Van Dinther et al., 2011). Bandura's (1994) theoretically separated self-efficacy and outcome expectations, however, Zimmerman (2011) argued that, in practice, high outcome expectations are usually affected by strong perception of self-efficacy. Unfortunately, there is a lack of investigation of the effects of outcome expectations in the literature of motivational beliefs (Zimmerman, 2011), one of the few studies focused on outcome expectations, namely Shell, Murphy and Bruning (1989, cited in Zimmerman, 2011), found that outcome expectations is an important predictor of academic achievement, but self-efficacy was a stronger predictor of success.

Positive expectancies and task values positively benefit achievement behaviours. Task value reflects students' perceptions of the tasks, appeal, importance and usefulness. There are four categories of task value: attainment value (personal need to achieve and do well in a task), intrinsic value, utility value (task relevance to current and future goals) and cost value (time, effort and resources need to engage in a task) (Raedts, van Steendam, de Grez, Hendrick & Masui, 2017; Zimmerman, 2011). High task value is expected to lead to more engagement with the task (Al Khatib, 2010), which was supported by empirical evidence (Zimmerman, 2011). Zimmerman reported evidence of task value effects on students SRLS and goal orientation. For example, Wolters and Pintrich (1998) found that students' perceived task value predicted their cognitive strategy use and SRLS significantly but did not predict students' academic performance. Moreover, Wolters, Yu and Pintrich (1996) found that task value and use of SRLS were positively related to goal orientation and self-evaluation: performance goal-oriented students reflected less interest in the task and less use of SRLS. Obviously, valuing a task triggers students' use of SRLS.

Furthermore, goal orientation is a self-motivation belief about one's own learning. As discussed earlier goals can be performance (task oriented) and/or learning-oriented (mastery-oriented) and they explain the reasons for learners' achievements. Students' orientation towards setting learning or performance goals have been justified by Dweck and Leggett (1988, cited in Zimmerman, 2011) in relation to mind sets. They argued that students' performance goal orientation reflects a fixed mind set; motivated students are encouraged to display their abilities, while demotivated and insecure students end up feeling helpless. However, learning goal orientation reflects growth mind sets by which both motivated, able and insecure students seek opportunities to enhance their learning through practice, persistence and the use of SRLS.

Much research demonstrated that motivational self-beliefs such as self-efficacy, task value and mastery goals positively predicted cognitive strategy use in middle and high school (Wigfield, Klauda & Jenna, 2011). Motivation for instance may not be directly related to adolescents' academic achievement but can indirectly improve academic achievement by promoting cognitive strategy use (same source). Overall, self-motivational beliefs can affect students' approach to learning, i.e. using SRLS, persistence, to a higher or lesser degree than the others; paying attention to students' beliefs about the reasons that drives them to achieve task is essential to a successful integration of SRLS in the classroom.

3.3.3.2   Performance strategies

The second phase of self-regulation (performance phase) involves process of volitional control, to avoid procrastination tendencies and focus attention on the learning task, being supported by self-observation strategies that assist monitoring proceedings and detect misguided or wrongly selected behaviours and strategies (Dörrenbächer & Perels, 2016). Self-recording During the performance phase students select appropriate cognitive strategies to achieve the task, and engage in metacognitive processes that provide feedback on the effectiveness of the strategies used-monitoring (De Bruin & van Gog, 2012; Dresel et al., 2015; Pintrich & Zusho, 2002; Wigfield et al., 2011). For example, cognitive strategies such as rehearsal, organisation and elaboration of information can be utilised in different domains, while summarising can be more task specific used to enhance reading or writing (Wigfield et al., 2011). Cognitive strategy use was highlighted as central to task performance and its use, adaptation and future intention to use depends on the self-control and monitoring strategies that students apply in order to judge the effectiveness of a particular cognitive strategy use for current and future performance (De Bruin & van Gog, 2012), depending on the nature of the task and student's approach to learning.

Self-control strategies are expected to assist learners to keep performing a task. These include strategies such as self-instruction, imagery, attention focusing and task strategies (Schunk; 2005; Zimmerman & Paulsen, 1995; Zimmerman & Kitsantas, 2005). Instructing one's self to keep performing the task verbally or by using self-observation techniques like recording performance or writing checklists is conducive to avoid distractions and delay gratification (Zimmerman, 1998; Zimmerman & Paulsen, 1995). Winsler and Naglieri (2003) found that 11-17-year olds engaged in audible self-talk, private speech as termed by Piaget (1923/1987), during various tasks especially when confronted by a novel or a challenging task. Literature in self-talk was associated mostly with children and adolescents, however it is used by adults too and it may become internal as learners develop as self-regulators. It was also considered a forethought strategy by which students plan an activity and judge their ability to perform it, which then undergo a temporal and

functional shift during performance, as argued by Vygotsky (1923/1987), as it functions as commentary and evaluation strategy during and after performing a task. On the whole, private speech/self-talk and its evolution and functions from defining goals and planning, to monitoring performance and providing feedback appears to be important strategies of a growing capacity to self-regulate learning and for problem-solving activities (cited in Wigfield et al., 2011).

Moreover, having a mental visual image of the task and the expected project can also help manage a learner's performance of a task as the learner has a perception of what the result should look like and thus use that mental image as a standard for success. Mental imagery is a strategy by which learners rehearse performance mentally as if they were in the process of performing it (Liu & Chan, 2009). Although Liu and Chan referred to a process where learners are actively and intendedly engaged in memorising performance, mental imagery in this study indicates students retrieving a mental image of a previously observed model or previously performed tasks. There is an emerging evidence in health settings that suggest that "repeated use of imagery tasks in which one visualizes the behavioural steps leading to a desired goal can enhance behavioural adherence and goal attainment" (Loft & Cameron, 2013, P. 261). Additionally, task comprehension and completion strategies such highlighting and writing notes support students' visualisation of information and maintaining self-control within the performance phase to accomplish tasks.

Strategies such as self-talk/instruction, imagery, attention focusing, time-management and environment structuring maintains students' persistence on achieving a task and support their intention to delay gratification for a longer-term goal, i.e. achieving a task and submitting an assignment. Persistence is a learners' willingness and continuation of performing a task despite being challenging or problematic; it represents a key behavioural indicator of SRL capacity (Wigfield et al., 2011). Dweck's theories of intelligence predicted learners' approach towards task performance. For instance, a learner who believes that intelligence is fixed, can easily abandon a task if challenged, while those with growth mindsets are likely to exert more effort and maintain persistence. Moreover, Dweck and colleagues found that receiving feedback on, and support in performance can influence students' persistence. For example, general external social support from parents, peers and adults can increase students' effort and persistence in sport and academics (see Wigfield et al., 2011).

Likewise, learning to delay gratification in academic settings or generally was considered a key contributor to self-regulation and achievement outcomes. Bembenutty's review (2009, cited in Wigfield et al., 2011) of academic literature highlighted delay of gratification as a key strategy to the monitoring and control phase with college students, which supported Pintrich, Marx and

Boyle's (1993) discussion of the cold cognitive system and the hot emotional system. Pintrich and his colleagues described the delay of gratification as a learners' cold cognitive system, characterised as being cognitive, strategic, emotionally neutral and contemplative, ability to control the hot emotional, impulsive reflexes that urge learners to have immediate rewards; undermines self-control efforts (cited in Tobin & Graziano, 2010). Delay of gratification was found more developed and strongest when paired with long-term goals and perceived instrumentality of the task- task value support future goals (Wigfield et al., 2011). Delay of gratification can be taught through modelling a learners' reaction and utilised strategies, to control self or other-induced distractions, through a self-talk of the motivational values that guided the task performance process, or through a representation of the delayed rewards. These strategies provide learners with techniques to respond to distractions, while reminding them of their motivation for learning, which can inform learners' delay of gratification capacity (Wigfield et al., 2011).

Monitoring is considered a dynamic steering wheel that provides direction and highlight areas that needs further adjustments in order to achieve a task. Learners monitor their use of strategies towards progress towards achieving goals by generating internal feedback about the success of their effort, reinterpreting elements of the task, assessing their engagement with it and redirecting their goals, effort, resources and use of strategies and/or engagement to maximise their success and achievement (Clark, 2012). Monitoring judgements are inferential in nature and they depend on the quality of the available cues related to the task and learners ability such as perceived difficulty of the task and task value, which are key motivational beliefs that drive learners' orientations towards achieving goals (De Bruin, Dunlosky & Cavalcanti, 2017; Dent & Koenka, 2016; Panadero et al., 2016). Having clear goals, good strategies and assessment of one's own progress facilitates learners' ability to monitor and control their performance. Overall, self-monitoring and self-control are thus intertwined and have a strong impact on academic achievement especially if students are not skilled self-regulated learners to become automatic in performing a task (Dent & Koenka, 2016). "Ideal self-regulated learners monitor the effectiveness of learning, adapt it when necessary, and maintain motivation and positive emotions while learning" (Wolters 2003, cited in Dresel et al., 2015, p.455).

3.3.3.3 Self-reflection strategies

In the third phase, students evaluate the preceding planning and performance behaviour by causal attribution to explain achievement or non-achievement of pre-set goals (Dörrenbächer & Perels, 2016). Self-reflection strategies encompass self-judgement and self-reaction strategies

(Zimmerman & Kitsantas, 2005; Zimmerman & Cleary, 2009), which supports students' evaluation of the effectiveness of the strategies they chose.

Self-judgement refers to learners' abilities to self-evaluate their performance based on a set of criteria, and consequently attribute success and/or failure to potential causes, such as lack of planning, not maintaining self-control, overestimating their ability (potential causes of failure) or practical goals, good planning, self-monitoring (reasons for success) (Dörrenbächer & Perels, 2016; Panadero et al., 2016, Schunk, 2005; Zimmerman & Cleary, 2009; Zimmerman & Kitsantas, 2005). Students need to make effective judgements about their work (Boud & Falchikov, 2007) and mastering this skill to the development of SRLS beyond a certain task or programme (Boud, 2000). Sadler (1989) stated that adult learners already possess some evaluative skills that enables them to judge their performance against standards and Boud (2000) emphasised the HE teachers' role in developing learners' self-evaluative strategies by encouraging students to monitor their learning goals and strategy use to enhance their learning and support their self-regulation process (Zumbrunn et al., 2011).

Consequently, self-judgement affects the type and extent of learners' reaction to their performance. Exerting effort and regulating learning is likely to help students accurately evaluate themselves, which leads to satisfaction and vice versa, which is less likely to negatively affect one's self-image, motivation or learning strategies (Panadero et al., 2016). The emotional outcome after performing the task either encourages learners to maintain similar strategies, adapt them to new tasks (based on the self-evaluation) or avoid performing tasks to save self-worth (Zimmerman, 1998). Less self-regulated learners could also act defensively, attributing their failure in accomplishing the task to the task itself or to the teachers (passing the blame on others). Moreover, students may give up performing subsequent tasks or continue applying the same ineffective strategies to perform the task believing that their level of ability and cognitive strategies is limited and cannot be improved (fixed entity).

Winne (2001, cited in Dent and Koenka, 2016) stated that the self-reflection phase is considered optional in information processing theory, as learners even the high achieving ones often do not evaluate their use of strategies, evaluate their performance and outcomes against standards and subsequently update their strategy use. However, knowing when and how to use particular strategies and tailor them for specific tasks are essential to develop a sophisticated and advanced knowledge of the cognitive strategies, which can have a significant impact on a learner's performance of a task and therefore in its outcome. Accordingly, students need to calibrate their judgement of their performance through practice and utilising their internal cues about standards

and performance and utilising external feedback on their performance generated by their teachers and/or peers.

Considering the phases and strategies of SRL suggested by Zimmerman, it is worth mentioning that being a self-regulated learner does not necessarily imply adopting a liner use of SRLS, following the 'task analysis/self-motivation-self-control/self-observation-self-judgment/self-reaction' order. The process of SRL is an iterative/cyclical process (Zimmerman, 1998; Zimmerman & Kitsantas, 2005), not hierarchically or linearly structured (Pintrich, 2004). Different strategies could happen in different order and self-regulation start, at different points while completing a task, based on learners' level of mastery of SRL. For example, learners may set goals, start performing a task, re-set goals, plan their progress, perform, evaluate, perform and evaluate or any other possible order. Learners are actually encouraged to go forward and backwards in their performance in order to complete the task successfully. Restricting learners to follow one single order or a set of strategies to regulate their learning and perform tasks may be counterproductive as learners vary in the abilities, knowledge and learning styles and strategies.

SRL strategies and sub-strategies have been emphasised in different models of SRL and the iterative nature of SRL has been frequently emphasised. The following section summarises five models of SRL and highlights the similarities and differences between them, justifying the adaptation of Zimmerman's (2002) model of SRL to guide this study.

3.3.4   Models of SRL

Different models explained the elements of SRL: this research aligns with Zimmerman's (2000) model of SRL as it emphasises the recursive nature of the SRL process, integrate the control and monitor process stages into one phase, and capitalises on the environmental/social aspect of learning. Puustinen and Pulkkinen (2001) reviewed the five most influential and popular models of SRL: Pintrich (1989, 2004), Zimmerman (1989, 2000, 2001, 2002, 2011; Zimmerman & Campillo, 2003), Boekaert (1992), Borkowski et al. (2000) and Winne (1989, 2001). Their review reveals similarities and differences between the models. While Pintrich, Zimmerman and Boekaert's models are goal oriented, Borkowski and Winne's are more metacognitively oriented because of the effect of IP theory.

Moreover, Winne argues that SRL is recursive to the point that metacognitive monitoring can produce internal feedback during any phase-feedback loop (Greene & Azevedo, 2007), while Boekaert placed more emphasis on the preparatory phase at the expense of the other phases (Puustinen & Pulkkinen, 2001). Winne's recursive feedback loop is of particular importance as it provides the learners with cues, feedback and supplementary information as they learn to achieve

tasks, which corresponds with the expected natural processing of learning and supports views of metacognition functioning, awareness of one's strengths and abilities in relation to task demands, This contradicts the distinct phases highlighted by the models (Bembenutty et al., 2015). Boekaerts, on the other hand, viewed learning as episodes/events that cannot be captured at one time via surveys or interviews, and therefore students' use of SRLS can only be captured via trace methodology techniques (Bembenutty et al., 2015).

Despite the differences in the emphasis on the five discussed models, they all share the same basic strategies and sub-strategies needed to develop self-regulated learners. The difference in the number of phases/stages does not indicate differences in the fundamental strategies required. Moreover, the focus on one area of SRL reflects that the other areas are implicitly included. For instance, the affect area/factor is integrated in all models, represented in motivation only (as in Boekaert, 1992; Borkowski et al., 2000), referred to as motivational and affective (as in Pintrich's 1989 Model) or implicitly integrated within the volitional area (as in Zimmerman, 2002 model), as they considered motivation a separate or the main influential aspect of affect (A summary of the review is provided in Table 3.2.

Table 3.2 Models of SRLS as summarised by Puustinen and Pulkicinen (2001).

Model	Adaptable learning	Metacognition	General framework for SRL adopting SCT	Social cognitive model of SRL	Four-stage model of SRL
Author	Boekaert 1992,95,96a &b	Borkowski et al. 2000	Pintrich 1989	Zimmerman 1989- 2000a	Winne 1996, Winne & Hadwin 1998
Phases/stages of SRL	3 phases: Preparatory performance, goal-setting appraisal & performance feedback	Knowledge Monitoring, Feedback not clearly structured	4/ forethought, monitor, control and reflection	Forethought, performance/volitional and self-reflection	Task definition, gaol-setting & planning, enacting tactics & strategies planned and metacognitively adapting studying techniques, COPES
Background theory	Kuhl's (1985) action control theory and by Lazarus and Folkman's (1984) transitional stress theory	Meta theorists such as Flavell Information Processing Theory (IP)	Social cognitive theory	Bandura's 1986 Social cognitive theory	SRL as an event not aptitude, Heterogeneous affected by Pintrich & Zimmerman, Kuhl
Areas of SRL	Appraisal influenced by (perception of learning sit, metacognition & self-system & motivational factors	Cognitive motivational personal and situational information processing	Cognitive, motivational and affective, behavioural and contextual areas	Cognitive, Behavioural and environmental	All four: cognitive, metacognitive, affective, behavioural/environmental
Considerations	Fast or automatic processing pattern and others that demand consciousness and deliberation regarding contextual goal processing Does not necessarily proceed in a linear way through the phases	Executive functioning proceeding from lower level skills and becoming gradually linked to positive motivational states	Integration of motivational constructs in SRL Heuristic framework because not all academic learning involves SR	Separable and interdependent variables Cyclical in nature SRL (SR thoughts, feelings and actions that are planned and cyclically adapted to the attainment of personal goals) 2000a (p.14)	SRL as an event not aptitude, Metacognitively guided behaviour that enables students to adaptively regulate their cognitive strategies in the face of a task Winne, 1996 Recursive model, Not linear
Instrument/s used in research	OMQ/ online motivation questionnaire: completed twice before and after a learning task	Intervention program	MSLQ Motivation (intrinsic orientation, task value& self-efficacy) self-regulated learning (rehearsal, elaboration, organization and metacognition)	SRLIS/ self-regulated learning interview schedule (Zimmerman and Martinez-Pons, 1986, 1988) structured interview 14 classes of SRS	Trace methodology
Empirical research conducted to support model	1993 relationship between motivational beliefs and math	Intervention program of guided discovery method/ not explicitly taught 5 phases 1995	200l role of goal orientation mastery or performance oriented related to SRL and academic achievement	Self-efficacy the most researched	Trace methodology/ observable indicators of cognition such as annotation Winne 1993, Winne et al. 1998,2000) Role of context (Hadwin et al., 1997)

Subsequently, McMahon and Luca (2001) suggested another framework based on Pintrich that positioned the affective factor as an essential/central factor and placed motivational, volitional elements within the overarching area of affect. The models suggested, complement each other and thus looking across them to identify opportunities or gaps is important for research purposes and implementation of SRL.

Zimmerman's model (1989, 1998, 2002, 2011; Zimmerman & Campillo, 2003) of SRL was influenced by Pintrich's model and thus by the SCT building on Bandura's SCT. Pintrich (1989) proposed his general and heuristic framework of SRL, which included four phases of SRL development (forethought, monitor, control and self-reflection) occurring across all four areas of SRL (cognitive, motivational and affective, behavioural and contextual). Pintrich (1989) outlined the types of cognitive, metacognitive, emotional and contextual monitoring processes that could occur within each area. His framework is still used by researchers to teach and test learners' SRL especially as Pintrich and his colleagues created the Motivational Strategies Learning Questionnaire (MSLQ) that aims to measure students' SRL (Puustinen & Pulkkinen, 2001).

Subsequently, Zimmerman proposed a three Phase-model instead of Pintrich's four phases. He argued that the monitor and control phases are hard to separate and thus he combined them in one phase, which he called the performance phase (Puustinen & Pulkkinen, 2001; Zimmerman, 2002). Zimmerman (2002) also referred to the affective factor as the volitional area. Zimmerman was one of the first authors of SRL and he proposed three different models over the years to explain the interaction and influences of SRL (Panadero, 2017). Panadero stated that Zimmerman's three-phase cyclical model of SRL was the most cited in the literature, which he situated within the social cognitive theory (the importance of context, observation and modelling in enhancing learning) and empirical evidence of the influence of Zimmerman's model in different fields such as sport, education and medicine can be explored in his review, Zimmerman (2013).

Zimmerman's (2002) and the other four models of SRL mentioned above, outline the four areas and strategies to consider before, during and after the teaching-learning process. These four areas suggest that a learner's mental ability-intelligence is but one factor/aspect affecting learners' attainment of knowledge and skills, affect and context have great impacts as well. As these areas and sub-strategies explain the 'what' aspect of SRL, it does not explain the 'how' aspect-namely do students self-regulate and whether SRL is a developmental process or a fixed entity (as discussed in the following section).

3.3.5   SRLS: nature or nurture?

It has been found that individuals can learn to self-regulate at different ages. Some tend to be better equipped and prepared to acquire SRLS at an early age (as concluded by Hattie et al. 1998, cited in de Boer, Donker-Bergstra & Kostons, 2012 and advocated by Sontag & stoeger, 2015) affected by their personality traits, upbringing or education. SR can be acquired naturally with the effect of the surroundings at an early age and it can be nurtured by practice even at older ages. For example, Effeney, Carroll & Bahr (2013) found that parenting and routines can help develop self-regulated learners at an early age and later academic achievement could be associated with early childhood example and routines. Self-regulated learning was found to steadily develop over the course of childhood (Paris & Newman, 1990, cited in Dent and Koenka, 2016) and was expected to have strong association with academic achievement as learners grew order. Children at elementary school have vague and limited understanding of task requirements and mostly their learning is highly structured by the teachers, which leaves limited opportunities for cognitive and metacognitive regulation (Meyers & Paris, 1987; Skinner et al., 1988, cited in Dent and Koenka, 2016).

As the demands of the learning and assessment tasks and the necessity for learners to monitor their learning in high school increase, and demands becomes even critical in university, learners need to use more cognitive, emotional and metacognitive strategies to maximise the effects of their learning. Students are expected to become more aware of the assessment task and of the strategies they can use to regulate their learning, therefore nature of the assessment and opportunities provided by the learning environment facilitate the development of self-regulation of learning (Dent and Koenka, 2016). Learners in higher education especially need to self-regulate their learning as they are expected to manage in autonomous and unfamiliar learning situations (Dörrenbächer & Perels, 2016), characterised by implementing complex and concurrent tasks, a need for autonomy with respect to learning organisation, learning materials, learning goals and learning procedures with few opportunities of structured external feedback (Dresel et al., 2015).

Research findings argue that goal-directed practice and motivation can develop learners' self-regulation even at older ages as long as individuals are not mentally-disabled, as de Boer et al. (2012) reported different study results where learners regulated and performed better at later than earlier levels at school or even at University. Additionally, motivation and support can have a noticeable difference in learners' ability to self-regulate when they are older. This is reflected in many professional and sport-based studies, where talent is not sufficient for success. Practice, commitment and motivation are key to assist learners' development of self-regulation and thus succeed (see i.e., Cleary, Zimmermany & Keating, 2006; Zimmerman and Kitsantas, 2002)

Bembenutty et al. (2015) suggested four developmental levels of self-regulation: observation, emulation, self-control and self-regulation. Observation indicates the importance of modelling as the first step by which learners become self-regulated, which requires the availability of a good model to generate the desired effect. Modelling, defined as "parenting one's thoughts and behaviours after those displayed by one or more models" (Schunk, 2003, p. 160, cited in Mullen, 2011), offers an overt and explicit demonstration (Vermunt & Verloop, 1999) of what students should do, how they do it and at what time. Montalvo and Torres (2004), however, suggested direct teaching of the strategy as the first step to nurture self-regulation within the learners. According to Montalvo and Torres, modelling comes second and then practicing, self-monitoring and social support consecutively. This study adopts modelling as the main strategy to teach self-regulation to provide learners with the opportunity to observe, study others' actions and record their own observation, and accommodate it within their own learning style and context (Mullen, 2011). Modelling is a major part of mentoring (Mullen, 2011) and it also capitalises on the significance of the context and environment, whether home or school, on students' ability to develop self-regulation, which again supports the rationale for choosing SCT theoretical underpinnings to guide this research.

As SRL can be nurtured, learned and developed, Nicol and Macfarlane-Dick (2006) and Clark (2012) suggested implementing formative assessment to promote self-regulation. In formative assessment, the assessment task is staged throughout a course of time and students receive feedback regularly and continuously to inform and improve learning. Nicol and Macfarlane-Dick (2006) argue that students become self-regulated and proactive if formative assessment and feedback is implemented taking context, assessment literacy and students into account. They argue that formative assessment and feedback emphasises the recursive and repetitive nature of self-assessment, which is essential to the development of self-regulation. Additionally, Clark (2012) emphasises that formative assessment practices 'actualise, reinforce and encapsulate' self-regulation by highlighting the importance of receiving, understanding, using feedback, and remaining on task throughout a period of time, which requires self-discipline and control, and self-assessment and management of one's work. Moreover, formative assessment reduces the amount of teacher-control, which reduces class formality due to the collaborative work conducted throughout the assessment period (Clark, 2012).

These are the characteristics of self-regulated learning and they are likely to be promoted when the criteria of excellence and objectives are transparent to teachers and learners. However, to design effective formative assessment tasks that support the development of SRL, context, assessment literacy, teacher-students' expectations and teacher and students' roles should be taken into consideration.

3.3.6   Measuring SRL

Montalvo and Torres (2004) suggested different instruments to measure SRLS: instruments that measure SRLS as an aptitude, offline measures, and instruments that measure SRLS as an event, online measures. The learning strategies are often difficult to observe, unless associated with observable behaviour, such as attention focusing, recording learning i.e. taking notes, therefore the most convenient method to collect data bout learners' strategies is to ask them (Chamot, 2004). Deciding on whether to use offline or online measures depends on the objective and context of learning researched.

The first type of instruments: offline measures regard SRL as an ability, which can be measured out of context and these instruments provide an overall score or picture of the learner's level of self-regulation. Retrospective self-report questionnaires, structured interviews-using hypothetical scenarios, and teacher judgements function as measurements of an aptitude reflecting little variation across context, demonstrating learners' perceived typical use of SRLS (Dent & Koenka, 2016). They may lack validity as learners' memory loss/distortion or their insufficient and inaccurate knowledge of their ability can be unreliable (Chamot, 2004; Dörrenbächer & Perels, 2016). For example, learners who use task and context-specific strategy may underestimate their use of strategies and rate their use as less frequent than the actual use, while students with less metacognitive knowledge of strategy use can mislabel their use of strategies (Dent & Koenka, 2016). Additionally, social desirability bias, where respondents provide answers they expect to be favourable by the researchers, threatens the reliability of the data collected.

Instruments such as think-aloud measures, methods of error detection, trace methodology and other measures that observe task execution, however, measure SRL as an event/activity (online measures). Assuming that SRL is an activity, conducting these instruments requires completing tasks or being involved in an activity, through which learners can report the details of the strategies and processes they utilise to succeed, in order to capture how student self-regulate their learning in real time as a concurrent, active and contextualised process (Dent & Koenka, 2016). Such instruments are meant to overcome the drawbacks from the aptitude instruments such as forgetfulness and reflection of learners' perception instead of actual process and level of SRL, especially if conducted out of context (Montalvo & Torres, 2004). Online measures reflects variation in strategy, as they are sensitive to task and context; they provide a more accurate relation to academic performance than offline measures (Dent & Koenka, 2016).

Comparing the two types of instruments measuring SRLS indicates that the purpose and context are two major factors in the choice of the instruments. Aptitude instruments are preferred for an overall snapshot of learners SRL at a particular time especially for a large sample size as they are

time and effort-effective. Learners' snapshots of SRLS are conducive to design assessment tasks and provide feedback based on students' strengths and weaknesses, even if their validity to provide an actual presentation of students' SRLS; questionnaires are worded in the broadest sense (Dent & Koenka, 2016). Trace methodologies and interviews may require a long period of time in such instances. However, if the aim is to provide a detailed record of the development of particular strategies, instruments that measure SRL as an event are more valid, reliable and appropriate.

Moreover, context affect the choice of instruments as it indicates what is needed, preferred and effective in a particular environment. For instance, if students are not highly-ware of their SRLS and cannot articulate their thoughts and actions while performing a task, implementing 'event' instruments is likely to be a waste of time and resources and it will not yield the expected results. In such cases, multi-item questionnaires are more appropriate as students rank (i.e., 1-5) to what extent do the items describe their learning. In spite of the issues of reliability associated with questionnaires, they are conducive as a diagnostic or pre-test and post-test instruments.

To conclude, it has been a challenge to measure such a dynamic nature of self-regulated learning as it encompasses several phases, components and strategies. Literature indicated frequent use of two main categories of instruments that measure SRL: instruments that treat SRL as a series of events and instruments that regard SRL as an aptitude. Deciding on the appropriate instrument to measure SRL depends on the purpose of measurement and the context assessed.

3.4   SRLS and success

Research on the effects of acquiring and using SRLS indicates positive results as self-regulated learners are found to be academically and professionally high achievers.

Studies on professional athletes' routines and instruction or guidance in using SRLS indicates improvement of performance. For example, Zimmerman and Kitsantas (2002) explored learners' awareness of SRL forethought and self-reflection phases by questioning what they were doing and thinking while practicing free-throw shooting/basketball. They found that experts adopted more specific goals and selected more techniques-oriented strategies and had higher self-efficacy perceptions than novice players. In other words, those who performed well were more self-regulated. Additionally, Cleary, Zimmerman and Keating (2006) reported positive impacts of a SRLS cyclic training for free-throw shooters as shooting adaption and motivation increased with the number of phases, they were trained on. In volleyball, Zimmerman and Kitstants (2002) studied the impact of modelled demonstration of the serve on the performance of female collegiate players of different experience level. They found that expert overhand-servers

displayed better goal setting, strategy use, self-efficacy , intrinsic interest, performance monitoring, adaptation and attribution. Obviously, experts tend to be more self-regulated learners than novice learners/players are, and thus they perform better. Practice, self-efficacy, self-control and self-reflection may have the major contribution to success.

This applies to education, where implementation of specific or the whole package of SRLS and areas affected students' academic performance positively in different educational levels. SRLS implementation affected learners' language skills (see Richardson & Healy, 2013; Zimmerman 1998; Zimmerman & Bandura, 1994), and/or content subjects such as mathematics (reported in Zimmerman, 1998), medicine/health (Badiyepeymaie Jahromi, Mosalanejad & Rezae, 2016; Sagasser , Kramer, Van weel & Van der Vleuten, 2015; Salamonson et al., 2016) or science (reported in DiBenedetto & Zimmerman, 2010; Zimmerman, 1998). For example, the positive impacts of SRLS were found on different age groups such as pre-schoolers (see Flook, Goldberg, Pinger, & Davidson, 2015; Perels et al., 2009; Raver et al., 2012), school students (see Al-Rawahi & Al-Balushi, 2015; Bose & Rengel, 2009; Stoeger, Fleischmann & Obergriesser, 2015) and college/university level (see Cadorin et al., 2015; Langer, Linke & Schimanke, 2014; Msaddek, 2016; Salamonson et al., 2016; Suknaisith, 2014). For instance, Al-Rawahi & Al-Balushi (2015) that journal writing has positive effects on Omani students' achievement in physics. Moreover, Aoki et al. (2010) and Bort-Mir (2015) reported that using technology (a mobile app and a software, respectively) helped learners manage learning by improving their learning strategies and manage emotions, and technology helped improve learners' metacognitive skills and academic achievement, respectively.

In summary, implementing SRLS whether directly via direct instruction or indirectly via modelling can improve learners academic or athletics performance across different age groups. Learners' academic performance improved in different content subjects or language skills like writing.

3.4.1   Writing Skills & SRL

Writing is a complex process and it takes many years to develop competence in writing (Harris, Graham, MacArthur, Reid & Mason, 2011), as it requires the delivery of thoughts, feelings, attitudes and knowledge (Abbas, 2016) to an unseen audience expecting their reaction to the text while perceiving the writer's voice and identity (Castello et al., 2009). The writer, thus, is an active agent in delivering his/her viewpoint of the subject while admitting the previous work and its relation to the composition at hand. This requires from the writer to keep his/her personal voice, which indicates the attitudes and identity of the writer, while maintaining good quality of its multi-dimensional aspects such as linguistic elements (spelling, lexis and grammar) as well as

the social and affective aspects (Abbas, 2016). The complexity of writing requires extensive self-regulation of an intricate process of which students need to develop an understanding of the wiring process, genres and strategies (Harris & Graham, 2016). Learning to write is more complicated than the writing skill itself and students need to be explicitly supported through school years and in post-secondary education (Harris & Graham, 2016).

The complexity of writing is even greater in English as Foreign Language (EFL) situations (Samanian & Roohani, 2018), where learners may not have the sufficient language skills to write in the target language let alone care about voice, affect and identity. However, EFL learners need sufficient writing skills to pass their courses (Abbas, 2016), many of which are taught through the medium of English for globalisation reasons. Skilled writers are sensitive to task cues and to the functions of their writing using a set of SRLS throughout the goal-directed and recursive writing process, scaffolded by a rich knowledge of cognitive, metacognitive and affective strategies in addition to knowledge of the subject or topic they aim to write about (Harris & Graham, 2016). Skilled writers indicated evidence of topic knowledge, motivation and persistence (Harris & Graham, 2016). Graham et al. (2005) argued that the more conscious the learners are, the less anxious they are and the more they tend to set personal and academic goals, the better quality the composed written text is. Although Graham et al.'s statement seems counter-effective in some cases where being conscious creates anxiety and may exploit a learner's time and effort, awareness of one's own weakness and strengths is important. These and other self-regulation strategies such as self-efficacy, self-beliefs (Zimmerman & Bandura, 1994), planning, monitoring (Graham et al., 2005) and self-evaluation (Abbas, 2016) are believed to improve the writing compositions if acquired and used by learners, because they tackle all writing stages: prewriting, writing and post-writing.

Rijlaarsdam et al., (2008) summarised three key theories and assumptions in writing education, namely Moffett (1968) learning to communicate, Elbow (1974) writers listen to their readers and Bruffee (1981) involvement of peers in the writing instruction. Moffett (1968) advocated real experience for learning to teach writing, as students learn when they experience language, which entails that instruction should provide real audience for students; real readers provide feedback and their response to their peers written productions. Learning to write become learning to communicate written thoughts and messages, to an audience that provide authentic and real not professional reaction as that provided by the teacher (Rijlaarsdam et al., 2008). Moreover, Elbow (1974) proposed a proactive writing education where students listen to their readers to accommodate the text to the writer. Elbow perceives writing as an act of exploration denying the existence of an objective theory of a good text. To Elbow (1974) the writing evaluation is subjective depending on the subjective opinion of the reader, therefore, readers need to be able

to 'listen' to how the text would 'sound' to a subjective reader; listening to the readers' voices, would provide feedback to the writer on whether his/her ideas are clear, communicating an understandable message or not; readers become a source of feedback and hearing their voice becomes an objective for the writer. Readers become more important to the writer than teachers, since an objective theory of what good text entails is absent (Rijlaarsdam et al., 2008). The third theory comes from Bruffee (1981), who advocated the subjective view of knowledge, assuming that students' learning involves experiencing different perspectives and views of the world, not only of the text topic. To Bruffee, writing does not represent the world but a view of the world; students, peers, coming together and discussing the writing purpose, process and evaluation is likely to enrich their view of the world providing nuanced and meaningful experience about the writing process and topic (Rijlaarsdam et al., 2008).

Moffett (1968), Elbow (1974) and Bruffee (1981) assumptions and understandings of the writing education provides a social aspect in learning, where the cognitive, individual process is explored and enhanced in context and within a community of learners, supporting the social cognitive theory of SRL. Writing to communicate, listening to your readers and involving peers situate the learning process within a socio-cognitive environment, where the cognitive process, involving the interaction between the task demands, the working memory and the long-term memory, is affected and directed by the social context of readers' expectations and evaluation of the message delivered, and the peers input, which can redirect the thinking and regulation of students' writing. Reading into these theories also suggest the interconnectedness between the different skills, reading, listening, writing and speaking and how can writing be influenced by the other language skills; in turn, writing can improve the other language skills (Zimmerman & Bandura, 1994) such as speaking and reading and vice versa. For instance, managing to express ideas in writing requires generating ideas, planning, organisation and cohesion skills, which are likely to improve speaking skills and help understand reading passages (Harris & Graham, 2016). Furthermore, the three theories provides implications for the teaching approach, whether adopting a communicative approach to teaching or promoting students' engagement in the writing instruction process, which is not limited to providing post-writing feedback, but inclusive to planning, performance and evaluation of the writing processes and products.

In spite of the importance of the writing skill in HE, where a lot of the assessment grade depends on exam writing or submitting a written paper, little research was conducted on writing in HE (Harris et al., 2011), and, especially, on the impact of SRLS training on writing performance, or its effect on writing skills transferability to advanced courses or across periods of time, and most of the work conducted comes from the west where the social and educational context is different from that in the east. Sala-Bubare´ and Castello´ (2018), in their recent systematic review of two

decades of empirical research in writing regulation processes in HE, reported that only 51 peer-reviewed articles investigated the writing regulation processes in HE, and only 15 of these utilised a socio-cognitive perspective, six of which lacked a constructive definition of regulation. Seven studies targeted undergraduate students' self-efficacy beliefs (3), metacognition (3) and task representation goals (2). They have all used observational designs and interviews, logs and questionnaires to explore students' self-regulation of the writing process. Moreover, five studies only investigated intervention effects of quasi-experimental studies on students' writing processes and products. Most of the articles have been published in the last five years indicating a growing interest on the writing regulation processes, however, context-wise, 15 were from USA, seven from Taiwan, Seven from Spain and five from the UK. Others included different parts of the world, however none were generated from the Middle East. Despite this systematic review's limitation, in terms of access to research, only peer-reviewed from Thomson Reuters Web of Science, Scopus and ERIC were used (See Sala-Bubaré & Castelló, 2018), findings indicate limited research in writing regulation in HE, especially for Arabic speakers learning English and using it as a medium of instruction.

Among the few studies that investigated the writing regulation process in response to implementing one or more SRLS are 1) Graham et al. (2005) investigated the effect of peer-support on writing, Abbas (2016) investigated the impact of self-reflection on students' writing process or multiple source of feedback, and a self-regulation strategies effect on writing was explored by Harris et al. (2011) and Samanian & Roohani (2018).

Graham et al. (2005) reported that implementing a Self-Regulation Strategy Development Model (SRSD) with peer-support in writing stories and persuasive writing improved learners' writing in length and quality of both genres. In addition, Samanian and Roohani (2018) implemented the SRSD model, which was developed by Harris and Graham in the early 1980s and found that SRSD instruction were effective in improving students' descriptive and reflective writing, i.e. completeness, length and overall quality of the writing products. Samanian and Roohani (2018) integration of SRSD in the writing classroom included six steps : 1) developing students' background knowledge, i.e. equipping learners with skills including assessment literacy and understanding of standards of good work, which are key for a successful performance, 2) the teacher and students discuss their current and desired performance in relation to the task and discuss strategies to improve performance, 3) the teacher model the steps for writing from topic to submission, 4) students memorise the strategies (however, students need to experiment with the strategies and adapt using them for different types of tasks instead of memorising them as this does not ensure transfer of learnt strategies), 5) the teacher support students' use of the strategies to complete specific writing tasks and finally 6) students use the strategy on their own

(Samanian and Roohani, 2018). Reflecting on the SRSD steps indicates that this strategy support the notion of gradually equipping learners of important skills and gradual release of responsibility of writing to the students (Harris & Graham, 2016) by the addition and removal of scaffold as required (Waring & Evans, 2015), ensuring that students have basic knowledge of assessment and requirements to understand and perform the task.

Additionally, dissertation workshops, portfolios, keeping diaries and drafting improved PhD students' awareness of their voice and the writing process (Castello et al., 2009). PhD students' writing develop partially due to the effect of raising their awareness of their writing, and partially to the frequent, repeated and staged effort, which aligns with Richardson and Healy's (2013) work on patchwork, whereby learners write weekly in the aim that these contribute to the final writing assignment. Moreover, Abbas (2016) found that a process-based approach to writing accompanied by weekly self-reflections on writing helped college students improve their writing performance and develop positive attitudes towards writing. This can be attributed to the cyclic nature of both process-based approach and self-regulation, and as students became more engaged in their learning process, their attitudes towards writing improved. SRLS foster within individuals the ability to mobilise, direct and sustain individuals' instructional effort. For instance, students struggling with setting writing goals can be shown via teacher modelling how to set goals and manage writing (Bembenutty, et al., 2015; Zimmerman & Bandura, 1994; Zimmerman & Kitsnatas, 1997). As it is essential to get individuals to use and be aware of the writing process and the strategies to promote and improve writing, instruction or training on self-regulation is essential (i.e., Ferreira, Simao & Silva, 2015; Flook et al., 2015; Sontag & Stoeger, 2015).

Overall, although researchers have described and elaborated on the characteristics of strong writers, research on how to scaffold teachers in the writing instruction is inadequate and rarely implement evidence-based practices in their classroom where they frequently experience difficulty meeting the demands of the course objectives and requirements (Harris & Graham, 2016). Writing problems are better dealt with at an early age (Graham, Harris & Mason, 2005), however, effective teaching does not always guarantee maintenance of learned skills to other pertinent tasks (Graham et al., 2005), and teachers knowledge on what is effective in relation to writing frequently lacks, calling for more research on how to support teachers and students in the writing classrooms in HE. Evidence-based practices that tackles the writing components, syntax, semantics and mechanism, as well as the writing regulation process in context are needed to scaffold students' success in HE and beyond.

3.5   SRL and SAPs

This section draws on the link between SRLS and SAPs highlighting the two concepts' definitions, research, and features.

By definition, SAPs promote students SRLS, enable them to take responsibility of their learning especially their self-evaluation skills and promote transfer of learnt skills and strategies to new learning situations. Based on this definition, SAPs becomes a means to develop SRLS in the students' learning environment, which indicates that the assessment design, processes and procedures impact the development of students' SRLS. Likewise, SRLS, becomes a feature for SAPs. The assessment literature indicated that tutorials, feedback, self-assessment and evaluation, assessment practice i.e. assessment literacy, feedback and design, have been discussed as means to achieve sustainable assessment practices (as discussed in section 3.2.1). Likewise, self-assessment and evaluation, has also been a focus in SRLS literature along with motivation and goal-setting (section 3.4)

Moreover, looking at the characteristics of sustainable assessment practices (SAPs) and self-regulated learning (SRL) discussed earlier indicates interrelatedness between both constructs. In fact, their characteristics are almost identical especially that concerns engagement of students and preparing them for the future while catering for current needs. Bandura (1977) introduced SRL as part of human agency and exercise of control that requires activating cognition, monitoring emotions and managing resources (Pintrich, 2000, 2004; Pintrich & De Groot, 1990).

From SCT and definitions of SRL, self-regulated learners are:

- active and proactive learners, who are actively-engaged in their learning and who are responsible for their own learning.
- goal-oriented learners, who set short-term and long-term goals for academic and non-academic tasks.
- able to monitor and control their cognitive processes (low-level skills such as rehearsal and memorisation and higher level skills such as organising, synthesizing and relating it to previous knowledge).
- metacognitive learners who think about their own thinking: recognise their mental processes, monitor, control and direct them to their own learning advantage.
- able to monitor, adapt and control their own emotions to increase their potential of learning and success.
- able to monitor, adapt and control contextual factors for better efficiency of learning.
- able to transfer and adapt acquired skills to different contexts whenever needed.

- able to identify quality of good work and are able to evaluate their performance according to a set of criteria.

Nilson (2013) summarised these characteristics in three words: international (meaning flexible or boundary crossers), independent, and self-directed learners. They are international in the sense that learners can transfer skills to different contexts and communicate their needs and learning effectively. They are also independent learners who create opportunities for learning and seek help if required. These learners are self-directed and do not need constant monitoring and guidance from others as they manage their abilities and available resources to their advantage. Nilson (2013) suggested SRL's characteristics can summarise sustainable assessment objectives as well. SAPs and SRL both aim to produce self-directed learners, who know their abilities, resources and control their emotions for the purpose of accelerating learning and achieving goals. These learners will learn to make informed judgements and make decisions, beyond the formal instruction environments, without seeking constant help and support from teachers or parents.

Zeidner, Boekaerts and Pintrich (2000) argued that sustainable assessment helps students become self-regulated as sustainable assessment practices scaffold students in the process of planning, monitoring and controlling their own learning. Moreover, this thesis proposes that implementing SRLS achieve and maintain sustainable assessment features (promoting transferability of SLRS as a skill and promote important strategies for self-efficacy, planning, performing tasks and reflecting on performance as circular, iterative process). Therefore, SRLS is a feature and an objective of sustainable assessment practices as implementing SRLS during school years or in post-secondary education can prepare students for learning beyond graduation (sustainable assessment).

3.6 Significance of the study and gaps in assessment research

Competences in self-regulation are considered as essential prerequisites for academic success (i.e. Boekaerts, 1999; Cassidy, 2011; Zimmerman, 2000, 2002) especially as the means of knowing has shifted from remembering and repeating information to the ability of searching for information and using them (Gillum, 2006); the development of these competencies has been identifies as an objective for HEIs (European Commission, 2008 cited in Dresel et al., 2015). However, many students are left behind and marginalised in the education system for lacking the basic skills and strategies that are required to navigate and exploit the learning resources available at HEIs (Dunlosky, Rawson, Marsh, Nathan & Willingham, 2013), especially as HEIs are broadening their intake of students to respond to calls for equality and equity to expand HEIs elite selection. This trend although required and recommended, leaves some novice, and in particular underprivileged

students at disadvantage being expected to participate in multiple communities inside and outside the educational institution and consequently become easily overwhelmed by the volume and complexities of the messages received at entry level, which emphasis the role of coping strategies to regulate various external inputs (Black & William, 1998; Clark, 2012).

Therefore, preparedness for college course and remedial courses became widely spread at postsecondary level to compensate to the general lack of generic skills, competencies and learning skills among students. In the context of the general educational systems, for example, in the context of Oman HE, investigations revealed that students were not provided with opportunities to develop self-regulation of learning and the dropout rate was interpreted as indicative of lack of motivation for learning and schooling (Al Barwani et al., 2012), which highlights the need for preparatory courses. College preparatory courses are sometimes differentiated from remedial courses as courses taking prior to college, while remedial courses are taken after college (Gillum, 2006). Academic preparedness courses are designed to equip students with adequate educational competences, i.e. learning strategies, reading, writing computer and mathematical skills, which are necessary to succeed in college (Biggs & Tang, 2011). However, the financial burden of remedial courses that falls on students and institutions creates resentment towards them especially if they do not produce the expected effects and students' skills do not indicate major improvements (Gillum, 2006; AlKharusi et al., 2012), which highlights the need to maximise preparedness and remedial courses effectiveness by including the development of self-regulated strategies as core objective of these courses.

Furthermore, reviewing the literature indicates five significant issues in relation to self-regulated learning theory and practice that include: 1) constructively defining self-regulation and SAPs in context; 2) a lack of intervention research, especially in writing regulation processes; 3) while there is extensive work on feedback, research on assessment as an overarching process is limited; 4) there is a rarity of research that explores the link between self-regulation and sustainable assessment, and 5) the lack of teachers' engagement in supporting students' self-regulation has to be tackled. Addressing and investigating these gaps in research is likely to take assessment research and practice a step forward.

First, self-regulation is not a unitary construct (see Lichtinger & Kaplan, 2011), however it is a dynamic process inclusive to different component, phases and strategies (Dent & Koenka, 2016), which urges for more methodological and theoretical considerations that investigate and measure SRL comprehensively, for the purpose of effective implementation of SRLS to enhance students' active engagement in domain-specific or general subject matter. This will also help advance our

understanding of SRLS as a construct, ability or a process as the different perspectives in literature indicate.

Conceptually, understanding of self-regulation varies in the literature from being independent learners to a more practical definition of using available resources, whether human or learning resources, to maximise learning, which is advocated in this thesis. For instance, the literature indicates a primer focus of SRLS at the behavioural level, while there is lack of the knowledge of the competencies required to realise SRL behaviours effectively (Dresel et al., 2015). Methodology-wise, despite the tools available to measure students' self-regulation, contextual barriers such as assessment design, the teaching approach and students' aptitude can impact tools' selection and the findings gained from utilising such tools. Moreover, supporting students' use in assessment for the development of SRLS can have different impact in different contexts (Dargusch et al., 2017), therefore methods or models of SRLS have to be sensitive for contextual differences. These considerations are essential for research intervention studies to test the nature and complication of self-regulation.

Second, there is a lack of assessment intervention studies, that measure self-regulation or report its development in the English as a Foreign Language (EFL) classroom at college level, in the literature of assessment whether these interventions are theory-driven or experience-based. Much of the work in SRLS comes from psychology, medicine and sport in the European and American contexts (Zimmerman, 2011). Moreover, there is a scarce of intervention studies that investigate the effect of SRLS training from a person-centred approach that can highlights important insights for developing adaptive and personalised training programmes (Dörrenbächer & Perels, 2016), while variable-centred approach for exploring SRLS effects is popular, which focuses on improving SRLS and highlighting important components and strategies for learning (same source).

That is to say, despite the interest in self-regulation and its effects on learners' academic and professional progress (Zimmerman & Schunk, 2011), literature shows that there is very little proof from practice that investigate the extent, nature and amount of learners' self-regulation considering a whole-package aspects such as literacy, feedback and design, let alone experimenting different types of interventions' impact on self-regulation and assessment. The writing regulation process has received even less attention. Although several reviews of writing regulation have been conducted in primary and secondary education (See Sala-Bubare´ & Castello´, 2018), Sala-Bubare´ and Castello´ claim that their systematic review is the first in HE. Sala-Bubare´ and Castello´ (2018). More work is needed to explore writing in a second or a foreign language and the use of SRLS in such situations.

Third, a lot of the work conducted on assessment focuses on feedback, mostly theoretical and pedagogical considerations. Self-regulation work indicates investigating particular strategies effects on academic success or professional athletes' lives (see section 3.5), however, exploring implementing self-regulation as a construct to enhance assessment practices has been scarcely explored (i.e. Evans 2016 and 2018 work); it needs further investigation. Therefore, "the focus needs to shift away from the narrow issue of how feedback can be improved and communicated, and towards the wider issue of how assessment (rather than feedback) can enhance student learning" (Sadler, 2013, p. 56).

 Moreover, a significant amount of research has been conducted to explore students' perceptions of assessment and feedback, however, teachers' perspectives and rationales for adopting a particular strategy has been fairly overlooked (Evans, 2013). Dargusch et al., 2017 reported a study by Fletcher, Meyer, Anderson, Johnston and Rees (2011); they found that teachers and students had different and often controversial views of assessment; while students felt that assessment marginalised the teaching and the learning process and that it was for accountability purposes mainly, staff considered assessment trustworthy and scaffolding the teaching and learning process. Moreover, Joughin (2010) emphasised that there is a gap between formal statement of assessment and what teachers expected from there students, which adds the complexity of expectations, understanding and transparency in addition to how best can teachers assess students' learning. Thus, the teacher voice in addition to that of the students is important to have a comprehensive understanding of the assessment practices and to better support teachers in their roles as facilitators of the learning process, scaffolding students' development of SRLS.

Fourth, the amount and quality of literature, which explores the effects of and the link between self-regulation and sustainable assessment practices is even rarer. In the last 30 years or so, a call for a focus on lifelong learning appeared (sustainable assessment, Boud, 2000) and it was argued that acquiring SRLS during school or HE can impact subsequent future or subsequent lifelong learning (see Panadero et al., 2016). However, the link between self-regulation as a mean to achieve sustainable assessment (acquiring important and core skills and strategies and transferring them to different levels of learning or stages of life to be bel to use the resources available to make decisions and solve problems) or vice versa has not been extensively and comprehensively researched. Self-regulation, sustainable assessment and life-long learning has been discussed in the literature as separate or related constructs without highlighting the relationship between them in theory or practice.

Fifth, in practice, teachers do not seem to share school psychologists' interest in self-regulation as a remedy for academic failure or students' disinterest in schools (Cleary, 2011). Thus, while school psychologists urge for access on students' motivation and self-regulation data to improve their professional role, teachers indicate their lack of knowledge of students' self-regulation, its nature or amount, due to lack of training, and if they have that sort of knowledge, they do not engage in the process of promoting students' self-regulation via research and interventions, or the practice of evidence use (Cleary, 2011). Honig and Coburn (2017, cited in Farley-Ripple et al., 2018) identified a historical gap in the literature between studies that tackle search-accessibility to research findings, or incorporation-use of evidence, highlighting that research overlooks discussing processes for implementation of research findings. Moreover, 'weak ties' exist between researchers and practitioners, and thus, the emerging emphasis to bridge the gap between research-based evidence and classroom practice Farley-Ripple et al., 2018). Furthermore, practitioners lack of contribution to research and/or practice can be related to an assumed reluctance to implement changes to assessment for epistemic, procedural and or pragmatic reasons (Dargusch et al., 2017).

To sum up, literature indicates students' lack of and need for self-regulation to navigate the wide range of available resources to enhance learning and succeed in HE and after graduation. There is lack of research that explores the link between self-regulated learning and sustainable assessment. Part of the issue can be explained in terms of the wide and different conceptualisations of the two constructs and the various methodological approaches that have investigated SRL, but overlooked sustainable assessment. Likewise, assessment as a whole package has been rarely investigated in relation to self-regulation, literature indicates the special attention to individual elements of assessment, mostly feedback, which this research aimed to avoid by implementing a more comprehensive conceptual framework and view of assessment and self-regulation.

3.7 Conceptual Framework

The proposed conceptual framework considers teachers' and students' beliefs and roles, assessment literacy, SRLS, feedback and assessment design as a means to enhance sustainable assessment practices (SAPs) by integrating Zimmerman's (2002) model of SRL and Evans (2016) EAT framework. Figure 3.2 highlights three main stages for a successful acquisition and practice of SRLS which takes into account the assessment practices design and the teacher's practice of SRLS integration in the assessment tasks.

1. SAPs Design

Teacher ensures that assessment is designed to support SRLS implementation i.e. assessment procedures and processes are transparent, meaningful, ongoing and provide equal opportunities.

2. SAPs Implementation

a. SAPs expectations: Teacher explains assessment procedures, objectives and requirements clearly, emphasising quality of good work, relevance of assessment tasks and how they contribute to learning while negotiating the teacher's and students' roles in the process.

b. Modelling: Teacher models SRLS phases and strategies for each assessment task as illustrated by Zimmerman (2002)

Performance phase

Self-control

- Self-instruction
- Attention focusing
- Task strategies
- Imagery
- Time-environment management

Self-observation

• Self-recording
• Self-experiment

Forethought phase

Task analysis

- Goal setting
- Strategic planning

Self-motivation

• Self-efficacy
• Outcomes expectations
• Task value/interests
• Goal orientation

Self-reflection phase

Self-judgement

- Self-evaluation
- Causal attribution

Self-reaction

• Self-satisfaction/ affect
• Adaptive/defensive behaviour

3. Students' intake of SAPs/outcomes: Transferability of SRLS use beyond the course

Figure 3.2 Sustainable assessment practices conceptual framework.

Theories of teaching and learning are often separated assuming that they tackle different unrelated aspects of education, while both should be aligned since teachers are supposed to take students' needs and interests into consideration in the design and creation of learning activities (Vermunt & Verloop, 1999). This alignment is essential to promote shared agency and responsibility of the students' learning and to promote students as active contributors in their learning process. Bednar et al. (1991, cited in Vermunt & Verloop, 1999) argued for integrating teachers' models in students' learning theories to facilitate learning. Thus, teacher-regulation and student-regulation should be considered before designing learning activities so that both types of regulations are compatible to maximise the benefit of the teaching-learning process. This means designing activities that are suitable to students' regulation level. In other words, if students are highly self-regulated, the teacher's control over the learning process should loosen and vice versa (Vermunt & Verloop, 1999). Therefore, this study's SAPs conceptual framework takes into account the teacher, student-regulation distinction and considers the four developmental levels of self-regulation (observation, emulation, self-control and self-regulation) suggested by Bembenutty et al. (2015).

To compensate for the lack of integration of teacher-regulation within students' self-regulation models, and the lack of the integration of assessment literacy and design in self-regulation models i.e. Zimmerman's model, Evan's EAT (2016) model has been incorporated to the SAPs conceptual frame work. EAT highlights the assessment literacy, feedback and design as key to effective assessment and learning, which facilitates teachers' mission to promote students' co-ownership of the assessment process and support their development as self-regulated learners. Noticeably, Evans (2016) designed EAT as a wheel and the process can start anywhere in the wheel, however, this research interprets the wheel and logically orders the aspects and elements within them as illustrated in Figure 3.2. The upper two boxes in the conceptual framework highlight the assessment design and literacy and the teacher role in the process of developing students' self-regulation.

First, sustainable assessment design is one aspect of the whole package of successful effective assessment. Evans (2016, 2018) places it within the EAT wheel and sustainable assessment design has taken into account the other two areas -assessment literacy and assessment feedback. The design aspect of EAT constitutes of four factors: transparent processes and procedures, meaningful, collaborative and focused assessment, access and equal opportunities (choice & resources) and ongoing evaluation to support sustainable assessment practices (Evans, 2016,

2018). This study's conceptual framework places sustainable assessment design at the beginning of each academic semester as the teachers discuss the assessment elements and suggest changes. The proposed changes will be evaluated throughout the semester and reviewed before the start of the next academic semester to evaluate their effectiveness reflected by students' performance, and their engagement in the assessment activities. However, since the foundation programme is centralised and major changes cannot be approved at college level, the changes proposed and implemented should not affect the assessment major elements.

Second, having discussed the possibility of incorporating SRLS into the sustainable assessment design and distributed SRLS implementations within different assessment tasks, teachers' and students' **assessment literacy** (the course's, teacher's and students' expectations and roles) is targeted by setting out SAPs expectations. Assessment literacy in this sense provides the first platform by which students feel empowered via the sense of ownership in being familiar with the assessment objectives and excellence criteria, and gradually participating in creating them. The importance of assessment literacy for both teachers and students is recommended to decide on the level of teacher-regulation (control) needed based on the level of students' self-regulation discussed at the beginning of the course to avoid friction in the two types of regulation (Vermunt & Verloop, 1999). Therefore, Evan's EAT assessment literacy part focuses on four factors: what constitutes good? How assessment elements fit together? Students' and lecturers' roles and entitlement, and clarity of the requirements of the discipline (Evans, 2016, 2018). Evan's framework is a workable document where students can write their expectations of the different factors and elements in EAT. For example, the first factor urges the teacher to clarify the standards of work, criteria of excellence and teachers' and students' expectations by which both become partners at least to the extent of sharing expectations. Factor two provides a map in which assessment elements and teaching and learning fit together so that students know how to manage these elements and own it, which is related to factor four. Factor three, however, indicates the level of students' engagement in the assessment practice and what support they are entitled to (i.e. feedback) – clarifies the nature of partnership and expectations on both sides. Raising students' literacy should not be limited to the beginning at the course, but revisited whenever needed.

Moreover, having ensured that sustainable assessment design scaffolds the implementation of SRLS and that assessment literacy is established and communicated, **the teacher integrates/models SRLS use within different assessment tasks**. Figure 3.2 considers the three phases of self-regulation emphasised by Zimmerman's (2002) model and aims to mend the gaps in his model. For instance, the forethought phase including refining the goals and planning, and reflective practice can occur any time during the three phases suggested by Zimmerman, and thus

the two-sided arrows between the phases (Figure 3.2). The arrows indicate the complexity of the nature and processes of self-regulation. Moreover, while Zimmerman's model illustrates the process of self-regulated learning including the feedback in its most valued self-assessment form and exploiting context to make full use of resources, Evan's EAT framework provides teachers and students with a platform to discuss the sources of support available for students and their perspectives on how it should be carried out and when. EAT sheds light on feedback grey areas that teachers may assume crystal clear. For example, do students know what to do with feedback, why are students receiving feedback and future benefits of feedback? It also attracts students' attention to the formative feedback they receive, and whether students really seek such opportunities or value them. Peer-feedback/ assessment is the third factor in EAT feedback aspect and is considered important. EAT points out to students that peer-feedback is actually a chance for students to support their peers and a chance to compare work, look for examples of better or worse work and a chance to receive feedback. Additionally, self-evaluation is essential in the framework and being the fourth factor indicates that it is an advanced step where students review their progress, whether they are in the right track and if not, what to do (see Graph 3.2). The EAT feedback aspect aims to actualise giving and receiving feedback to promote self-regulation within individual learners.

Third, the conceptual framework hypothesises that having considered and implemented the three elements- design, literacy and modelling SRLS- **sustainable assessment practices** are achieved in the form of promoting students' responsibility for their learning and enabling them to **transfer learnt strategies to new learning situations**, highlighting students' ability to adapt their strategies to achieve new assessment tasks. Sustainability is students' intake of the implemented framework which is achieved via raised awareness of the objectives of the assigned assessment tasks and practice of SRLS.

To summarise, this conceptual framework integrates Evan's EAT framework and Zimmerman's SRLS model to achieve SAPs, highlight the importance of assessment design and literacy to scaffold the integration of SRLS along with adapting a good model of SRLS within assessment tasks. Moreover, it functions as small baby-steps, but influential changes in terms of aligning teachers'- students' expectations, teacher's-students' regulations and delivering and receiving effective feedback. A key point is that the framework is presented as an integrated framework where all dimensions of EAT framework and Zimmerman's model work in union – it is however possible to direct focus at specific areas that may be lacking such as assessment design, or literacy, or specific language skills i.e. writing skills, as well as directing specific self-regulatory strategies such as goal-setting, motivational beliefs or self-evaluation.

3.8   Summary

Interpreting the current literature on assessment indicates a lack of focus on assessment interventions and the effect of SRLS implementation on SAPs in education/EFL. In fact, there are different interpretations of effective assessment practice and deciding on an overarching definition that tackles assessment literacy, procedures, feedback and design is of high importance. Moreover, the relative lack of interventions in assessment research makes defining effective assessment practices even harder and noting that this issue is global, it is even more obvious in the Arab world, Oman in particular, where there is hardly any published work in education in general and assessment in particular. The case is even more prominent in HEIs. SRLS and assessment practices occupies the same status in spite of the few studies that reported the positive impacts of SRLS on professional and academic achievements.

The link between SRLS and success, in these studies, varies in the scope and design of research. Some focused on one strategy (i.e., self-efficacy, self-monitoring, setting goals or self-reflection), other on a whole phase of SRLS process (i.e., forethought, performance or self-reaction) or a whole programme of SRLS and its effect on academic achievement. Design of these studies also varied from exploration (using strategies that measures SRLS as an aptitude or events) to experimental and action research studies, which used direct instructions or modelling to support the development of these strategies. The intervention period varies from less than an hour to an academic year. However, much work and more interventions are still needed to test current or theoretically proposed methods of assessment, and much work is necessary to investigate the effect of SRLS teaching/implementation on sustaining assessment practices reflected in the transferability of acquired skills beyond the academic course period.

The proposed conceptual framework aims to address some gaps in the current research such as that considering assessment literacy, feedback and design as a whole package implemented in a foundation year, writing programme in the context of Oman. It integrates Zimmerman's (2000) model of SRL and Evans' EAT tool/framework to investigate the SRLS impact on SAPs. The conceptual framework of this research emphasis the cyclical process of SRL and maintains frequency of implementation needed to support internalisation and transferability of skills. Next chapter provides more details on the design, procedures, elements, participants, and ethics of this research.

Chapter 4   Research methodology

4.1   Introduction

This study aims to investigate the effect of training students in self-regulated learning strategies (SRLS), in an academic English skills course in the foundation year programme at a College of Education (xCoE) in Oman, on sustaining assessment practices (SAPs). SAPs are considered as those promoting SRLS transferability across courses and semesters in the foundation program.

The design of this study was quasi-experimental, conducted over a period of nine months/an academic year. The inductive-deductive strategy directed the choice of data collection methods and data analysis procedures. The key aim was to answer the following overarching research question:

How can a research-informed approach to the integration of self-regulated learning strategies support sustainable assessment practices at a college of education, Oman?

And sub-questions:

RQ1. What are students' perceptions of their self-regulated learning (SRL) at entry level?

RQ2. Would a SRL intervention in a writing Academic English Skills (AES) course involving teacher modelling of SRLS improve students' writing academic achievement?

RQ3. What evidence is there that the impacts of the intervention are sustained beyond the immediate assessment task(s)? (Are students able to transfer the strategies learnt through the intervention to different courses in the foundation programme?)

This research derives its concepts and theoretical model from the Social Cognitive Theory (SCT), which conceptualises the learning process as a socio-cognitive process that has both cognitive and affective aspects and occurs within the social interaction between people and context (Bandura, 1994, 2001).

This study hypothesized that:

H1. Students enter the foundation programme at XCoE with low perceptions of their SRLS.

H2. Integrating SRLS into an AES writing course plan will improve students' academic achievement in the same course.

H3. SRLS integration will develop sustainable assessment practices measured by transferring learnt strategies across courses in the foundation programme or even beyond.

The research design and methodology are guided by the questions and hypotheses underpinning this research.

This chapter provides a detailed account of 1) the research paradigm, methodological design, variables and instruments, and justifies their selection; 2) study procedures including the selection of the population and sample, securing ethics for the data collection process, pilot study and main study intervention plan; 3) data analysis, which aims to link the data collection process and data analysis stage, indicating and justifying the selection of certain statistical analysis tests and software; and 4) threats to validity that highlight some of the limitations of the study and how they have been minimised. Finally, an overview of the chapter is provided.

4.1   Research paradigm, design and instruments

4.1.1   Paradigm informing the research design

The post-positivist paradigm underpins the philosophy of this research. Schwandt (1989, cited in Dieronitou, 2014) defined paradigms as 'worldviews' and beliefs about the nature of reality, knowledge and values. Based on this definition, the ontology (nature of reality), epistemology (nature of knowledge addressing the question "how do you know?"), and axiology (values) underpinning this research are discussed.

Ontologically, there is an overarching reality that governs people's actions but this reality is shaped by people's experience and beliefs. Unlike the positivistic view advocating a single superior version of reality represented in a hypothesis that is either confirmed or refuted advocating objective experiments and the researcher's distance from the participants, which is hard to achieve, this research extended that view by arguing for inclusion of participants, not subjects, views, experiences and beliefs to enrich the reality and adds different dimensions to the positivistic research. Therefore, this research adopted the use of hypothesis, testing hypothesis, and aiming to control variables (Gray, 2013; Ryan, 2006), from the positivist approach, and aimed to support the objective data collected through quasi-experiment by interviewing the participants to provide a deeper understanding of self-regulation at the foundation programme level. Consequently, knowledge was not merely discovered but actually constructed by participants

(Ryan, 2006), and the findings this research arrived at were the result of context and participants' input, which formed a set of general patterns and guidelines illustrating how students learn. Moreover, the researcher was not completely isolated from the study and participants, but was actively engaged with the participants by either training the teacher-participant or modelling for, and co-teaching, the participant-students. Moreover, using these multiple sources of data and input serves as a method for triangulation and using evidence to develop this research's conceptual framework and a means to decide to which extent are SRLS transferable.

Epistemologically, inputs from teachers, students and researcher are used for triangulation as evidence from these sources are utilised to develop the SRLS-SAPs conceptual framework, suggested in section 3.7, and determine to what extent these are transferable within the XCoE context. This research followed the inductive- deductive approach to generating data and testing hypotheses. After operationalising self-regulation and sustainable assessment constructs, the hypotheses stated were tested deductively via a quasi-experimental research design and the generated data were inductively supported via semi-structured interviews. The deducted themes/codes used in the data analysis were adopted from Zimmerman's model (2002) derived from the social cognitive theory and the conceptual framework, but some new themes emerged from the interviews. Deductively, hypotheses were formulated based on the SCT, SRLS and SAPs concepts and characteristics. Hypothesis one (H1) was explored at College level by the self-regulated learning scale-Al'Adawi (SRL-A) and compared to the published literature on SRLS and SAPs and pre-test scores. The second hypothesis, however, was tested using SRL-A, semi-structured interviews and students' written assignments and scores on the writing course. The same applies to the third hypothesis, which required defining SAPs to measure what effects SRLS have on them. Findings from questionnaires, interviews and observations were aggregated to answer H3 taking into account that it involved testing the change over a period of nine months. Appendix D provides a summary of research questions, objectives, methods of data collection and analysis.

Moreover, the research instruments, questionnaires and interviews, were tested for validity and reliability purposes to ensure a degree of objectivity, taking into account that this research did not aim for universality of the findings, as is the case in positivism (Bahari, 2010). Rather, it aimed to provide evidence of the possible effects of SRLS integration into a foundation programme writing course and advocate such integration officially at the college level. Furthermore, as it is hard to claim that researchers are value-free (Grant & Giddings, 2002), I believe that trial and error is sometimes useful especially to test hypotheses generated from context and observation (as part

of my role as a lecturer in the context of this study), and integrating participants' voice as a valuable dimension in generating knowledge and shaping reality.

4.1.2   Research methodological design

The post-positivist paradigm places this study within the quasi-experimental design as random selection and assignment of student samples could not be granted within the natural setting of intact classroom groups' population (Creswell, 2014). Another feature of this design was its use of pre- and post-test that characterise the less rigorous form of this experimental study (Bhattacherjee, 2012). Moreover, this study is classified as quasi-experimental with a longitudinal element because the data collection phase extends over a period of nine months, in which the intervention phase takes place within the first four months and the evaluation phase extends to the ninth month.

The intervention period
(September - December 2017)

The evaluation period
(December 2017 - May
2018)

September 2017   December 2017   May 2018
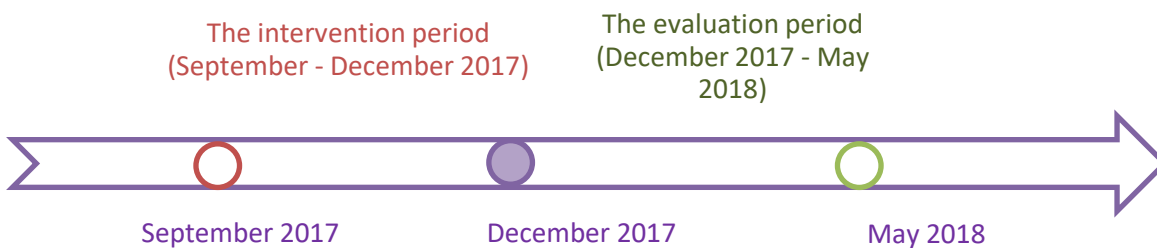
Figure 4.1 A timeline of the study's data collection process: the intervention and evaluation phases.

For the purpose of this quasi-experimental study, two intact groups were selected using a purposive convenience sampling technique from level B (equals 3.5-4 IELTS band) foundation year students. Purposive (choice of level B) convenience (intact groups) sampling was selected as this study tackles classroom natural setting where the researcher was not involved in the formation of the intact groups; the researcher selected participants based on ease of accessibility to participants and data (Blandford, 2013; Creswell, 2014). One group was the experimental group that received the intervention for four months and the second group was a control group intended to serve as a measure of control to compare the effect of the usual process of teaching

and learning to the effect of intervention in the experimental group. In phase 1, the experimental group had 26 students, while the control group had 21 students (see Appendix E).

4.1.3   Variables

This study's hypotheses have been formulated from SCT, which underpins the different variables (SRLS intervention, academic achievement and transferability of skills). A variable refers to a characteristic or attribute of an individual (learner) that can be observed and tested (Creswell, 2014; Spector, 1992). Variables can be classified as independent variables, which are the variables causing the change (treatment) or dependent variables that are receiving the treatment and enduring change (Creswell, 2014). Therefore, the SRLS intervention was the independent variable, while students' writing academic achievement scores and transferability of SRLS were the dependent variables in this study. There were other variables involved in this quasi-experimental study, which were considered under control such as students' age (+17), fresh graduates from high school, similar expected level of proficiency (based on English language placement test, PT), both groups were taught the same courses, had their exams and activities at the same time with the same number of hours and they were pre- and post-tested by the SRL scale and a writing task (see Appendix D & Appendix E). These students were assigned to their groups based on their results in PT. However, another variable that was not controlled for was the decision to choose two different teachers of English language, instead of one, to teach the two groups involved in this study (control and experimental group) for validity issues (discussed later).

4.1.4   Instruments

A mixture of quantitative and qualitative means of collecting data were used to answer the research questions based on their purpose. SRL-A was utilised to measure students' perceptions of their SRLS at the beginning and end of the data collection process to evaluate the effect of modelling SRLS on students' perceptions of their self-regulation and academic performance scores. Interviews, observations and document analysis were all used to measure the nature and extent of such impact on students.

4.1.4.1   SRL-A

The SRL multi-items scale was adapted from scales previously developed by Pintrich, Smith, García & McKeachie (1991), Pintrich & De Groot (1990) and Zimmerman & Martinez-Pons (1986), which were all tested for validity and reliability as measures of individuals' use of SRLS and they provide insights into the nature, categories and frequency of students' SRL due to the scale structured

format. However, the new adapted version of SRL-A (Appendix F) was designed to align with Zimmerman's (2002) model of SRL and it was piloted for validity and reliability purposes. Adapting the scale involved adopting some items as they are, writing some new items based on Zimmerman's SRL model (i.e., cognitive, metacognitive and self-reflection) and rewriting some others to fit context (Appendix F). The adapted scale (SRL-A) was created to reflect and include all of the SRLS to ensure that the scale tests what it was supposed to test, and thus addressing construct validity (Bergkvist & Rossiter, 2007; Bhattacherjee, 2012; Hinkin, Tracey & Enz, 1997).

The purpose of utilising a multi-items scale was to measure the different facets and dimensions of SRL as suggested by Zimmerman (2002) (Figure 3.1 in Section 3.3.3). Each scale consisted of similar items under the same dimension such as cognitive, metacognitive and self-reflection components that provided a comprehensive picture of the construct, SRLS (Bergkvist & Rossiter, 2007). In addition, the multi-items scale/SRL-A was used as a pre-test, immediate post-test and delayed-post-test in this study; repeated over three times to avoid issues of two points' measurement (pre and post-tests only), i.e. marginalise possible post-intervention impacts. Moreover, a multi-items scale tends to have a better internal validity than a single-item scale in addition to its advantage in measuring different dimensions (Alexandrov, 2010; Johns, 2010; Brown, 2011; Creswell, 2014; Spector, 1992).

SRL-A multi-items scale is using a Likert scale and applied the 7 point measurement responses scale, that ranged from '1-not at all true of me' to ' 7-very true of me' as indicated in Appendix F. All 7 response points were labelled and despite the general assumptions that only descriptive analysis can be carried with such scale, this research followed the common practice, which is to analyse the gathered data statistically to find possible correlations between variables and compare different groups (Brown, 2011).

4.1.4.2   Observations

Observations are instruments of data collection aiming to record accounts of events or procedures in progress (Blandford, 2013; Harrell & Bradley, 2009) and they are used in this study to support the teacher in his/her role in modelling SRLS to ensure the training of the participant teacher was going as planned and to contextualise findings from pre- and post-tests. Observations provided access to people's behaviours as opposed to only accessing what they say they do (Harrell & Bradely, 2009). In this case, observations provided an opportunity to watch students' self-regulated behaviour in action such as planning, writing notes or asking classmates for assistance (Zimmerman, 2001). Observations served as a descriptive and explanatory instrument of students' SRLS during completing writing tasks.

The researcher assumed different roles throughout the semester (see Figure 4.2 and a detailed explanation in Appendix G). In the first three weeks of the semester, the researcher was a co-teacher twice guiding the experimental group teacher in her role as the person that was modelling self-regulated learning skills for the students. Then, the researcher embraced the role of an 'observer as a participant' or a 'guide-observer', observing students' use of SRLS as well as helping the teacher monitor students' use of SRLS, or facilitating the process when needed, i.e. weeks 5-10. Finally, by the end of the semester the researcher was a 'complete observer' of the classroom setting, and of students' and the teacher's behaviours without being directly involved in the class teaching or learning i.e. week 11 & 12. Moreover, unplanned interventions such as students' self-evaluation of their writing in week 3, raising students' assessment literacy i.e. assessment literacy and marks allocation, and a focus group providing feedback on the course and their needs in week 10 were led by the researcher for accessibility of information as the researcher shares the students' first language: Arabic. These different roles by the researcher (Figure 4.2) aligned with the research design to ensure the full potential of the intervention. Notetaking was the method used to record observed data as videos were culturally sensitive and inappropriate within this context. Notes were later photocopied and transferred into a google word document file.
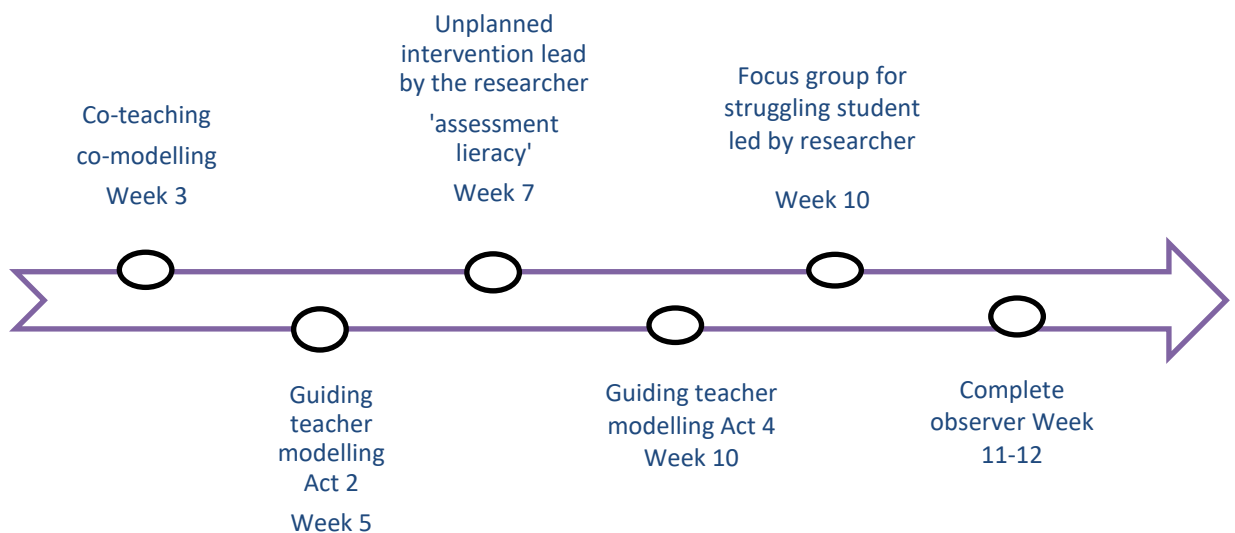
Figure 4.2 The researcher's involvement during the intervention phase.

As observation was assumed to affect participants (the observed) and change their behaviour due to the observer's presence, also referred to as the Hawthorne effect (Harrell & Bradley, 2009); changing the observer role from co-teacher to an 'observer as participant' to a 'complete observer' might have lessened that effect. The researcher gradually changed her role by establishing a participant relationship with students, having access to the classroom and being present four hours a week for four months. This lessened the effect of having a researcher and an outsider in the classroom and helped students in viewing the observer as being part of the group, maintaining however awareness of the research taking place.

4.1.4.3   Interviews

Descriptive data on students' awareness and use of SRLS as a result of the intervention were collected via semi-structured interviews. Moreover, teachers were interviewed during the two phases to explore their beliefs and practices of assessment. Semi-structured interviews were used in this study as a methodological and a research tool (Edwards & Holland, 2013) within the overarching quantitative quasi-experimental design. Semi-structured interviews were defined as an interactional exchange of dialogue on topics based on a pre-set list of questions or topics that are specified in an interview guide (Kajornboon, 2005; Harrell & Bradley, 2009; Edwards & Holland 2013). The interview had a degree of flexibility of the order and wording of questions and direction of the conversation (Alshenqeeti, 2014; Blandford, 2013; Keats, 2000). The interviews aimed to test the second hypothesis and provide a rich account and understanding of how students use SRLS to perform tasks, and the extent to which the intervention had an effect on students' awareness and use of SRL. Interviews were also utilised to explain students' perceptions and use of SRLS within the teachers' assessment practices and the classroom context.

Semi-structured interviews served as propping, data-triangulation, methodological and research tools. They were utilised as complementary tools to provide rich details (Keats, 2000; Harrell & Bradley, 2009) of students' use of SRL and help validate data collected from SRL-A multi-items scale and students' written tasks. Interviews helped to explain data gathered from the scale and sustained numeric data with a descriptive account. In other words, interviewing students during the semester helped students to elaborate on their self-regulation and helped explaining the findings from the scale. Having the opportunity to ask for clarification and to reflect on a previous task with the assistance of the interviewer, stimulated students' knowledge and reflection on their use of SRLS (Alshenqeeti, 2014). Moreover, interviews ensured high return rate as the interviewer directed the interview, propped interviewees and elaborated questions, which was

not possible with multi-items scales in which students could have misunderstood, missed answering the question or ignored it altogether (Keats, 2000).

Thirty-five students and four teachers were interviewed in the first phase of this study and twenty-five students and four teachers in the second phase, the amount of data collected was considerable (Alshenqeeti, 2014). The volume and richness of the data was challenging and required considerable time and skill sets to draw out the key findings (Alsaawi, 2014). Coding consumed time as students' descriptive accounts of their self-regulation generated multiple themes. As Accuracy of self-reporting was an issue. The assumption that students will self-report their learning process/self-regulation accurately and in detail, was not always the case as students failed to report certain behaviours assuming they were obvious, or unimportant (Blandford, 2013), and/or students were completely unaware of them. Interviews as a means for collecting data can also demonstrate low reliability as the data they provide can be less consistent in relation to participants' input and researcher's interpretation over a period of time. Potential interview limitations were minimised by preparing an interview guide to maintain a degree of consistency, probing questions (to stimulate respondents' answers and memory), audio-recording interviews and using computerised-analysis tool such as Nvivo, which supported a consistent and systematic and systematic approach to coding (Alshenqeeti, 2014; Keats, 2000).

SRL interview guide construction

The SRL interview guide was created to complement and measure students' SRLS in conjunction with the SRL-A multi-items scale instrument and thus the SRL interview guide (Appendix H.1) resembled the scale in the types and order of the themes discussed. However, while SRL-A aimed to provide a snapshot of a learner's SRLS, semi-structured interviews sought rich data of learners' SRLS. That is to say, the main body of the interview aimed to collect a detailed account of students' knowledge and use of SRL based on the most recent task students had completed. It aimed to stimulate and trigger students' memory on the strategies they had implemented before, during and after completing the writing task whether cognitive, metacognitive or self-reflection strategies.

Questions were constructed to be as simple and as clear as possible to the reading level of the students (Harrell & Bradley, 2009) and they were translated into Arabic for easier access to students' experience of learning and to eliminate potential language barriers. The scale was translated from English to Arabic and to ensure a consistent and accurate translation of the tool, two English Language teachers specialised in translation, reviewed and edited the original translation. Moreover, double-barrelled, double negative, and jargon questions were avoided to

minimise confusion. In addition, leading questions were removed and specific open questions were replaced to avoid social desirability responses, where interviewees' answers correspond with the norm or expectations of the interviewer (Harrell & Bradley, 2009).

The questions were consistent for all students, but the guide gave the interviewer a degree of flexibility to ask additional questions and provide probing questions according to the flow of the interview for each interviewee (Alsaawi, 2014). The opening and closing of the interview, however, corresponded with tips provided in the literature i.e. establishing good rapport, making the interviewee feel comfortable, obtaining factual and background information about the interviewee. The closing part was advised to be staged to maintain the rapport and ensure confidentiality of data and interviewee identity and being grateful for the interviewee's participation (Edward & Holland, 2013).

Furthermore, the teachers' interview guide was constructed based on the key principles supporting Evans' EAT framework such as equity, agency and transparency. Key factors such as good assessment practices, assessment literacy, assessment design and teachers' and students' roles in, and contributions to assessment are addressed and highlighted in the interview guide (see Appendix H.2). Moreover, the clarity of questions and their validity to context was assured. The teachers' interview guide was also flexible to address teachers' concerns regarding the assessment process and policies facilitating or obscuring assessment success.

To attend to issues of the reliability of semi-structured interviews, each interview was digitally audio-recorded for easier and constant access to data even after the interview (Alsaawi, 2014), which was subject to participant consent. This helped provide word-for-word transcripts of the data and allowed the interviewer to focus on the interviewee responses and thus probe and collect rich and interesting data instead of focusing on writing notes. To exploit this feature of technology, consent was guaranteed from the interviewees, a reliable device was secured and the interviewer was guided using tips provided in the literature (Edward & Holland, 2013) and by practice, i.e. conducting interviews at the pilot stage.

Moreover, piloting the questions on three students and two teachers indicated the questions' clarity or ambiguity, reading level and content validity as an instrument that was measuring what needs to be measured (Harrell & Bradley, 2009). In addition to overcome the issue of forgetfulness and short-term memory on students' account of their use of self-regulation, the interview probed students' memory of their SRLS during the most recently assessed task they had completed.

4.1.4.4   **Field notes**

Field notes were utilised throughout the data collection period to document factual data about the intervention process including the time, physical setting, behaviours and events (descriptive data) as well as the researcher's insights, questions, concerns and reflections on the process i.e. what went right and what should have been included or changed. Field notes were taken during the observations of classroom interactions, teaching and learning process, during the interviews to note and document topics raised by the interviewees for further exploration, during the administration of the writing activities and SRL-A to document questions raised by the students, any unclear and ambiguous items, time utilised to complete the scale and expected or unexpected behaviours from the students.

Field notes were gathered manually, using a pen and paper and using a digital device to record the researcher's reflections, questions and concern. Written notes were later typed and uploaded to G-mail site. Additionally, written notes were photocopied and stored in a password-protected computer. The qualitative field notes were later utilised to contextualise and understand the findings and reference to them can be sighted in the findings chapter. Appendix I provides a sample of a field note generated during one of the writing course lectures.

4.2   **Study Procedures**

The following sections provide an in depth description of population, research sample and sampling procedure, and the timeline of the data collection of the study.

4.2.1   **Population**

As this was a small-scale quasi-experimental study, data were collected from approximately 46 Level B students (divided into one experimental and one control group), and eight teachers (out of 20) through the SRL-A scale, students' written records, observations and interviews. The population of the study was foundation year students (aged 17-20), who had a placement test a week before the start of the study. The students' writing was evaluated using a set of criteria, the placement test criteria for marking the writing section in the test (Appendix J.1), and they scored 35-49 out of 70 marks, which was the total maximum mark of the placement test exam as indicated in PT mark sheet (Appendix J.2). This result was equal to 3.5-4 IELTS band and it was categorised as level B (intermediate) at XCoE. Passing level B guaranteed students' progress to level A (Band 4.5-5 in IELTS) before they could start their bachelor degree in their academic major. The reason for choosing level B for the study was due to the fact that this research was conducted

within an academic year (within nine months) before students started their bachelor in English Language Teaching degree. Since level B and level A are similar on their writing academic English skills objectives such as writing descriptive or argumentative paragraphs and essays, the intervention was conducted in the level B AES writing course and its effect on the transferability of strategies was measured on the second semester when the same students would be studying the level A AES writing course. This plan aligned with the purpose of this semi-longitudinal study. Level B students were considered academically mature and were expected to understand SRLS instruction and follow an integrated course of SRLS. The students were fresh graduates from high school. At the time of the intervention, they studied English for 20 hours of English Language skills per week and the majority studied mathematics and computer science (as some were exempted based on mathematics and IT Placement test results).

4.2.2 Sampling procedures

The selection of the groups was based on purposive convenience sampling as random sampling and random assignment could not be obtained in the natural setting of the classroom and college environment (Bhattacherjee, 2012; Creswell, 2014; Edward & Holland, 2013). Two intact groups were selected according to the participant teachers' assigned groups, students' willingness to participate in the study, and to the students' schedules and their compatibility with the participant teachers' lecture schedules. Two intact study groups were selected, which was the number of level B groups in Autumn 2017, and because a small number of participants was easier to follow as a panel study group (Creswell, 2014) instead of more in case of loss of participants over time (due to failure to meet requirements, drop from college or from the course). Students' consent was secured in the first week of teaching as intervention started then. Recruitment of students depended on the recruitment of the teachers as participants in the study, as the selected teachers' students were selected accordingly.

Most of the students were males except for three females registered in the experimental group, which totally depended on the intake of that year and the registered students in the two groups involved in the study. One student suspended her study from 2015 to 2016 and then to 2017 due to a health condition and six other students registered in the experimental group were from the 2016 intake and had started from a lower level i.e. Levels C or D, or had failed one level and thus were repeating the course. Moreover, four teachers were interviewed in Autumn 2017 and four were interviewed in Spring 2018, five of which were Omanis of 3-5 years of experience and three were foreigners of up to 20 years of experience at the time of the study (teachers' profiles are presented in Appendix K).

4.2.3   Ethics and data collection procedures

Ethical considerations were obtained from Southampton Education School's ethics committee (ERGO: 23737, Appendix L.1) on the 19th of October 2016, and from The Scientific Research Centre at MOHE in Oman on the 28th of December 2016 (Appendix L.2) in response to the researcher's letter requesting access to the field (Appendix L.3). Students and teachers in the study were provided with participants' information sheets in the first week of study (Appendix M1-2) in which they were provided with an overview of the purpose of the study, level of involvement required and the consequences of participation. The participants' information sheet, also, provided the researcher's contact details, explained that participation was voluntary (Alshenqeeti, 2014; Edward & Holland, 2013; Kajornhoon, 2005) and ensured confidentiality of data (Appendix M1-2). Withdrawal from the study meant receiving the same implied treatment as being enrolled in the same intact group but neither being tested by SRLS-A nor being interviewed.

Students were also provided with a consent sheet in which they were asked to provide their informed consent as participants in the study to be tested using SRL-A multi-item scale and to be observed and interviewed (Appendix N). Participants' consent and contact details were required on the scale, interviews schedule and their completed writing tasks in line with ethics clearance procedures. Students were informed that their details were needed for the analysis of the data collected and for future contact whether for further data collection or for reporting findings (Alshenqeeti, 2014; Edward & Holland, 2013; Kajornhoon, 2005)

Participants were informed of the tools of data collection and data protection such as being audio-recorded in the interview using a digital device, and storing the recorded data and written data gathered from students' participation in the test, observation or written tasks in a password-protected computer. Students were ensured the confidentiality of their data and anonymity of their identity and that the data gathered would be used for research purposes and any following publication related to the study only (Alshenqeeti, 2014; Edward & Holland, 2013; Kajornhoon, 2005).

4.2.4   Intervention

The intervention within the semi- longitudinal quasi-experimental study is illustrated in Appendix G and Appendix E, which details the nature and number of interventions and tests throughout the first and second phase of the study. As shown in Figure 4.3, the first phase of data collection was conducted in the first semester of the academic year (September 2017 – December 2017). The first phase started with students responding to the SRL scale pre-test to measure students'

perceptions of their SRLS. After that, students were given a writing task in the first study week as a pre-test of students' writing performance (Appendix O).

In week 3, the intervention process began with the teacher and the researcher modelling AES activities (as indicated in Appendix E & Appendix G) by verbalising his/her areas and phases of SRL while students were expected to acquire and internalise the strategies and processes throughout the activities over time. This continued throughout the semester as students were graded on five activities in the level B AES course (Appendix E).
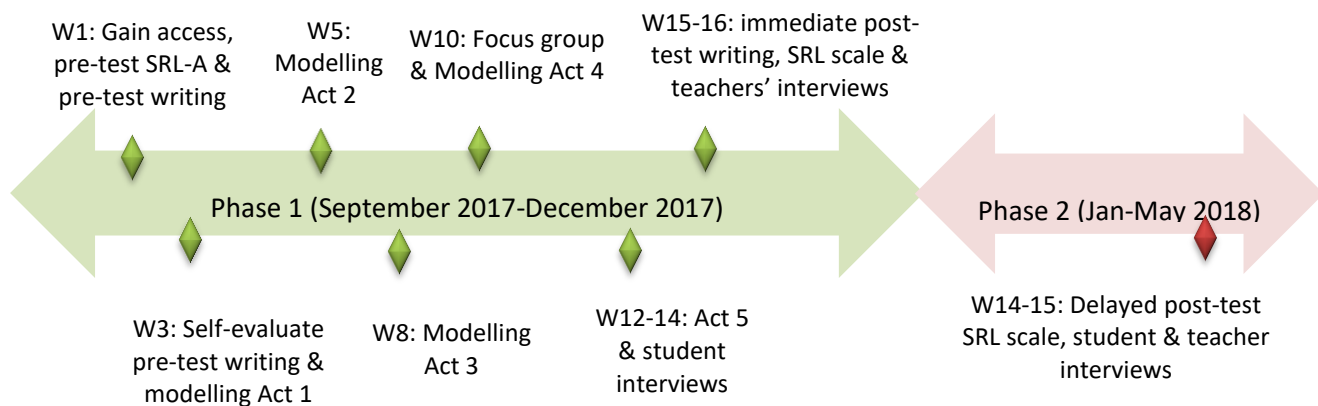
Figure 4.3 Phase 1 and phase 2 of the data collection process indicating the writing activities (Act.) and data collection methods at different points of time during the study (W=week).

Phase 1:

The rationale behind the intervention was to raise students' awareness of SRLS, provide a model of good SRL, and direct students' current use of SRL to be able to learn, regulate their own learning, make full use of college courses and direct their future use of SRL beyond graduation. Modelling SRLS was thought to be more effective than teaching at the college context, because the researcher could not make major changes in the students' timetable, or nature of courses and allocation of courses hours.

Training the experimental group teacher (T1) started a week before the beginning of the semester, by explaining the research to T1, providing information about SRLS and their importance for learning, providing examples and how they are going to be integrated into the course. Then, every week the teacher and researcher spent about 15 minutes before the lecture to discuss the aim and procedure to integrate SRLS within a particular activity. In addition, in the first few weeks, the researcher's presence was noticeable, by co-teaching and modelling with T1. The researcher interventions were limited after that to guiding the teacher outside class hours or in the break between the activities during the class, and whenever the teacher needed help as indicated by the unplanned interventions in Appendix G.

Modelling SRLS started in week 3 with a complete model of SRLS phases and gradually the teacher focused on different phases during the semester, i.e. week 10's focus was on self-evaluation and feedback (Appendix G provides a full account of the modelling and unplanned interventions).

During weeks 12 and 14, students were interviewed on their awareness and use of SRL based on the most recent activity they completed (Activity 4, see Appendix P). The semi-structured interviews were designed to provide a rich account of students' own awareness of, and progress in SRLS use. Students in both groups responded to the semi-structured interviews for about 30 minutes each (Appendix H.1), which were audio-recorded for a reliable storage and easier analysis and revisiting of data in the future.

Students, in both groups, were immediately post-tested on using the SRL-A scale to measure the extent to which their perceptions about their SRLS had changed due to the intervention, during week 15 and 16 of the semester. In addition, a post-test writing task was designed to measure students' performance in writing after the intervention in week 15 (Appendix Q). Comparison between the results of the students' perceptions of SRLS and AES activities scores (students' achievement on the course) within and between groups were conducted using paired-samples and independent-samples t-tests to measure the effect of integration of SRL into the AES course for the experimental group. Moreover, teachers were interviewed in week 15-16 to explore their views of their assessment practices and explore teachers' perceptions of their students' SRLS performance during the semester (Appendix E & Appendix H.2).

Phase 2:

The second phase was carried out in Spring 2018, the second semester of the academic year (February 2018 - May 2018) (Figure 4.3 & Appendix E). Students were interviewed again during weeks 12 & 14 to compare students' perceptions of SRLS in both semesters and measure whether they have progressed in their self-regulation process (Appendix H.1). Moreover, the SRL–A scale (see Appendix F) was used again with both groups, experimental and control, as a delayed post-test to measure students' perceptions of SRLS five months after the intervention at the end of the second semester. In other words, would students continue to use SRLS to perform activities and complete assignments on their own? This study hypothesises that they would. However, the relatively short intervention period meant that SRLS had not been fully internalised by all the experimental group students and the existing assessment design could have constrained teachers' time and freedom to commit to the intervention. Teachers were also interviewed by the end of the semester to explore their perceptions on their students' performance and self-regulation strategies and their perceptions about the assessment practice at the college (Appendix H.2). Different teachers were interviewed during the two semesters, as the teachers teaching these students changed and the composition of the students in the two groups changed as well for no obvious reason (The admission and registration centre rearranged the students assigning a mixture of the control and experimental group students in each new created group in the second academic semester).

This study was conducted throughout the academic year. Its success depended on the design of the study, the validity of the data collection methods and management of time; so that interviews and the SRL-A scale were conducted within the time limit and approximately, in a short period that did not exceed two weeks each time students were interviewed (two times). Its' success also depended on training the participant teacher on modelling and verbalising SRLS for one group which required time, efforts and agreement between the researcher and the teacher. The reason that teachers were not interviewed at the beginning of the first semester was because the participant students were new and unfamiliar to the teachers.

4.3 Data Analysis

Data obtained during the pilot study and the data collection stage were analysed using a mixture of quantitative and qualitative data analysis methods and tools based on the nature of the research questions they were designed to answer and the nature of data they helped interpreting. The analysis started by transcribing the audio-recorded interviews which took over

four months. Then, quantitative data from The SRL-A scale, pre-test and post-test writing tasks, assessed writing task, and mid-term and final test scores collected during the first and second phase (Appendix E) were analysed using independent-samples and paired-samples t-tests via SPSS.

4.3.1   Quantitative data analysis

Piloting the SRL-A scale served as a way of measuring the reliability and validity of the scale (Bhattcherjee, 2012; Creswell, 2014; Harrell & Bradley, 2009; Hinkin et al., 1997). At the pilot stage, the Arabic version of the SRL-A scale was distributed to nine level B students and 15 level A students (different from the participants in the main study), one response was discarded as the participant forgot to answer one of the pages. The SRL-A scale was distributed to students during their English language classes time 10-12 pm on Monday, the 8th of May 2017. The participants spent 20-30 minutes rating the items in the scale, which was practical. The SRL-A scale was distributed to levels B and A students as it was the last week of teaching in the semester and students were already absent preparing for the final exam, which was held on the following week. Moreover, in the academic semester of Spring 2016/2017, there was only one group of level B consisting of 21 students, four of which withdrew from the course for lack of attendance.

The initial analysis of the scale showed that there was a translation mistake with one of the items as the translated item was difficult to understand for more than one student and thus a simplified version of the translation was provided (a simpler lexis). There was also a typo mistake in another item. The internal reliability of all items (79 items) in the scale tested using Cronbach's alpha was 0.87 in the piloting phase and 0.93 in the data collection phase, which indicated strong item covariance and homogeneity and suggested that the sampled domain had been adequately captured (Bergkvist & Rossiter, 2007; Creswell, 2014). An initial exploratory factor analysis extracted 17 out of 19 subscales only (Creswell, 2014; Hinkin et al., 1997).

Moreover, a pilot study measured how valid the scale was by testing its internal validity. That is to say testing whether the scale tests what was intended to be tested (the construct under investigation). This was measured through participants' responses (Brown, 2011; Creswell, 2014; Johns, 2010), as it showed what students have missed, misunderstood or ignored (Brown, 2011; Johns, 2010); whether their answers were systematic or it indicated social desirability trends (Bergkvist & Rossiter, 2007; Creswell, 2014).

As SRL-A was administered in the first week of Autumn 2017 as a pre-test, week 15 of the same semester as an immediate post-test and week 15/16 of the Spring 2018 as a delayed post-test,

the analysis process was gradual as well. The pre-test scale results were entered in SPSS in October 2017, immediate post-test results in March 2018 and delayed post-intervention in May 2018. Analysing the data included checking data, missing data, coding, reversing negatively-worded items, testing scale reliability, testing students' SRLS when they first entered college, and the effect of the intervention on the experimental groups, comparing the control and experimental groups SRLS and the status of students' SRLS after an academic year of language learning as shown in Figure 4.4.
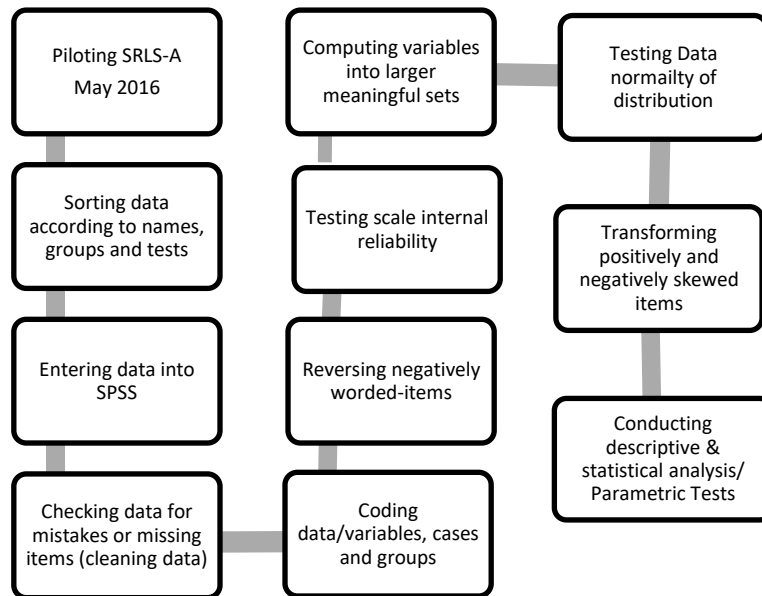
Figure 4.4 The process of analysis of quantitative data gathered from writing tests and SRL-A.

First, collected data from the scale were entered into the data window into SPSS, mistakes and typing errors were corrected, missing data due to students' absence were acknowledged. For instance, some students did not answer the survey and thus these were regarded as missing cases. Some others failed to answer some items or in two cases a whole section/page and thus these were treated as missing items, therefore analysis-by-analysis option was selected in most statistical tests.

Second, coding was gradual starting by coding groups as the control group (C) and the experimental group (E). Participants/ cases were also coded for confidentiality and therefore the control group participants were given the letter C and numbered 1-20 (i.e. C1, C2, C3, etc.) to identify them, while the experimental group participants were coded using the letter E and numbered 1-26 (thus, E1, E2… E26). Moreover, the scale items were also coded and shortened to indicate the different variables of the SRL-A scale.

Third, some items in the scale were negatively worded (Appendix F) and thus they were reversed using the transform option in SPSS to have accurate representation of participants' responses before conducting statistical analysis. Subsequently, Cronbach alpha was measured for all items in SRLS scale (α= 0.96, N=87 cases, as 36/123 were excluded because they contained incomplete responses). Alpha for sub scales were also measured as indicated in Table 4.2. Subscales indicated high internal reliability except for task analysis scale (α=.52), self-judgement (α=.58), and self-reaction scale (α=.61), however these three sub-strategies scales were included in subsequent analysis as they were important strategies for the development of self-regulation.

Table 4.1 The internal validity (α) of SRL-A multi-items scale and sub-scales.

Scale	Number of items	Number of cases/123	Reliability (α)	alpha if item is deleted
1.A task analysis	5	119	0.52	lower if any is deleted
1.B motivational beliefs	16	111	0.92	.93 if 1.b.4.b is deleted
1 forethought	21	108	0.90	.91 if 1.a.2.a is deleted
2.A self-control	30	103	0.91	not much difference
2.B self-observation	12	116	0.85	no difference or lower
2 performance	42	97	0.94	not much difference
3.A self-judgement	9	121	0.58	.66 if 3.a.1.b is deleted
3.B self-reaction	7	121	0.61	.68 if 3.b.2.b is deleted
3 self-evaluation	16	119	0.71	.72 if 3.a.2.d is deleted
SRLS	79	87	0.96	not much of a difference

Then, items were computed to produce the 19 sub-strategies which were further grouped into the six sub-strategies (task analysis, self-motivation beliefs, self-control, self-observation, self-judgement and self-reaction) suggested by Zimmerman (2002), which made it manageable to explore the data's normality of distribution, conduct statistical analysis and compare and contrast within and between groups.

In order to carry out statistical analysis, data were regarded as scale/interval data. This is to suggest that there was some kind of equal intervals between responses and therefore, they are eligible for inferential statistics such as coefficient correlations, in addition to descriptive statistics such as the mean, central tendency and standard deviation (Bergkvist & Rossiter, 2007; Creswell, 2014; Field, 2009). Inferential statistics (via SPSS) tested correlations between variables of which

simple descriptive statistics cannot measure (Pearson's for correlations independent and paired-samples t-tests, two ways ANOVA or mediation tests).

The 'Explore function' in SPSS provided descriptive statistics of SRLS overall and sub-strategies scales. Visual inspection of histograms, normal Q-Q plots, box-plots and Skewness and kurtosis statistics indicated that sub-strategies and overall SRLS scores were within the acceptable range of normality of distribution (<+1 & >-1) except for self-observation, self- judgement and self-reaction scores. Self-observation (with a skewness of -0.768, SE=0.225 and a Kurtosis of 0.886, SE= 0.446) and self-judgment scores (with a skewness of -0.828, SE=0.220 and a Kurtosis of 1.748, SE= 0.437) were negatively skewed, while self-reactions scores (with a skewness of 1.025, SE=0.220 and a Kurtosis of 1.611, SE= 0.437) were positively skewed. Therefore, these three sub-strategies scores were logged transformed. Adjusting data and transforming them for acceptable normal distribution permitted conducting parametric statistical tests on the data.

Parametric tests such as independent-samples and paired-samples t-tests, ANOVA and mediation tests were used for different purposes. While independent-samples t-tests were used to compare between the experimental group and control group perception scores of SRLS and their writing scores in assessed writing tasks and writing tests, paired-samples t-tests were utilised to investigate students' perception and writing scores within each group over time. Moreover, two-way ANOVA tests measured the change in students' scores across three tests, pre-test, immediate post-test and delayed post-test to explore the intervention immediate effect and post-effect on the experimental group, when did change occur if any and whether there was a statistically significant difference between the control and experimental group. Furthermore, mediation test indicated whether significant changes were mediated by a variable other than the independent variable.

To summarise, students' perceptions of their self-regulated learning was captured via SRLS-A to provide a snapshot of students' perceptions at the beginning and the end of the course as a pre and a post measure of the intervention effect. Independent-samples and paired-samples t-tests, ANOVA and mediation tests were conducted to compare the self-regulated learning strategies perceptions' scores and writing tests scores for the control and experimental groups at pre-test, immediate post-test and delayed post-test.

4.3.2   Qualitative data analysis

The interview guide was piloted in May 2017. Three students from level B were interviewed to explore their use of SRLS based on their performance on the last task assessed. The interviews

were conducted on Tuesday, the 9th of May 2017 from 10am-12pm in a meeting hall. Each interview lasted for approximately 30 minutes. One participant was interviewed in English while the other two preferred Arabic due to their limited language proficiency. The main observation was that students confuse SRLS with language proficiency skills.

Teachers' interviews, different to those conducted during the main data collection process, were piloted on the 7th, 8th and 9th of May 2017. Interviews lasted 45-60 minutes each. All three teachers taught the same group of level B students: one taught grammar, the other reading and the last one taught writing. The participant teachers described their experience of assessment and their observation of students' self-regulation of learning. They all agreed that most of the students enter college with limited self-regulation and study skills except for a very small number of students. However, they were happy that their students improved according to their own pace and interest. They all recommended teaching or introducing students to self-regulation strategies and university life either by teaching them directly, promoting it as a college practice and culture, or by inviting discussions of successful graduates. All three participant teachers described effective assessment as that in which students are engaging and participating and that which develops responsible and successful students.

Piloting the interview guide provided valuable data on the clarity, wording and language of the questions, and how understandable they were to the participants (Alshenqeeti, 2014; Edwards & Holland, 2013; Keats, 2000). Piloting the study instruments served also as a training and practice session for the interviewer to anticipate possible issues with interview questions, their order and content and whether there were important topics/questions the researcher failed to include. It was also an opportunity to test the recording device's reliability, in terms of clarity and durability, which were both fine. The analysis processes started almost as soon as the data collection started with immediate reflection of the pilot interview results and possible topics or themes emerging during the interviews (i.e. learning histories, culture and geographical area impact on learning, attitudes towards the foundation year), which has been included in the interview guide as a result.

The Final version of the student interview guide was utilised in the main study (Appendix H.1). Twenty-four and 11 students from the experimental and control groups, respectively, participated in the interviews in the first phase of the main study. The rest missed the interviews and time was tight to arrange for another time as they had busy schedules, submission of assignments and frequent absence in the last two weeks preparing for exams. Students' interviews were carried out on the 28-30th of November 2017 and the 10-11th of December 2017 as there was a national

vacation week between the weeks of the interviews, which was unavoidable. Moreover, four teachers were interviewed later on the 27th and 28th of December during foundation year exams week. Phase 2 interviews were conducted during the period from the 29th of April to the 11th of May 2018. It included eight students from the control group, 13 from the experimental group and 4 teachers, each teaching one of the study groups. All teachers and students' interviews were electronically recorded for easy and frequent access.

Verbatim transcription was used to transfer interviews from the verbal form to the written form. Word for word transcription was used to enliven the written representation of the interviews and provide better insights of themes. All but four of the students' interviews were conducted in Arabic, as per students' preferences. The Arabic records were translated directly into English by the researcher, a bilingual speaker of Arabic and English. Transcriptions were stored in a template that highlighted the interviewee identification number, date and time of the interview and it contained two columns; one for the interviewer-interviewee interactions and the highlighted codes and the other was for the themes-revised themes (Appendix R1-2). Figure 4.5 illustrates the process of analysing the interviews data.
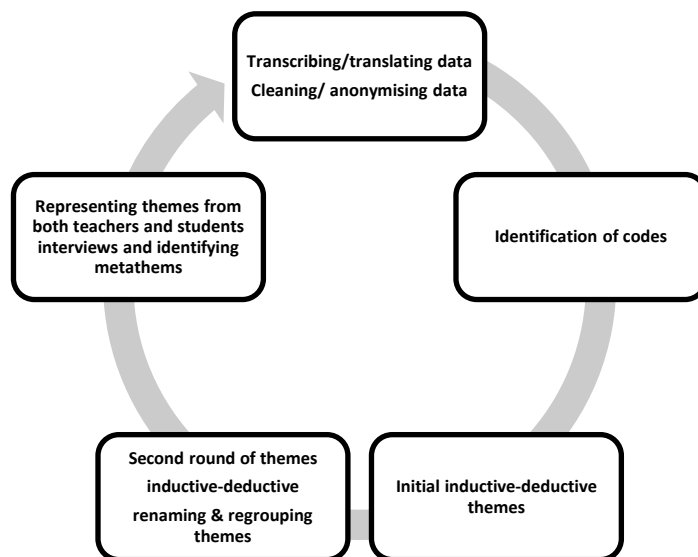
Figure 4.5 The process of analysing the qualitative data gathered via semi-structured interviews.

Following Braun and Clarke's (2006) discussion on qualitative thematic analysis, this research adopted their recommended series of steps in thematic analysis- method of identifying, analysing and reporting patterns within data. Braun and Clarke (2006) suggested six main steps of thematic

analysis in the qualitative, inductively-generated research, but they were also applicable to qualitative data in quantitative research. These steps were 1) familiarizing oneself with the data, 2) generating initial codes, 3) searching for themes, 4) reviewing themes 5) defining and naming themes and 6) producing the report.

As an initial step, the teachers' and students' interviews were identified as data sets - data that were used for this particular analysis (thematic analysis). Additionally, themes- representing a level of meaning related to the research question from within the data sets- were deducted from the conceptual frame works. Initial identification of themes included, but was not limited to, assessment literacy, completion of task, forethought, performance, self-reflection, and thoughts on SRLS. Within the general themes, sub-themes deducted from the conceptual framework included criteria, help-seeking, confidence, motivation, preparation, strategies, difficulties, awareness, evaluation, strength and weaknesses.

Analysing data from the semi-structured interviews adopted an inductive-deductive approach using a series of inductive-deductive thematic analysis via Nvivo software (Alshenqeeti, 2014; Bhattacherjee, 2012; Field, 2009; Keats, 2000). The adoption of the inductive-deductive approach in which concepts from the conceptual framework represented the themes in the coding process of the data (predetermined categories based on research questions and Zimmerman model) corresponded with the post-positivist approach of this study. Deductively generated themes, such as forethought (goal-setting and strategic planning), performance (self-control and self-observation) and self-reflection strategies (self-judgment and self-reaction), guided the analysis process. However, other themes emerged during the data analysis process, which deserved investigation, interpretation and integration into the results (i.e. repeated practice and learning histories). Nvivo was used to manage the data transcription and data storage process. Nvivo was designed to provide numeric as well as descriptive and explanatory data that helped in supporting the data collected via SRL-A multi-item scale and provided a rich data on the amount and depth of students use of SRLS indicated via the nature and frequency of the themes inductively-deductively generated (Alshenqeeti, 2014; Field, 2009; Keats, 2000). The coding trail that indicates the change and evolving of the themes is represented in Appendix S. Subsequently, these themes were integrated with the data gathered via SRLS-A scale to assist in explaining and enriching the quantitative findings.

4.3.3   Students' written products

Students' produced written texts throughout the course either for practice or for formal assessment. The research collected pre-test and immediate post-test written tasks as part of the intervention process, which were marked according to placement test writing criteria (Appendix J.1) by the researcher to compare students' writing scores within and between groups across time. Moreover, five written tasks, assessed by the class teacher according to pre-set criteria, were also collected from all students (excluding those who missed the task) and achievement scores were compared between the two groups. The experimental and control group writing course teachers moderated students' writing tasks scores to ensure the reliability of their grading. Moreover, students' mid-term and final exam writing scores were collected for comparison as they could serve as a post-test since they occurred in week 16 of Phases 1 and 2, the final week of the semester. These tests were marked by two different teachers, who are usually not the assigned group teachers, thus validation was not required. All assigned marks from the assessment tasks and exams were statistically-tested using paired-samples t-test to compare students' performance scores in the two phases and compare the two groups' performance using independent-samples t-test via SPSS.

4.4   Threats to validity and limitations of the study

 A major strength of the study was its attempt to explore students' perceptions and use of SRLS and its attempts to investigate SRLS transferability across the curriculum and their role in sustaining assessment practices. However, its major limitation laid in the potential impossibility of controlling for all variables in a natural context as students' SRL development could be induced by the teachers' usual teaching effort whether in the general English course (GES), which they studied in combination with AES, or in mathematics or IT courses. In addition, possible factors from family and peers could have had affected students' development of SRLS.

Moreover, there were cases of loss of participants due to the length of the period of data collection (nine months) as students lost interest or failed the course. This possibility was heightened considering that all level B students were included in the study (46 students), including the six 2016 intake students who had passed level C or were repeating level B. However, this issue was marginalised by restricting the period of voluntary participation in the study to the first three week after which participants were obliged morally to commit to the study as stated in the participants' information sheet.

This indicates a major issue with research involving an intervention element, which is the participants' willingness and buying to invest in the research. In other words, being obliged to be participants in the research after the end of the three-week voluntary participation, did not necessarily translate into students' investment in their participation, which was observed in some students' reluctance to be interviewed. Moreover, students seem to lose interest even more on the second semester as the number of students interviewed indicates (Appendix E).

Furthermore, the training for the teacher required time as it was planned to take place during the students' orientation week and to ensure training went as planned, the researcher assumed the role of a co-teacher for the first 3-4 weeks before shifting into the guide-observant role. This again was problematic as it affected the researcher's observation and role as a researcher in a quasi-experimental study. However, the access to data and in-depth insight into the students' perception and use of SRL would not have been achieved by being distant from the participants.

Likewise, the SRL-A scale has limitations in testing the breadth of students' SRLS as it treated SRL as an aptitude not as an event (Pintrich, 2004). Moreover, Perry and Rahim (2011) argued that it could be difficult for learners to make generalisations about their learning as their selection of learning strategies depended on the context. Based on these arguments, think-aloud protocols could have been, in theory, more effective to collect rich data, but this was not an option as students need training on think-aloud protocols before introducing such method, which was unlikely to happen due to the study time-constraints. Thus, semi-structured interviews were used to elaborate, explain and support data collected from SRL-A, and to provide detailed accounts of students' knowledge and use of SRLS. Furthermore, there were some validity and reliability issues of the research instruments, which were discussed in the pilot study section.

Furthermore, in relation to the data and statistical analysis, missing data could have impacted the results and their validity whether the missing data concerned one item which could affect perception of a single sub strategy or missing sub-scales which affected the validity of the overall scale.

4.5   Summary

In summary, the study's research design was robust adopting a quasi-experimental design with a longitudinal element to explore the effect of modelling SRLS in a writing course, utilising both quantitative and qualitative data collection and analysis tools for triangulation purpose, and holistically unpacking the assessment aspects to provide a comprehensive understanding of SRL in context.

This study aimed to investigate the effect of implementing SRLS in an AES course on SAPs via a quasi-experimental design in which implementation occurred in the first half of the academic year and the implementation effect (transferability of skills) was tested in the second half. Data were collected during the period of Sep 2017- May 2018 using SRL-A multi-items scale, observations and interviews. The three-point measurement assisted in neutralising the 'novelty' aspect of introducing modelling and SRLS, as the third point of measurement eliminated the direct impact of 'the new method effect', if any. Data were analysed using paired-samples and independent-samples t-tests, ANOVA and mediation tests via SPSS, and inductive- deductive thematic analysis manually and via Nvivo to measure the assumed effect and possible correlation between variables. Chapter 5 highlights the main findings and analysis that answers research sub-questions.

Chapter 5   Findings and analysis

This research was looking at whether implementing a change involving modelling SRLS for students, in the foundation year programme at different times during an academic semester (four months), would improve students' perceptions about their SRL and improve students' writing. The study's quasi-experimental design included two phases: phase 1 consisted of the intervention and phase 2 aimed to investigate the impact of the intervention as measured by the transferability of students' learnt SRLS to new learning situations. Measurement of students' perceptions of SRLS and writing performance occurred at three points in time as represented in the study timeline (Figure 5.1).

Pre-test
September 2017
Time 1

Post post-test (delayed)
May 2018 (end of
phase 2)
Time 3

Time 2
Post-test (immidiate)
December 2017
End of phase 1
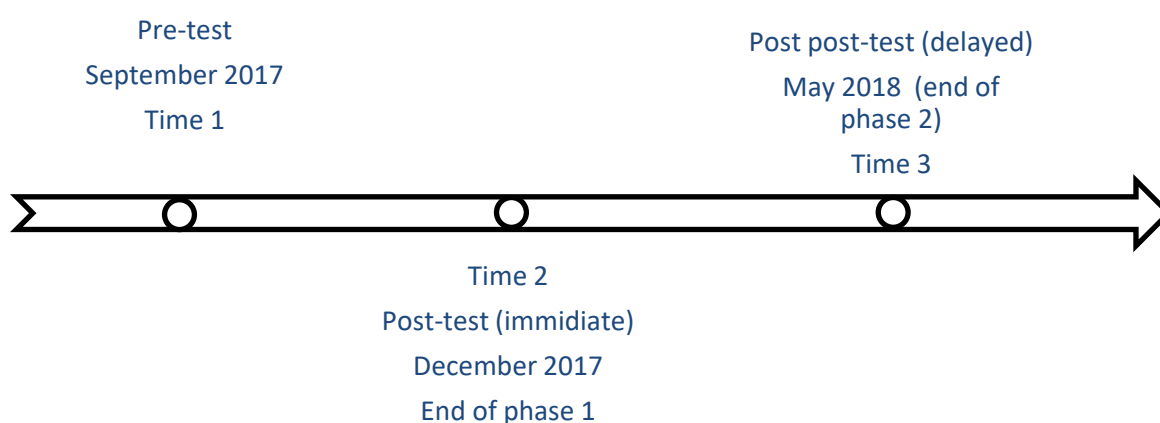
Figure 5.1 The timeline of the study's data collection process.

Date collected in September 2017 (time 1) aimed to provide a snapshot of the students' perceptions about their SRLS and their academic writing performance in order to answer **RQ1: What are students' perceptions of their SRLS at entry level?** (discussed in section 5.1). Having explored students' perceptions and writing performance at the beginning of the semester, the implemented change was tested, explored and compared, at time 2 in December 2017, between the experimental and control group (discussed in section 5.2) to answer **RQ2: Would a SRL intervention in a writing Academic English Skills (AES) course, involving teacher modelling of SRLS improve students' academic achievement?** Moreover, the transferability and sustainability of the impact of the change, if any, was explored at time 3 in May 2018 in phase 2 (discussed in

section 5.3) to answer **RQ3: What evidence is there that the impacts of the intervention are sustained beyond the immediate assessment task(s)?** In addition to students' perceptions and views of their SRLS uses, the findings were interpreted in relation to the teachers' views and practices of effective assessment (section 5.4). Finally, major findings are highlighted, numbered, and finally synthesised in section 5.5.

It is important to highlight that findings and subsequent analysis, and interpretations and conclusions were synthesised from 123 student responses to the SRL-A scale, 56 student and eight teacher interviews, 36 pre-writing and 36 post-writing test scores, midterm and final test scores and foundation level B and Level A academic writing task scores collected over an academic year (nine months, see Appendix E). Findings were analysed using a mixture of Parametric Tests via SPSS (i.e. two-way ANOVA, independent and paired-samples t-tests and a mediation test), and inductive-deductive thematic analysis conducted manually and via Nvivo in order to answer the research sub-questions. The findings from the thematic analysis of student interviews from control and experimental groups are presented as a whole, since there were no differences identified in the themes emerging from the qualitative data between the two groups of students.

The quantitative findings from SRL-A and writing scores are presented in figures and tables and are interpreted and explained through qualitative findings, which were synthesised from students' and teachers' reflections and from the researcher's observations and field notes. The organising framework of this chapter is that of Zimmerman's (2002) model of SRLS highlighting the forethought phase strategies (i.e. task analysis and motivational beliefs), the performance phase strategies (i.e. self-control and self-observation strategies), and the self-reflection phase strategies (i.e. self-judgement and self-reaction strategies). Emerging and important themes in students' reflections were discussed in relation to the quantitative findings and presented in Appendix U and Appendix V. Moreover, Evans' EAT (2016) framework and its key principles of equity, agency and transparency, were utilised to analyse, interpret and organise findings from teachers' interviews in order to explore and consider teachers' assessment literacy, feedback and design (Appendix W).

Key findings indicated that the impact of the integration of SRLS in the experimental group writing lectures had a general stabilising effect in their perceptions of their SRLS throughout the study, and a delayed effect in their performance in the writing course (occurred in phase 2). However, the over-structured teaching and classroom environment for the control group, increased students' sense of control over the course in phase 1 of the study, which declined later with the

increased demands of assessment tasks in phase 2. Beliefs and values, assessment design, the teaching approach and task demands, along with individual differences, i.e. learning patterns and histories, and self-efficacy, were identified as key factors for a successful integration and development in SRLS, emphasising the transition from secondary school to HE and the need for training in SRLS. The following sections provide a detailed presentation of these findings organised according to the research sub-questions. Key findings within each section are highlighted in bold.

5.1 Students' perceptions and writing performance in September 2017 (pre-test findings)

Hypothesis I responding to RQ1 predicted that students in the foundation year level B course would have low perception of their SRLS as they enrol at XCoE, which was explored and supported through a descriptive test and an independent-samples t-test.

Descriptive statistics, carried out to explore students' perceptions of their SRLS at college entry level, indicated that the mean scores (students ranked their perceptions 1-7 according to SRLS Likert scale, see Appendix F) of students' SRLS sub-strategies perceptions were above average (+3.5) in self-control strategies (M=5.26), i.e. self-instruction, imagery, attention focusing and environment structuring, and above average in their task analysis strategies (M=5.21), i.e. goal setting and strategic planning. However, they had low perceptions of their self-reaction strategies (M=3.27), i.e. self-satisfaction/affect and/or adaptive/defensive behaviour towards outcomes and feedback, in comparison to their perceptions of the remaining sub-strategies[1]. **Students' overall SRLS mean score (4.67) was lower than the mean score of 952 Omani students entering Sultan Qaboos University, the only public university in Oman, in 2010 (SRLS overall Mean score = 5.17, Alkharusi et al., 2012). Therefore, it was assumed that the study's sample perceptions of their SRLS was low at pre-test, college entry level (Finding 1).**

Both the control and experimental group had low perceptions of their SRLS when they started college in September 2017. An independent-samples t-test, conducted to compare the control and experimental group students' perceptions of their SRLS as a pre-test measure, indicated that *there was no statistically significant difference in the overall SRLS score between the control*

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[1] This analysis was performed before manipulating that data i.e. log transformation to adjust none normally distributed data.

group (M= 16.30, SD= 1.66) and experimental group (M= 16.44, SD= 1.95; t (23) = .19, p= .43, Finding 2)*.* Likewise, ***students' perceptions of their sub-SRLS strategies including task-analysis, self-motivation, self-control, self-observation, self-judgement and self-reaction indicated no statistically significant difference between the experimental and the control group (Finding 3, see Appendix T.1).*** This analysis included 16 students from the control group and 22 from the experimental group, all those who have responded to the pre-test SRL-A (Appendix F)[2]. All intake students, except for six, were new intake of foundation students in their first semester at college. They had satisfied the same college entry requirements, i.e. secondary school diploma and a placement test (intake of Autumn 2017) (Field notes).

In addition to the SRL-A pre-test, students completed a pre-test writing task (Appendix O) in the first study week of the academic semester (see Appendix E), as part of controlling study variables and as a means of examining the intervention effects afterwards. Students were asked to narrate their first day experience in the college within 150 words while using the prompts given in the task instructions such as 'What did you do?' 'Who did you meet?' and 'How did you feel?' Task requirements (task cues, i.e. writing 150 words paragraph, first day of the Orientation week) were highlighted in 'bold' in the writing task question and the class teachers were available to respond to any enquires (Appendix O). The students' writing was marked by the researcher using the placement test criteria (Appendix J.2).

Comparing the two groups' writing scores, using an independent-samples t-test, indicated that, unlike their statistically similar low perceptions of SRLS, there was a statistically significant difference between the control and experimental groups' writing mean scores in favour of the experimental group. **The experimental group (M= 16.70, SD= 4.83) scored statistically significantly higher in their writing task than their peers in the control group (M=13.23, SD=5.17; t (34) = 2.02, p= .03) *(Finding 4).*** The effect size of the difference was moderate (.11) according to Cohen (1988, cited in Pallant, 2016). Observation of the pre-writing task administration and students' performance indicated that students in the experimental group were more motivated at the beginning of the study, knowing that the study was directed for them (Field notes). However, a couple of students in the control group asked about the added value for them, for which the researcher answer was it may indirectly improve your awareness of your strategies, as they are required to complete the multi-item scale at the three-measurement point

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[2] "Exclude cases analysis-by-analysis option" was used to avoid complete exclusion of cases due to missing data from the scale, as indicated by the changing number of students in Appendix T.1.

in addition to the writing tasks, pre-writing and post-writing tasks. In line with this interpretation, the experimental group performance in the pre-writing test can be attributed to their superior ability on writing or their motivation and investment in the task.

5.1.1 Overview

In response to sub-RQ1, findings from the analysis of the sub-scale items indicated that students in both groups had higher perceptions of, and seemed more confident with, their task-analysis strategies and less satisfied with their self-reaction strategies at the beginning of the study. Moreover, there was no statistically significant difference between the two groups' perceptions of their SRLS at college entry level. Hypothesis H1 anticipated that in their first semester at college, students lack awareness of self-regulated learning strategies, which are essential strategies for learners in higher education in the 21st century to prepare lifelong learners (Cassidy, 2011; Zimmerman & Schunk, 2001). Generally, it was found that **this sample of students had low perception of their SRLS at college entry level, in comparison to AlKharusi et al. (2012) findings, indicating lack of awareness of their SRLS, which corresponds and supports H1 (Conclusion1).** Despite being statically significantly equal to the control group students in their perceptions of SRLS, the experimental group students produced statistically significantly better quality written samples than their peers in the control group, which was attributed to students' level of investment in the task as a result of being targeted by the intervention. This indicates similar starting points for the groups with regard to their perceptions of their SRLS, nonetheless students had different starting points regarding their writing performance.

5.2 Students' perceptions and writing performance by December 2017 (immediate post-test findings)

Research hypothesis two (H2) anticipated that the experimental group would have statistically significantly higher perceptions of their SRLS than their peers in the control group based on their responses to *SRLS scale* (increase in perceptions' scores indicate increased awareness of SRLS). Moreover, it was hypothesised that the experimental group students would perform statistically significantly better in the level assessed tasks and standardised written exams, and post-test writing than the control group students, because of the SRLS modelling interventions the experimental group had at different times during the semester. Quantitative statistical tests and qualitative themes were integrated to provide a comprehensive interpretation of the impact of the intervention.

As this section explored the impact of the designed intervention (Appendix E & G) on the experimental group and compared it to that of the control group, using a mixture of statistical tests and qualitative thematic analysis, it was found that there was no statistically significant difference between the groups' writing scores and overall SRLS perceptions. However, there was a statistically significant decrease in the control group students' perceptions of their self-observation and self-reaction strategies, while the experimental group students indicated a significant increase in their perception of their self-reaction strategies. Most importantly, students' reflections indicated that although students' selection and use of SRLS is unique, they are influenced by different factors such as the teaching approach, accessibility of learning resources and strategies and/or task demands. These findings are elaborated and explained in the following subsections.

5.2.1 Writing performance and SRLS perceptions: comparison between groups

An independent-samples t-test indicated no statistically significant difference between the control and experimental groups in writing scores, whether in academic writing tasks (WritingAut50), their writing tests (mid-term and final test) or post-test writing task as demonstrated in Table 1 in Appendix T.2 (Finding 5). The post-test writing was conducted for both groups during the last teaching week in Autumn 2017 (Week 15, see Appendix E). It required students to think about the skills they learned, explain how they acquired them and justify their importance (Appendix Q), which could be cognitively more demanding than the pre-test writing, which depended on recall, synthesis and organisation of ideas.

This aligns with the independent-samples t-test findings, conducted to compare the control and experimental groups' (18 and 26 responses respectively) immediate post-test perception scores of their SRLS, which indicated **no statistically significant difference between the experimental group students (M= 15.17, SD= 2.23) and their counterparts in the control group (M=15.89, SD=2.20; t (21) = -.76, p= .23)** *in their* **overall SRLS perceptions (see Table 5.1)**. *Despite the intervention, which aimed to help the experimental group students develop their SRLS in order to improve their writing performance as measured through their test scores, t-test findings indicted that the interventions did not elicit major statistically significant differences neither in students' SRLS nor in their written academic achievements at immediate post-test level (Finding 6)*. This finding may suggest that the experimental group initial performance in writing may have been boosted by motivation rather than better ability in writing.

Table 5.1 Independent-samples t-test of control and experimental groups' SRLS immediate post-test scores

Phase	Post-test	Group	N	M (SD)	t	df	Sig (η^2)
Phase	Overall SRLS score	Control	9	15.89 (2.20)	-.76	21	.23
		Experimental	14	15.17 (2.23)			
Forethought	Task-analysis	Control	18	4.81 (1.04)	.41	41	.35
		Experimental	25	4.95 (1.22)			
	Self-motivation	Control	14	4.60 (.51)	.19	31	.43
		Experimental	19	4.63 (.63)			
Performance	Self-control	Control	14	5.30 (.84)	-1.68	31	.05 (.08)
		Experimental	19	4.77 (.92)			
	Self-observation	Control	17	.39 (.15)	1.26	37	.11
		Experimental	22	.44 (.13)			
Self-reflection	Self-judgement	Control	17	.41 (.11)	.09	39	.47
		Experimental	24	.41 (.16)			
	Self-reaction	Control	18	.50 (.10)	1.27	40	.11
		Experimental	24	.54 (.11)			

N= number of sample, M= mean, SD= standard deviation, t= t-test value, df= degree of freedom, sig ≤ 0.05, (η^2= t²/ t²+ (N1+N2 -2)

These findings can be interpreted in relation to the time of the intervention (short at discrete times during the semester), students' level of motivation, investment of time and effort (decreased as the semester progressed as per observation; students became strategic knowing that a pass grants them transfer to the next level), task value and task demands, and assessment

design (which required the attainment of different skills without allowing students' adequate time to master them) and the teaching approach. Literature indicates that intervention impacts could require two years for implementation to take place and for a change to be observed (Desimone, 2009; Martin & Hand, 2009; Osborne et al., 2013), assuming that other factors such as understanding, buying in, engagement and practice are ensured.

The intervention could have been more intensive aligning with the assessment design; however, the number of objectives to be achieved in the course were many, which minimized the amount of teacher modelling SRLS. Meeting course objectives was important for students to pass the level B exams, as the foundation year system was standardised across six colleges and permitted change within each was minimum, therefore contextual and institutional barriers could have constrained teachers' freedom to select or modify learning objectives according to students' needs. In addition, students' level of investment in the tasks seemed to drop by the end of the semester especially as they considered the post-test writing task as valueless because it did not contribute to their course marks and grade; students were reluctant to write it and some asked 'teachers will we get marks for these?' This have been frequently noted in students' reflections of their use of SRLS, 'marks are important' or 'I care about marks only'. Moreover, generally, students aimed for a 'pass' that enabled them to progress to the next level; a 'pass' according to the foundation year progress regulations can be obtained with minimal effort. Furthermore, the structured nature of the task due to the teaching approach did not require students' use of SRLS, therefore students' performance in the writing task, especially writing paragraphs, was not a precise indication of students' awareness and use of SRLS.

5.2.1.1   Self-performance phase: Self-control strategies

The independent-samples t-test analysis *revealed a statistically significant difference between the control group perception scores of their self-control strategies (M=5.30, SD=.84), and the experimental group's (M=4.77, SD=.92), t (31) =-1.68, p=.05), in favour of the control group (Finding 7).* The effect size was moderate (.08, see Table 5.1). Consistency of approach, repeated practice and copying teacher strategies promoted students' sense of self-control over the writing task (Field notes), as the writing tasks did not induce a sense of challenge for which students would need to self-regulate their assessed tasks (Evans and Waring, Forthcoming). Students in the control group had the same structure of lectures with the teacher modelling the writing tasks, and students practicing writing using the same template and strategies repeatedly, which increased their sense of self-control over the learning process and assessment tasks (Field notes).

However, co-teaching and observing the dynamics of the writing lectures indicated that the experimental group had to manage a variety of objectives and tasks that were a requirement by the course, in addition to the requirements induced by the intervention design within the same period of time that the control group had only to cover the course's main objectives (Field notes). This created pressure on the teacher and exposed students in the experimental group to different task demands and a variety of strategies. Consequently, there was no consistency in the modelling and use of strategies for students to practise and internalise strategies, as was the case in the control group (Field notes). Therefore, excessive cognitive load possibly occurred in the experimental group demanding students' attention to different sources of information provided by the teacher, experimenting different strategies as well as trying to satisfy the course requirements: affecting students' sense of their self-control over their learning and the assessment tasks. **This finding highlights task demands as a major enabler or inhibitor of the acquisition and use of SRLS (Ross, Green, Salisbury-Glennon & Tollefson, 2006). Inducing a level of challenge is recommended, however, it should not be too demanding and frequent as transferring strategy use from one task to another requires time and practice (Panadero & Alonso-Tapia, 2013) (Finding 8).**

Accurate and sound self-monitoring strategies are essential for successful learning. Students' reflections of their self-control strategies[3], i.e. strategies that assist students' performance of a task by monitoring their goal setting achievement, self-confidence, effort, reaction needed to perform a task (Bercher, 2012), indicated that the ways in which individuals selected strategies was unique as performing a task required different strategies from different students, however students' self-control strategies reflected the over structured teaching approach their teachers adopted, such as structure/template, organisation and visual representations. Students' reflections in both groups highlighted imagery, following the teacher instructions (structure and content) and/or consulting previous planning or planning simultaneously as their main strategies for monitoring their writing task performance, which were hugely influenced by the teacher's instructions and prior knowledge. The teacher approach influence on students' selection of strategies is highlighted in E26's reflection as he stated "Teacher taught us how to write and I followed directions like introduction, body and conclusion. I chose a story to write." Following a

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[3] A full account of students' strategies organised according to Zimmerman's (2002) framework is presented in Appendix U, however, this section highlights and elaborate on the strategies, which evoked significant difference in students' perceptions of their SRLS.

teacher guidance and example is recommended for beginners, however, teacher approach and time allowed should be sufficient to scaffold students' self-agency on deciding what works for them.

Moreover, an overlap between phases as students tended to use the same strategies at different stages during writing indicating the complexity of the writing process as well as the uniqueness of the individuals' cognitive processes and strategy use. For instance, while E21 monitored his performance based on a previously prepared plan, C19 planned and monitored the writing process simultaneously. C19 explained his strategy, "First, I talk about each student, what's his feeling in first week. Second, I plan. I write about my feeling in first week in the college. Final plan, I write what I am learning in first week" (see Appendix U.2), **highlighting an overlap between the task analysis and self-control strategies, situated within the forethought and performance phase respectively in Zimmerman's model of SRL (2002) (Finding 9). Moreover, students' sources of help and their strategies for seeking help depended on accessibility of the source of help and students' self-efficacy, capitalising on the need for a good quality of support network (Finding 10).** However, one student revealed unawareness of his self-control strategies, either because he lacked the language to speak of SRLS or for limited need for and/or use of SRLS.

Students' perceptions and use of their self-control were associated with the teaching approach adopted in the classroom (Finding 11). Generally, a structured approach was used by the teachers at the college in the writing classroom, as students were considered beginners and it was considered a scaffolding method (Field notes). T2 (Control group), for instance, adopted an over-structured and over-controlled flow of teaching, which did not allow much creativity for the students or a need to self-regulate and resulted in adopted copying strategies by the control group students and increased these students' self-control over assessment. Moreover, T1[4] (E group, P1), who was assigned the experimental group to implement the modelling activities, emphasised students' need for a structure and a model. T1 elaborated,

> "*They always need someone to guide them through the process and they are shown the evaluation criteria in the class and if they are ever shown certain guidelines and how to*

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[4] Teachers IDs are presented using Letter T and a number (1-8).
Students' IDs are coded with a letter E or C indicating whether they were enrolled in the Experimental or the Control group and a number (1-26). P. is an abbreviation for phase.
Repetitions and redundancy in quotes are deleted and language mistakes are corrected, but their ideas, perceptions, beliefs and responses are retained.

evaluate themselves you know in reality they would not even do that although they are

encouraged to do that."

T1 explained that students need a model because of their lack of language and lack of motivation, and consequently teachers provided a template and instruction, which helped students to complete tasks on time and understand criteria, and helped teachers evaluate students work based on pre-set criteria. However, although T1 tried to implement explicit modelling in addition to direct teaching with her students, the number of tasks and the variety of requirements allowed limited time for students to practice and experiment the recently-introduced strategies. Both teachers' approaches raised questions about the quality of learning, students' investment in using strategies, and students' ownership of the task (field notes*). **How students are enabled to break free from scaffolds as part of independence in learning and demonstrating initiative should be key to teacher training programmes (Finding 12).**

Hawe and Dixon (2017) argue that teachers are responsible for creating an environment that enable students to develop their capacity as 'animators of their own effective teaching and learning processes (Hawe & Dixon, 2017). The teachers' influence was recognised in students' reflections during the interviews through their mention of using strategies in which they tried to follow the teachers' structure and instructions and at times overly imitate them as was the case in the control group (Field notes). **There was, for example, an emphasis on visual representations as students used imagery and memory recall for performing a task (Finding 13**, see Appendix U.2). Mental imagery in this study refers to a student's retrieval of a mental image of a previously observed model or previously performed tasks. C6, for instance, used imagination of the final product to help generate ideas and achieve the required word counts. Memory recall and imagery strategies can be associated with the structure/content strategy (mental image of structure and organisation of the written text), as students recall the structure and activate memory to retrieve previous knowledge and associate it with the task while generating new information during writing. Evidence suggest that repeated visualisation of the behaviours leading to an aimed for goal can develop behavioural adherence and goal attainment (Loft & Cameron, 2013); repeated practice and training is expected to reduce cognitive load and help learners use resources effectively (Seufert, 2018).

Another important self-control strategy for the development of self-regulated learning is help seeking**. The qualitative data analysis indicated that students sought help from peers and family more frequently than they sought the teacher's help for accessibility reasons and due to some personality characteristics i.e. being shy (Finding 14).** Ideally, students can seek help from

different sources when they face difficulty whether human and/or non-human. In particular, students' interview responses highlighted technology, peers, family and the teacher as their support network (Appendix U.2). Nicol and Macfarlane-Dick (2006) argued that students could be more effective than teachers in understanding their peers' strategies of learning, and consequently suggest alternative learning strategies in accessible language. C7, for instance, justified avoiding the teacher help revealing that "the teacher says search and if you do not find the answer come back to me", which can be considered time-consuming for students if they need a quick answer to complete the task, or troublesome for students who want easy and swift access to the information because they are externally-regulated. Moreover, E16 and E24 argued that approaching peers was easier, especially when support was offered in the students' mother tongue (Arabic), which was frequently the case, while teachers' discourse can be inaccessible and complicated for less able students (language barrier).

Moreover, personal characteristics such as being shy i.e. C2, or unsocial like E22 forced students to avoid seeking the teachers' help, especially when seeking-help had a negative connotation as being associated with struggling and a low-achieving student. Bembenutty (2011) called for removing the 'negative stigma' associated with help-seeking. Bembenutty (2011) elaborated that many learners avoid help-seeking as it is widely considered a sign of dependence and incompetence, while if proactively and effectively sought, it indicates a learner's resourcefulness and competence in learning, which is explicitly advocated by the SCT and active engagement principles. The SCT (Bandura, 1971) and active engagement (Reeves, 2013) support using the environment to scaffold and promote learning. Accordingly, being self-regulated means being discriminatory in the choice of support sought, and the ability to make use of important messages from feedback to enhance learning (Evans and Waring, 2012, forthcoming). Furthermore, the language barrier was E23's reason to consult peers and family, as E23 reflected that limited language hindered his ability and willingness to seek teachers' support. It is important to emphasise that help-seeking via accessible help providers, scaffolds academic achievement, taking into consideration the quality of the support sought and students' keenness in getting the right help. Moreover, personality, i.e. being shy or timid, self-confidence and accessibility in terms of language can affect students' choices of their support groups.

Overall, reflecting on these findings highlights students' use of some forethought task analysis strategies such as planning, structure and content or following the teacher instructions as self-control strategies to monitor their performance. This further highlights the teaching approach influence on the selection of strategies. Although the discussed strategies were common in both

groups, the quantitative findings indicating the control group increased perceptions of their self-control strategies align with their teacher's approach of providing very specific parameters to complete the task. This could have increased the control group students' confidence in their sense of control over the task, however having an over-structured classroom and task performance environment limited their need to self-regulate their task performance.

5.2.2   SRLS perceptions within groups

At the group level, findings based on a paired-samples t-test, indicated a change in the control group self-observation i.e. self-recording and self-experimenting, and self-reaction perceptions, i.e. affect and adaptive or defensive behaviour, and a change in the experimental group perceptions of their self-reaction perceptions from pre-test to immediate post-test in Autumn 2017 as indicated in Table 5.2

Table 5.2 Paired-samples t-test of control and experimental group pre and post-test of SRLS perceptions.

Group	pre & post test	N	M(SD)	t	df	Sig (η^2)
Control	SRLS	5	.13 (1.80)	.16	4	.44
	Task-analysis	13	.47 (1.09)	1.56	12	.07
	Self-motivation	12	-.01 (.57)	-.08	11	.57
	Self-control	9	-.23 (.94)	-.74	8	.24
	Self-observation	14	.07 (.12)	2.11	13	.03 (.26)
	Self-judgment	14	3.69 (13.78)	1	13	.17
	Self-reaction	15	.05 (.08)	2.38	14	.02 (.29)
Experimental	SRLS	7	-.46 (1.32)	-.91	6	.20
	Task-analysis	21	.05 (.86)	.25	20	.40

Self-motivation	16	-.18 (.57)	-1.28	15	.11
Self-control	11	.26 (.75)	1.17	10	.14
Self-observation	17	.02 (.15)	.44	16	.33
Self-judgment	21	1.09 (5.17)	.97	20	.18
Self-reaction	21	-.06 (.11)	-2.26	20	.02 (.20)

N= number of sample, M= mean, SD= standard deviation, t= t-test value, df= degree of freedom, sig ≤ 0.05, (η^2= t²/ t²+ (N-1)

5.2.2.1 Self-performance phase: Self-observation strategies

There was **a statistically significant decrease in the control group students' perceptions mean scores of their self-observation strategies from pre-test (M=.45, SD=.11) to post test (M=.38, SD =.15), t (13) =2.11, p=.03, Finding 15)**. The mean decrease in self-observation perception score was .07 and the effect size of the difference was large (.26). Self-observation is "a critical component of the performance phase, because it supports monitoring proceedings and helps detect misguided behaviour" (Dörrenbächer & Perels, 2016, p.230). The reduction in students' perceptions of their self-observation strategies in the control group was interpreted as a decrease in students' awareness and use of SRLS as task performance became redundant and automatic; students got used to the task format and requirements. This can be attributed to the teaching and instruction as the course was over-structured and the teacher controlled the flow of the class time and activities (Field notes). Task demands also decreased as students were provided with the structure/template (Dent & Koenka, 2016; Seufert, 2018), and students imitated the teacher behaviour producing a set number of paragraphs with certain feature, including the word count throughout the writing process (Field notes).

For example, the control group teacher approach towards teaching students writing strategies was characterised by repeated practice and over-structuring (Field notes). T2 (control group, Phase 1) modelled writing strategies in groups, showing students how to understand writing questions and criteria, plan, write and revise written texts three times a week (number of writing lectures) for 14 weeks (an academic semester), which provided constant opportunities for students to observe the teacher strategies, understand them and practice using them frequently.

Constant practice and imitation of the teacher behaviour and strategies solidify learners' prior knowledge of the task, limiting students need to self-regulate (Hoogerheide et al., 2014; Seufert, 2018, Finding 16). As teaching became redundant and over-structured, it limited students' need for decision-making; the writing process became automatic and students did not feel the need to reflect on their strategies or adapt them (self-observation); copying strategies increased as well (Field note).

Students' self-observation strategies were elicited from students by asking them about the difficulties they encountered during writing and their strategies to overcome these difficulties. Their interview responses indicated that **students were often more observable of their behaviour and reaction to learning difficulties and obstacles, rather than their behaviour towards familiar learning tasks, as these became less demanding in terms of the need for self-observation. This explains students' decreased need to observe their strategies as tasks become structured, controlled and highly directed by the teacher (Finding 17).** As students tended to remember strategies they used when faced by a challenging task, students observed their vocabulary, grammar, organisation and self-reflections strategies more often than other language attainment or self-regulation strategies, because they perceived them difficult to attain. Vocabulary learning and vocabulary retrieving strategies whether in terms of semantic/meaning or syntax and spelling were the most observed strategies mentioned among students. C20, for instance, reflected, "If spelling is difficult, I try to find another word with similar meaning and easier spelling for me," while C1 guessed the letters of the word based on pronunciation. Likewise, C11 commented, "… For example, I wanted to write 'forget' and I forgot the word, so I wrote 'do not remember now." C11 used the word definition or meaning to compensate for lack of vocabulary. It appears that students recalled vocabulary, grammar and spelling strategies, being associated with the writing skill, as beginners probably thought at the basic level of requirement in writing directing their attention towards language mechanisms instead of higher-level thinking skills.

The lack of awareness and use of accurate or well-identified self-observation strategies i.e. recording behaviour-keeping a journal or taking notes of strategies, and/or seeking feedback for peers and mentors on good strategies and comparing it to one's own behaviour- regular self-reflections, resulted in students' use of more accessible and primitive strategies such as **intuition or 'feeling of knowing', which was frequently used by students to monitor their performance and complete tasks (Finding 18).** C2, for example, reflected that feeling of knowing guided his

decision-making while performing a task (see Appendix U.2). Moreover, intuition was used by E11 to overcome uncertainties in accuracy and syntax of the vocabulary items as E11 used his feeling of knowing of how the sentence should sound as a strategy to complete and achieve tasks. Although unsystematic strategies that depend on "heuristics that operate automatically and unconsciously" (Eva & Regehr, 2011, p. 313), 'feeling of knowing' provides alternatives to passive reaction or absence of strategy use.

Moreover, E22 restored to the 'trial and error' strategy of the word category to experiment with the language; providing synonyms or changing the word altogether. E22 attributed his language problems to his inability to think in English, which means thinking in Arabic and translating into English resulting in increased cognitive load (Nawal, 2018) and leading to poorly written products (Nawal, 2018), highlighting another possible complexity, besides learning new strategies for the students, which is using and experimenting their SRLS in another language. Shifting between languages may hinder retrieval of vocabulary and grammatical items burdening the working memory and leading to incompetent performance as argued by Schoonen et al. (2003): a tendency acquired by novice writers (Nawal, 2018). In addition to being a self-observational strategy, the 'trial and error' strategy was also emphasised by E25 as a strategy to self-control performance during writing and learning in general.

Furthermore, teachers reflected that their students used note-taking, and vocabulary revisiting strategies to monitor and record their progress. T1, thought that students use vocabulary strategies often such as looking up words and their meaning in the dictionary or translating words and ideas from Arabic into English. Similarly, T3 seconded, "they will not only write the new vocabulary, but revisit it". It appears that students monitored their performance via their attainment of vocabulary items and via retention strategies while reinforcing learnt and unlearnt items that has been previously written in their exercise books.

Overall, students used accessible strategies such as 'feeling of knowing' and 'trial and error' to compensate for their lack of knowledge of more refined self-observation strategies. However, teachers indicated that students used note-taking strategies to observe and record their learning, and revisited the learnt vocabulary, pointing out that some students display their awareness of well-identified strategies even though they lacked the language to speak about their strategies. Moreover, the control group decreased perceptions of their self-observation strategies was attributed to the structured approach their teacher was using, which limited students' need to self-regulate including the need to self-observe their strategies.

5.2.2.2   Self-reflection phrase: Self-reaction strategies

Both the control and experimental group indicated a change in their perceptions of their self-reaction strategies from pre-test to immediate post-test (see table 5.2). Self-reaction strategies refer to emotional, i.e. affect/self-satisfaction, and behavioural reaction, i.e. adaptive defensive/behaviours, to tasks and feedback (Zimmerman, 1989, 2000, 2002). **While the control group students' perception scores indicated a statically significant mean score decrease by .05 from pre-test (M=.51, SD =.08) to post-test (M=.46, SD =.06, t (14) = 2.38, p =.02)**, with a large reduction size of .29, there was **a statistically significant increase in the experimental group students' perception of their self-reaction strategies score from pre-test (M=.50, SD =.07) to post-test (M=.55, SD =.10), t (14) = 2.38, p =.02) (Finding 19).** The mean difference was .06 with a large effect size (.20, see Table 5.2)

The impact of the intervention in the experimental group was mainly observed in students' perceptions of self-reaction strategies, which could have been a result of the teacher continuous feedback and encouragement (Field notes). The change was also attributed to the intervention impact on raising students' awareness of standards of quality. Students were provided with a set of criteria (Appendix J.1), which they discussed with the researcher in accessible language and then used to evaluate their own performance in the pre-test writing (Appendix O and intervention 1 in Appendix G). Moreover, the teacher provided students with some opportunities to practice self-evaluation of written performance, raising students' awareness of quality of good work and developing their self-evaluation strategies.

Before discussing students' self-reaction strategies, it is important to highlight students' sources of evaluation and feedback. The self-reflection phase of the SRL model involves a process of reflection of the learning process, outcomes, and utilised strategies, as well as potential regulation of negative emotions and motivation for future use (Dresel et al., 2015). Findings indicated that although students identified marks/teacher assessment and feedback, peer-assessment and feedback, classroom performance, intuition/feeling of knowing and/or emotions as a means of assessing one's performance and progress (see Appendix U.3), *students were generally externally regulated depending on teachers' feedback as the course lacked focus on self-assessment and self-feedback* **(Finding 20),** whereas students need to be able to calibrate judgements for themselves (Boud & Falchikov, 2007) to develop as lifelong learners. In fact, students rarely practiced self-assessment and self-evaluation.

Therefore, the students' reflections included in this section indicates students' self-reaction

towards their main source of feedback: the teacher feedback. Students indicated positive and negative reactions to teachers' feedback, since receiving positive feedback from the teacher produced different reactions. For example, positive feedback made E1 happy and encouraged E1 to invest more time and effort in her study. Obviously, momentary affect reactions to feedback, i.e. happy or sad, produced limited effect unless accompanied by attempts at the behavioural level such as adaptive strategies to improve performance (Zimmerman, 2002; Dörrenbächer & Perels, 2016). Supplementing instant affect reactions with a plan for improvement is recommended. For instance, E18's reaction of feeling down because of receiving an unexpected result was followed by an urgent desire to compensate for his previous underperformance (positive reaction). Moreover, C1's (control group) reaction depended on his understanding of the teacher's feedback as C1 discussed the feedback with the teacher if he did not understand the feedback or doubted its accuracy; whereas where C1 was clear about what he needed to do, C1 accepted and trusted the teacher feedback. These examples were not considered representative of the quoted students' groups as a mixture of reactions were found in both.

Furthermore, students' responses indicated that there were not any defensive reactions towards teacher's feedback. Students can adapt their performance and practice according to the feedback, accept it, react passively to it, or behave defensively to protect self-worth. However, findings from students' interviews in this study indicated that students accepted their teachers' feedback. For example, E17's adaptive strategy involved acceptance of the teacher's feedback, comprehending it and attempting to correct mistakes and perform better in subsequent tasks. Likewise, E24 reasoned that getting a low mark, means something went wrong and thus he tried to identify the mistake, learn from it and improve (an indication of his efforts to self-regulate). However, C7's reaction was passive revealing, "well, I care more about the marks, feedback is not that important. I read them but I do not ask or discuss," and C6 reacted with "nothing". Students' reactions can be explained in the light of their phase of study at the college as they were new intake **students in their first semester at the college who *needed to familiarise themselves with the college system, regulations and communications (an issue of transition) in order to then be able to make use of SRLS to enhance their learning* (Finding 21)**. Simply said, students could have been 'testing the waters', being in a new environment, and getting to know the institutional culture and acceptable behaviours at the college. Moreover, 'no reaction' could mean unawareness of their reactions, as students may lack strategies to identify, assess and adapt their strategies to self-react to previous performance and feedback in preparation to perform subsequent tasks.

Likewise, teachers revealed that students accepted their feedback and did not reveal positive or negative reactions to feedback. T1, for instance, stated, "I have never had any student reacting negatively towards feedback," as T1 made it clear "they [students] shouldn't be offended or anything towards a correction like that because it is for them." Similarly, T2 asserted that students did not display disappointment by the feedback, but they could be hiding their emotional reaction, which is common, culturally. Moreover, T3 said, "in my group they trust that I will mark them fairly and I have never experienced a student who came to me complaining". Students' acceptance of feedback and their faith in their teachers' fair evaluation can be a consequence of culture or learning histories (teachers were the main source of feedback during school years) and could indicate trust or fear. There appeared to be a misunderstanding or an overemphasis of trust over fear as C18 commented that his reaction depends on teacher tolerance of discussion-an example of testing the waters. Therefore, it is important to question whether it is a case of trust in teachers' judgement or fear of teachers' reactions towards questioning their feedback. Accordingly, the **classroom environment (i.e. encouraging discussion of feedback) and the learning experiences of assessment and feedback, a student's ability or motivation (i.e. language barriers and low self-efficacy), and culture (respect or fear) can influence the potential for dialogical exchange; the issue here is how honest learners are about the feedback they receive (Finding 22).**

By comparison, T3 commented on the defensive or negative reaction from students towards feedback stating, "Few cases in my group, they are stubborn, and they do not listen to what I ask them to do." T3 justified their reaction saying, "I think it is the character of the students themselves, it is the way they are. They do not want you to tell them what is right and what is wrong, and they do not want to be told in class that they have made that mistake." On this note, personality can influence students' reaction to learning tasks and learning strategy use (Dörrenbächer & Perels, 2016), and in this case students' reaction to feedback. T3 attributed students' reaction towards receiving feedback to students' personality or character, as they were strong-headed and refused to accept directive instructions. However, T3 reflection can also be a reflection of her own beliefs about students' character and its influence on learning and especially on feedback rather than highlighting the teacher's approach influence on students' reaction to feedback as the way feedback is communicated matters. The feedback delivery method affected students' reaction as feedback provided in groups but directed at an individual can threaten self-worth and thus students are likely to ignore or act defensively towards feedback. Hence, **reactions to feedback are complex and mediated by individual context needs and depends on**

the level of investment in the task and the feedback, and the importance assigned to outcomes by the students (Finding 23).

5.2.3   Overview

In summary, it was optimistic to expect significant change in the experimental group perceptions of SRLS and consequently in their writing performance by modelling SRLS for about 15-30 minutes at five different times during the semester, especially as beliefs and context are involved. Therefore, the intervention did not indicate any significant difference in the experimental group overall SRLS perception and writing scores from their peers in the control group at immediate post-test. The statistically insignificant findings could be attributed to the short intervention period, students' lack of motivation and interest at post-test and unsound assessment design of the course that did not support the intervention for more than discrete points of time. Issues of access, learning histories, context and the teaching approach, task demands and task value and the need to self-regulate were identified as key to students' use of SRLS.

Based on the previous findings and related discussions, **_H2 was rejected_**, as modelling SRLS at discrete times during the semester for the experimental group had no statistically significant impact on students' writing performance scores in spite of the pre-test writing statistically significant score as a 'starting point' for the experimental group (**_Conclusion 2)._** This finding supports the initial interpretation that the experimental group could have been more invested in the pre-test writing task than their peers in the control group, and they were more interested at pre-test than they were at post-test.

5.3   Students' perceptions and writing performance by May 2018 (Phase 2 - delayed post-test findings)

Hypothesis 3 stated that SRLS integration would assist the sustainability of the assessment practice measured by transferability of learnt strategies across courses in the foundation programme and from one academic semester to the next. This entails a sustained positive perception of one's own SRLS and good use and adaptability of these strategies in new learning situations to assist students' completion and achievement of tasks i.e. writing tasks, which is regarded as a sustained impact of modelling SRLS into a writing course.

Findings from quantitative and qualitative data indicated a general stability of SRLS perceptions in the experimental group, whereas a general decreased of SRLS perceptions occurred in the control

group, which was associated with over-scaffolding from teachers and decreased students' perceptions of their self-control when encountered by new learning tasks (i.e. in nature and demands). Moreover, students displayed an increased adoption of minimum effort tendency and procrastination, associated with low grade progress requirement versus some tasks increased demands, deciding to procrastinate and perform the minimal that grants a 'pass' in the course. These findings are discussed in detail in the following subsections.

5.3.1 SRLS perceptions: comparison between groups

The experimental and control group students' perception scores of their SRLS at delayed post-test were compared using an independent-samples t-test. Findings revealed statistically significant differences between control and experimental groups in the perception of their overall SRLS, task-analysis, self-motivation and self-judgement strategies, indicating a sustained and/or a delayed effect that can be attributed to SRLS pre, post-test and/or the modelled activities in Autumn 2017 as indicated in Table 5.3. Each significant change is explored and explained using qualitative data in the next sections.

Table 5.3 Independent-samples t-test of between groups delayed post-test students' perceptions of their SRLS.

Post post-test		Group	N	M (SD)	t	df	Sig (η^2)
Phase	Overall SRLS score	Control	20	14.87 (2.46)	2.02	35	.03 (.10)
		Experimental	17	16.26 (1.51)			
Forethought	Task-analysis	Control	20	4.78 (1.12)	2.01	39	.03 (.09)
		Experimental	21	5.37 (.76)			
	Self-motivation	Control	20	4.09 (.69)	2.52	33.08	.01 (.14)
		Experimental	21	4.56 (.47)			

Performance	Self-control	Control	20	4.56 (1.09)	1.63	28.14	.06
		Experimental	19	5 (.54)			
	Self-observation	Control	20	.47 (.18)	.27	38	.40
		Experimental	20	.48 (.13)			
Self-reflection	Self-judgement	Control	20	.46 (.09)	-2.51	31.68	.01 (.14)
		Experimental	20	.36 (.15)			
	Self-reaction	Control	20	.52 (.13)	.69	39	.25
		Experimental	21	.54 (.10)			

N= number of sample, M= mean, SD= standard deviation, t= t-test value, df= degree of freedom, sig ≤ 0.05, (η^2 = t²/ t²+ (N1+N2 -2))

5.3.1.1 Forethought phase

Task analysis

At delayed post-test, students in the experimental group had a higher perception of their task-analysis strategies (M=5.37, SD=.76) than their peers in the control group (M=4.78, SD=1.12, t (39) =2.01, p=.03) with a moderate effect size of the difference between the two means (.09, Finding 24). Students' reflections and subsequent analysis and interpretations of the interview data highlighted task-related, general, performance and learning goals as students' approaches to goal setting and indicated an increased tendency towards minimal effort and procrastination when it comes to planning (Appendix V.1).

Goal setting is a metacognitive strategy that influences motivation, self-efficacy and self-monitoring through its role in directing the self-regulated learning process (Zimmerman 2008; Hawe & Dixon, 2017), whether setting learning or performance goals (Burnette et al., 2013; Evans et al., 2003). Students indicated setting performance, task-related goals, general learning goals, combined both or neglected this important strategy (see Appendix V.1). Students' approaches

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towards goal setting were affected by perceived task demands and criteria for success, expectations of course objectives, self-efficacy, and/or need for cognition. C17 (control group, phase 2), for instance, pointed to the importance of being aware of the task requirements and criteria for success to set goals, which in turn affected his selection of performance strategies such as research and environment management strategies to satisfy requirements and achieve the task successfully (Appendix V.2). Identifying and comprehending standards for success is important to identify specific attainable and self-directed goals, which is a key strategy for the development of self-regulation.

Another important strategy for task analysis is strategic planning. Generally, students adopted a minimal effort tendency towards planning to achieve a task, *due to task demands (easy/familiar or demanding), lack of time-management, lack of/high self-efficacy and/or wrong expectations (expecting teachers to plan for them-external regulation, Key finding).* Strategic planning facilitates performing a task by activating prior knowledge to achieve learning goals (Winne, 1996, 2001, cited in Dent & Koenka, 2016) and monitoring how the task is addressed and mastered (Winne, 1996). **Students sustained a tendency towards doing the minimum, a strategy that has been observed in phase 1 (see Appendix U.1) and increased in use during phase 2. As perceived task demands increased and challenged students, students became familiar with the 'pass' regulation of the foundation year system, aiming for the minimum that ensured their progress to the next level (Field note and students' reflections-Appendix V.1**, **Finding 25).**

Settling for the minimum was associated with lack of confidence or over-confidence, lack of motivation or lack of need for cognition, lack of SRLS or low expectation of the course requirements and objectives. Therefore, either goal setting was overlooked, or passing the course was the students' main goal. E2, for example, stated having only one goal for the semester-namely 'passing' and C20 stressed his 'wanted pass' aim. Moreover, C7's stated that "the first semester was easy and not difficult [but in] the second semester things changed" which indicates low expectation of the course and over-estimation of his ability; both can be associated with previous achievement of similar learning tasks, i.e. experience of phase 1, inaccurate self-judgement of ability and/or misjudgement or lack of awareness of course requirements, which in turn caused surprise, moments of doubts and tendency to aim for the minimum that is expected by the course.

Furthermore, **procrastination was observed frequently in students' completion of classroom activities and assessment tasks, and appeared as a major issue in students' reflections (Finding 26)**. Generally, students either planned for the minimum or had a general plan at the beginning of

the semester and neglected it afterwards. Postponing task completion or planning strategically for an activity or a task was associated with either lack of, or high challenge. For instance, low perceived task demands can increase students' self-efficacy assuming that they do not need to plan for a task postponing task execution until the last moment. However, high task demands require the need for self-regulation of which students may have little knowledge and use of, and with low self-efficacy students may delay performance to save self-worth blaming poor outcomes on poor management of resources and time.

Lack of planning can be a sign of lack of self-regulation, which can encourage students to procrastinate. Alternatively, over-planning can lead to procrastination as well indicating hesitation and reluctance to start a new task. This can result in aiming for the minimum and rushed task completion within limited time; not surprisingly approaching the task on the surface.

Self-motivational beliefs

Closely associated with their perceptions of their task analysis strategies, **the experimental group rated their perceptions of their self-motivation strategies (M=4.56, SD=.47) higher than control group students (M=4.09, SD=.69; t (33.08) = 2.52, p= .01) with a large effect size (.14) according to the independent-samples t-test** (**Finding 27**, see Table 5.3).

Overall, students in both groups expressed a decline in their motivation in Spring 2018 due to course objectives, teachers' approach, self-efficacy and/or procrastination. Students' motivational beliefs are important in assisting students' achievement of goals and in completing tasks (Cassidy, 2011; Schunk and Zimmerman 1994; Dent & Koenka, 2016). The analysis of students' reflections indicated that goal setting and effort tendency (task analysis strategies) seemed to be closely associated with students' motivational beliefs. Moreover, it was found that **goal orientation i.e. performance or learning goals and/or long or short terms goals, perceived task demands or challenge, self-efficacy, and self-image, i.e. family and/or community approval, formed students' sources of motivation (Finding 28)**.

Goal-orientation is an important motivational belief strategy that assists students' initiation of self-regulated learning**.** Goals, whether performance or learning/mastery oriented, reflect the kind of effort and help needed for completing tasks. For example, immediate, task-focused goals promote deep processing of knowledge and task, which means deep engagement with the task and thus more mental effort, and time and environmental management (Dent and Koenka, 2016). Students highlighted different goals such as future aspirations of having a qualification and a good

occupation, immediate performance goals i.e. getting high marks and outperforming peers, and long-term self-development goals such as learning a language (see appendix V.1).

Students' goals were usually attributed to the relevance of the learning tasks to students (task value). For example, family and/or community approval and recognition was an external source of motivation that feeds into one's concept of self and direct his/her approach to learning. For instance, E8 commented that his family's opinion of his achievement and their aspirations for him motivated E8 to meet college requirements. He added that society's perception of his achievement mattered too and therefore, he usually weighs up the pros and cons of his actions, including completing course assessment tasks and activities. Likewise, E2 associated current and future success with self-image as a motive to meet requirements elaborating that,

> *The motive is success. Everybody wants success. I do not want to be under probation and suspended from college. Success is a goal for everybody. If I failed for example, I would have a negative effect on the community and my family's opinion of me would change. However, if I put more effort, study hard and work to improve myself, I will improve my language and become a better learner and at the level of my classmates, and graduate with them which serves as a positive motivation for me.*

E2's family's and community's perspective of his study effort, performance and outcomes are the fulcrum to his motivational beliefs and performance, as being respected, recognised and celebrated in the community was highly-desired and continuously-pursued by E2. This strong image of self and future perspective, including the effect of E2's current decision and action on the society and future of the student was rarely expressed this vividly in the students' reflections during the interviews.

Moreover, self-efficacy, an important source of motivation and key to self-regulation, was influenced by perceived task demands, and/or students' learning histories. Students' beliefs about their ability assist students' understanding and execution of the task as their beliefs specify the extent of environmental control and resources needed to achieve tasks (Bembenutty, 2011) especially as the learning situation and learning task demands increase (Bembenutty, 2011). In this study, students' responses about their self-efficacy in relation to completing the tasks indicated self-confidence in their ability to do the task especially when the task was manageable, familiar or easy, or they tended to overlook this part of the metacognitive process to avoid moments of doubt and hesitations to perform a task.

Moreover, and in relation to self-efficacy, instances of worry and perhaps doubt were experienced by E2 stating that "there is a sort of worry or challenge this semester in case I did not do much." Such doubt was a constant characteristic of C2 reflections stating that "I always doubt my ability, especially English, because I feel it is not one of my strengths, so I will try to change my specialisation next year to Maths, because I am excellent in Maths, but not very good in English." This major impact of doubt or stress can be beneficial at earlier stages of learning; however, it may delay C2's progress in the future. C2 needs either to take that decision of changing the major or developing his self-confidence via practice and importantly regulating his learning process. Doubt can be a result or a cause for lack of self-efficacy, which can affect students' approach and attainment of goals and affect the development of students' SRLS.

The close relationship between task analysis and motivational beliefs is emphasised by students' reflections as one seems to affect the other i.e. motivation directs goal orientation and both are affected by task demands and the learning context. Therefore, both strategies should be emphasised and highlighted during the integration of SRLS in a learning classroom.

5.3.1.2 Self-reflection phase

Self-judgement strategies

The independent-samples t-test indicated that the control group students had a higher perception of their self-judgement strategies (M=.46, SD=.09) than their peers in the experimental group (M=.36, SD=.15; t (31.68) = -2.51, p= 01) at delayed post-test, and the mean difference indicates a large effect size (.14). However, both groups' reflections indicated that Similar to Autumn 2017, in Spring 2018 students depended on teachers as suppliers of feedback as self and peer-assessment and feedback were still used sparingly, however, a strategic approach towards establishing a good support network started formulating. Moreover, although negative attributions of performance outcomes to inability or blaming others still existed in Spring 2018 (end of Phase 2), there was an increased instances of performance outcomes attributions to practical causes such as students' use of strategies and/or the effort exerted in completing tasks (Finding 29).

Although students' attempts to widen their sources of feedback to include self-assessment (through self-satisfaction and feeling of knowing), and peer feedback, teacher assessment and feedback still dominated in the classroom. Boud and Falchikov (2007) emphasised that students need to be able to calibrate judgements for themselves and Boud (2000) argued that unless

students can make effective judgements about their work beyond a certain task or programme, then the programme assessment is not sustainable, as it does not support students' future learning. However, self-evaluation was still used sparingly in the classroom due to assessment design and objectives; students' self-evolution of their performance and outcomes were intuitive depending on self-satisfaction, emotions and feeling of knowing (Appendix V.3). Despite the control group students' increased perceptions of their self-judgement strategies, they too relied on the teacher's feedback. Frequently, students judged their performance and academic achievement via marks and teachers' feedback as a common and reliable source of feedback. For instance, E8 used the teacher's feedback to compare previous and current progress through marks and E23 elaborated on using marks as a self-evaluation strategy explaining that 'receiving high marks indicates improvement, while getting low marks means there is lack of performance, and there is a problem'. Additionally, E2 emphasised the teacher's role in assessing students, indicating, "It depends on the teacher". Examining these quotes indicates that there is a reliance on teacher's judgement, which in turn highlights the students' trust in their teacher's evaluation. Moreover, some students like E25 and E2, highlighted the criteria that helped them make accurate judgements of their performance. In writing for instance, E25 reported,

> *The criteria are spelling, vocabulary, sentence organisation and grammar. It depends on the grammar, so if I do not write a sound sentence structure and good vocabulary, it would be incomplete sentence. The teacher evaluates my writing according to spelling, grammar, vocabulary etc.*

The teacher's role in evaluating students and providing feedback was notably acknowledged by students in the form of the criteria given, the marks and feedback provided, and performance in class. This role of the teacher could have been hugely emphasised by students' learning histories in school, as teachers were the main agents in the assessment process and thus supported students' comfort zone. However, the teachers' approach to teaching and the foundation courses design that relies on the teacher as a provider of knowledge, feedback and skills encouraged the reliance on teachers as the main agents in the reflection and evaluation process.

On that note, Bose and Rengel (2009) argued that teachers are more effective in providing feedback by virtue of their discipline knowledge and experience, which was supported by Nicol and Macfarlane-Dick (2006) who regarded teachers as a 'crucial source of external feedback' influencing SRLS development among students. However, *considering teachers as the sole source of feedback is a significant inhibitor of students' ability to manage learning for themselves*, as being lifelong learners via sustainable assessment requires students' competence in making

calculated judgements and consequent decision-making in the absence of a mentor whether in the workplace or everyday life situations (Boud, 2000; Evans & Waring, 2019). In order to develop students' self-evaluation strategies and develop student self-efficacy in their own judgement of their learning performance and learning outcomes (Boud 2000; Sadler 1989; Bose & Rengel, 2009), both the *classroom activities and the teacher's approach needs to address and highlight students' self-evaluation strategies as a focus of the classroom learning and assessment.*

However, by phase 2 students started to be more selective in terms of seeking peer feedback highlighting 'who' and 'when' to ask. For instance, E2 commented that seeking peer feedback depended on the peer's academic achievement level or year of study as E2 sought feedback from 'good' students or those who had experience and expertise in their major like third and fourth year students. E2 was selective of whom to include in his support network, which is a valuable self-regulated learning strategy. Similarly, E13 consulted her peers in presentations as she practiced presenting in front of them and asked them to evaluate her performance. E13 commented that peers were able to guide her performance and advise her on more effective strategies to improve outcomes, however, they can provide inaccurate judgements as well in a form of flattery, misunderstanding it as a support (Appendix V.3) fearing for their friend's emotional state and to protect her self-worth.

Causal attributions strategies

Accordingly, students formed positive or negative attributions to explain the causes for their good or poor performance in the classroom. Good strategies such as *self-talk and self-questioning* one's strategies were associated with positive causal attributions to make positive action plans for improvement as commented by E8. Moreover, C17 was precise in attributing his lack of performance to ineffective studying strategies reflecting, "My strategies could be wrong", which is an important realisation as a starting point to change strategies and improve performance. C18 was also honest indicating his full awareness of his ability to succeed and develop as a learner, stating that it was not a matter of cognitive ability "we are not stupid", however, it was a consequence of lack of effort "we are just not making an effort" and inattention or unwillingness to make such effort, procrastinating change until the following year (Appendix V.3). There was also an indication of negative attribution of low marks to one's ability (self-efficacy) or to a teacher's mistake, which emphasise student's lack of awareness of accurate self-evaluation and causal attribution strategies. Therefore, students' effort at making accurate attributions of success or failure in satisfying tasks requirements can be related to their efforts and attention to their performance, and/or choice and use of self-evaluation strategies.

According to students' causal attribution strategies, students reacted emotionally to feedback i.e. became sad and/or demotivated, adapted their strategies to improve, or reacted passively indicating disinterest and helplessness. Emotional reactions i.e. disappointment, were students' initial reaction to assessment and feedback. C7 and E2, for example, became sad and depressed; however, their initial reactions were substituted afterwards by an urge to improve via intensive study and preparation. Moreover, E23 adopted a thorough approach of reflection of performance and associated strategies, attributing mistakes and lack of performance to their accurate causes in order to perform better in subsequent tasks. On the other hand, some negative reactions appeared from some students such as C6 and C20. Their reactions were neither adaptive nor defensive but complete passiveness to feedback as they tended to accept feedback indicating *helplessness and resolution* to neglect feedback, which can be attributed to being content remaining in their comfort zone and adhering to familiar strategies even if they had experienced their ineffectiveness or saving self-worth blaming it on lack of effort instead of harming the self-worth. This highlighted these students' beliefs about their role in assessment and feedback i.e. being passive recipients of assessment and feedback-assessment is done to them (Boud, 2000), or active agents in their learning and assessment process (Nicol & Macfarlane-Dick, 2006; Sadler, 1989, 2010).

5.3.2 SRLS perceptions within groups

The overall change within an academic year in students' perceptions of their overall and sub strategies of SRLS was explored using a two-way ANOVA. A two-way between groups, analysis of variance was conducted, with time of the test (pre, immediate post and delayed post-test 'post post-test') and group (control and experimental) as between factors and self-regulated Learning strategies score and sub-strategies scores as the dependent variables. Effect size was evaluated using Cohen's (1988) criteria, which suggested that partial eta square (η^2_p) values at or above .01, .06, and .14 indicate small, moderate and large effect sizes respectively. Then, a closer investigation of the change in students' perceptions of their SRLS between the three tests (pre, immediate post and delayed post-tests) within each group, through paired-samples t-tests, and the difference between the control and the experimental groups at these three tests were carried out using independent-samples t-tests.

Students' perceptions of their forethought strategies

A two-way ANOVA test was conducted to investigate the change in students' perceptions of their forethought strategies, including task analysis (i.e. goal setting and strategic planning for a task)

and self-motivational beliefs (i.e. self-efficacy, task value, outcome expectation, and goal orientation). The analysis indicated that the interaction between test and group, of students' task-analysis perception was not statistically significant, (F (2, 113) = .1.35, p = .26) as presented in Figure 5.2. However, although the difference between the two groups was small at pre-test and immediate post-test, Figure 5.2 indicates that the difference is wider at delayed post-test, which required further analysis.
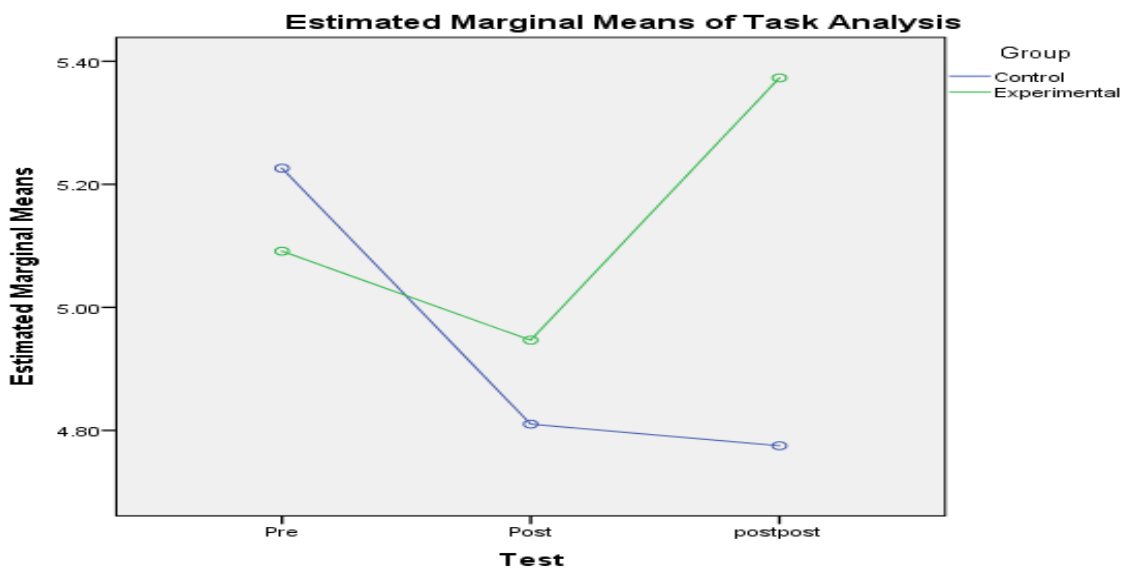
Figure 5.2 Students' perceptions mean scores of task analysis strategies over an academic year

Obviously, the trajectories of each group perceptions was different as can be seen in Figure 5.2. However, investigating the change within each group using paired-samples t-tests revealed no statistically significant changes in students' perceptions between the pre, immediate and delayed post-test whether in the experimental or the control group.

Change, however, was more obvious in the control group students' perceptions of their self-motivational beliefs (see Figure 5.3). A **two-way ANOVA test indicated a significant main effect of test time (F (2, 105) = 3.54, p = .03) on students' perceptions of their self-motivation. The effect size was moderate (η^2_p =.06).** Post hoc comparison indicated that there was a significant difference between pre-test (M = 4.62, SD =.51) and delayed post-test scores (M = 4.33, SD =.63), and between immediate post-test (M = 4.62, SD =.57) and delayed post-test scores (M = 4.33, SD =.63). Students' perceptions of their self-motivation scores drop from pre-tests to delayed post-

test indicates a decrease in their perception of their motivation strategies from Autumn 2017 to Spring 2018 (Figure 5.3), which corresponded with their interviews' findings.

Figure 5.3 Students' perception mean scores of self-motivation strategies over an academic year

Looking at change at the group level, a paired-samples t-test indicated that there was a statistical significant **decrease in the control group's perception of their self-motivation by .60, from immediate post to delayed post-test, with a large effect size (.48, see Table 2 & 3 in Appendix T.3). This reduction was maintained from pre to delayed post-test (Finding 31). Supporting this finding, an independent-samples t-test indicated that at delayed post-test the control group students' perceptions (M= 4.09, SD=.69) were statistically lower than their peers in the experimental group (M= 4.56, SD= .47, t (33.08) =2.52, p=.01) with a large effect size (r=.14) (Finding 32).**

Students' perceptions of their performance strategies

Moreover, a two-way ANOVA indicated that there was a marginal significant mean effect of test time (F (2, 79) = 2.79, p = .07, η^2_p =.05), and the interaction between test time and group (F (2, 79) = 2.84, p = .06, η^2_p =.06), on self-control strategies score (i.e. imagery, self-instruction, task strategies and imagery). The experimental group students' perception scores dropped from pre-test (M = 5.269, SD =.798) to delayed post-test (M = 4.779, SD =.884) (Figure 5.4). The control groups perceptions of their self-control strategies decreased by .85 mean score from immediate

to delayed post-test and the decrease was significant (.01) with a large effect size (.48, as indicated in Table 1 in Appendix T.3). This could be attributed to the increasing task demands as students' progress from Autumn 2017 to Spring 2018 and probably experience high cognitive demands, moments of doubts and lack of self-control over tasks and over the learning resources available (Seufert, 2018) .
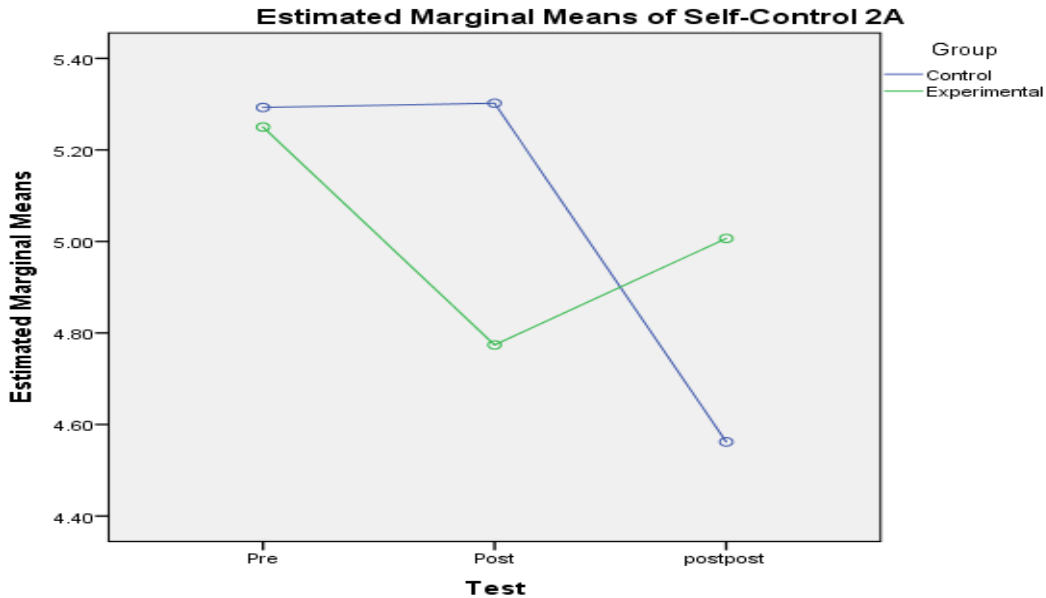
Figure 5.4 Students' perceptions mean score of self-control strategies over an academic year

Moreover, Figure 5.5 indicates that the interaction between test and group, of students' self-observation strategies perception was not statistically significant, (F (2, 109) = .34, p = .70). However, post hoc multiple comparisons indicated that **students' perceptions of their self-observations strategies in the control group statistically significantly increased from immediate post-test (M = .41, SD =.14) to delayed post-test (M = .47, SD =.15, p=.04),** the effect size of the increase was large (.19) according to Cohen (1988) **(Finding 33).**
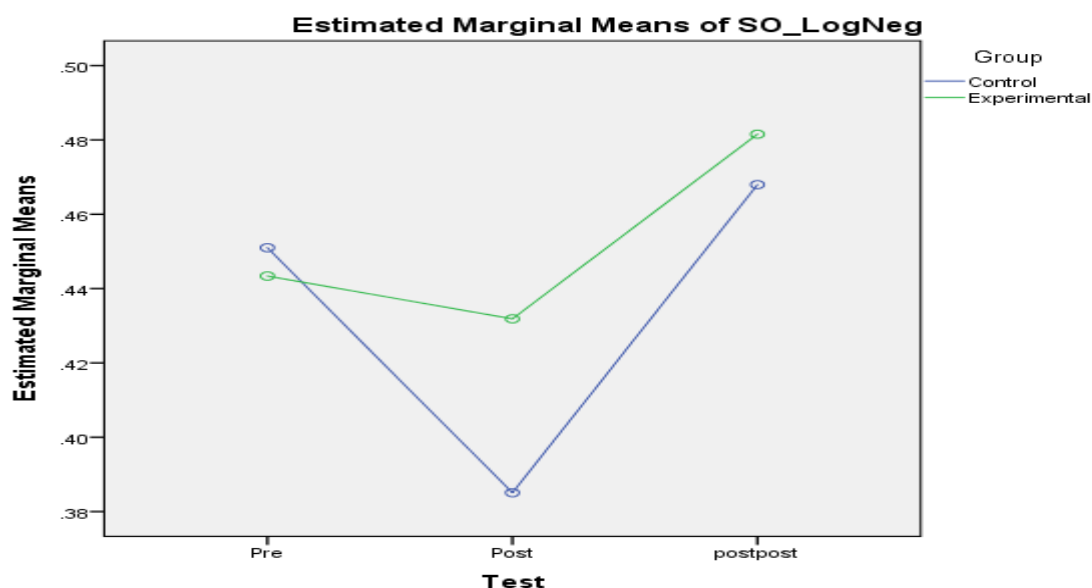
Figure 5.5 Students' perception mean score of self-observation strategies over an academic year

This reduction in the control group students' perception of their self-control strategies was attributed to the perceived task demands. *Task demands increased, which seemed to affect students' beliefs about their abilities and their sense of control over the assessment tasks*. As task demands increased and the task nature changed, copying strategies were not effective in regulating and managing the writing tasks. Therefore, students started noting their use of SRLS to meet the challenge induced by the task demands. Accordingly, the control group **students' self-observation perceptions statistically significantly increased** from immediate post-test to delayed post-test. **The control group students' perceptions of their self-motivation and self-control continued to decrease from pre-test to delayed post-test with a dramatic decrease from post-test to delayed post-test as indicated by the two-way ANOVA. Students' self-motivation and self-control perception mean scores decreased by .46 and .75, with a large effect size of .35 and .31 respectively (Appendix T.3).**

By comparison, findings indicated **no statistically significant difference in students' perception scores between post-test and delayed post-test in overall SRLS and SRLS sub-strategies within the experimental group (Finding 34)**. Appendix T.3 indicates that students' perception scores of their overall and some sub-strategies of SRLS increased between the two tests, although this difference was not statistically significant. Similarly, **exploring the change in their perceptions from pre-test to delayed post-test indicated no statistically significant changes. The stability in students' perceptions can be interpreted as an effect of the intervention as students did not**

experience a significant deterioration of perceptions or awareness, over an academic year, even
when task demands became challenging (Conclusion 3).

5.3.3   Overall SRLS and writing performance

A two-way ANOVA indicated that there was not any statistically significant main effect of the interaction between test time and group on students' overall SRLS perception score (F (2, 79) = 1.93, p = .15). While the difference between the experimental and control groups was small at pre-test, Figure 5.6 shows a great difference between the groups at delayed post-test, both groups taking different patterns and trajectories: while the experimental groups students' perceptions experienced a **'dip of implementation'** at immediate post-test before rising again at delayed post-test, the control group's perceptions decreased gradually from pre-test to delayed post-test.
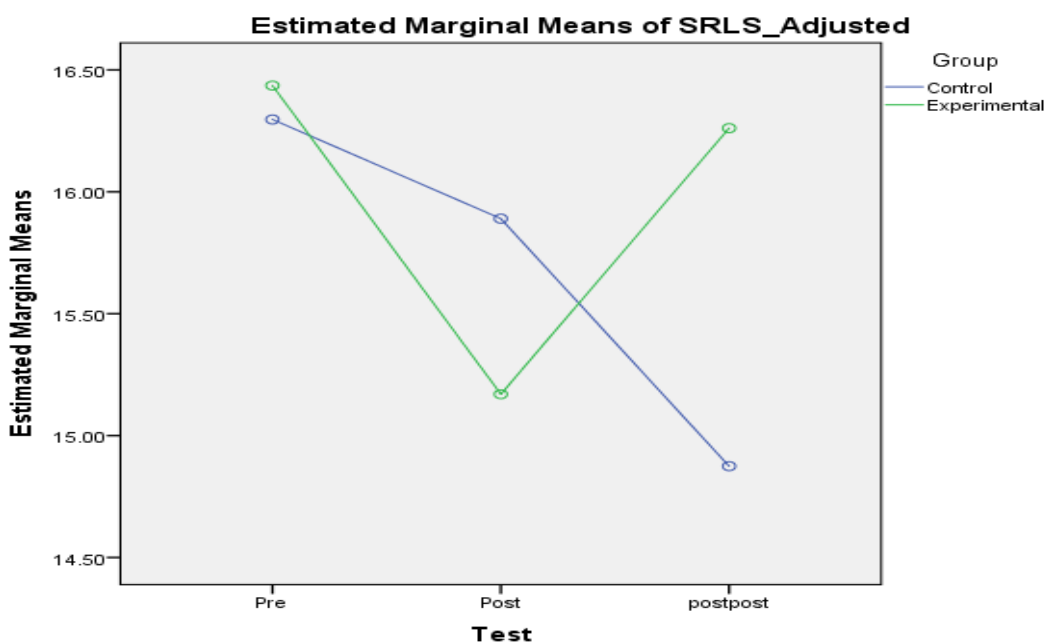
Figure 5.6 Students' perceptions mean scores of overall SRLS over an academic year

Accordingly, a paired-samples t-test supported the gradual decline of the control group students' perceptions of their overall SRLS, and the dip of implementation after which the experimental group perceptions increased again indicated in Figure 5.6. The paired-samples t-test revealed a non-significant reduction in the control group students' perceptions of their overall SRLS from

pre-test to immediate post-test (See Appendix T.3). However, **the drop in the control group perceptions from immediate post-test (M=16.26, SD=1.51) to delayed post-test (M=14.87, SD=2.46; t (8) = 1.95, p= .05), was significant with a large effect size (.32). This decrease was maintained from pre-test (M= 16.30, SD= 1.66) to delayed post-test score (M= 14.87, SD= 2.46; t (11) = 2.55, p=02, r=.37) (Finding 30).** On the other hand, the experimental group within group perceptions' drop from pre-test to immediate post-test and its increase after that from immediate post-test to delayed post-test was statistically insignificant (See Appendix T.3, Tables 2 & 3).

At the end of Phase 2, students' overall SRLS score was found to be higher in the experimental group (M=16.26, SD=1.51) than in the control group (M=14.87, SD=2.46, t (35) = 2.02, p= .05), but the effect size was small (.10). Moreover, exploring SRL-A, as a method of data collection measuring students' perceptions at three different points of time, on students' perceptions of their SRLS via a mediation test revealed that **there was a direct effect of students' pre-test perception of SRLS on the delayed post-test SRLS perception scores. Moreover, there was also a mediating effect of post-test SRLS on delayed post-test perception scores** (Figure 5.7), indicating that the SRL-A contributed to the learning process and the teaching approach in forming or reforming students' perceptions of their SRLS. **SRL-A scale items could have raised or lowered students' perceptions and awareness of their SRLS (Finding 26).**
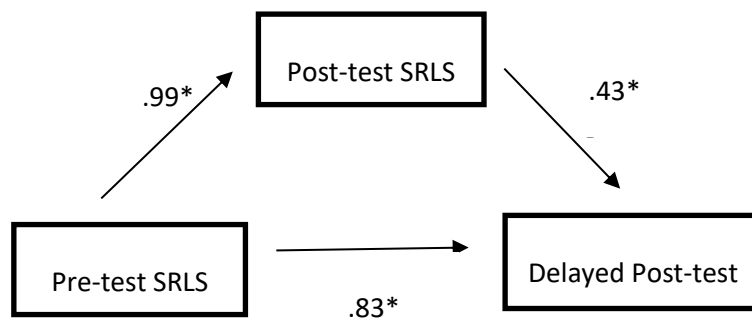
Figure 5.7 The relationship between pre-test SRLS, post-test SRLS and delayed post-test perception scores

Aligning with the statistical difference between the control and experimental group in their perceptions of their SRLS, **the independent-samples t-test indicated that the experimental group students performed statistically better in their writing mid-term and final tests (Finding 35**, see Appendix T.3-Table 3). Both the mid-term and the final tests required students to write an argumentative essay of 250 words on a particular topic, which requires organisation, synthesis, critical thinking and editing skills. However, the two groups of students performed similarly in the researched processed writing over the semester i.e. writing a short research paper.

Reflecting on the two groups' performance in the writing tasks indicated that phase 1 experience and task demands affected both students' writing skills and students' perceptions of their SRLS. Findings indicated that the control group students' fluctuating perceptions could be attributed to the change of assessment types and task demands. The Phase 1 learning environment and assessment tasks were over-structured by the course and the teaching approach and students mainly copied teachers' strategies using a template for writing paragraphs and felt in control of learning and assessment. However, in Phase 2, students were challenged with a higher demanding task that involved searching, synthesising information, forming arguments through a process of writing longer texts and students had to utilise more complex cognitive and metacognitive processing, which created a sense of lack of control and doubt of self-efficacy as indicated by students' reflections.

In the experimental group, however, SRLS intervention had a stabilising effect as students' awareness was raised especially about task analysis strategies and self-motivational beliefs since these were frequently discussed by T1 in phase1. Notably, with increased demands of a familiar task, i.e. mid-term and final writing tests, the experimental group had statistically better scores than control group students. The writing tests required similar cognitive and metacognitive strategies to that students used in writing an essay, which they were accustomed to. However, the experimental group performance in the research paper was statistically indifferent to that of their peers in the control group emphasising students' need for time to practice the new task and experiment with strategies to use them effectively for a better performance of the task. One important issue that can be inferred here is the length of effective implication for change to occur and be sustained. This implies that training should not be expected to have immediate impact on the perception or use of SRLS in less than a year (Desimone, 2009; Martin & Hand, 2009; Osborne et al., 2013), as students need to understand, experiment, and apply the observed strategies *(Hoogerheide et al., 2014; Seufert, 2018).*

5.3.4   Overview

In summary, the control group students' perceptions of their self-motivation and self-control decreased in Phase 2 in response to the increased assessment demands, which urged students to be more observant of their SRLS. The experimental group, on the other hand, maintained overall stable perceptions of their SRLS, which was attributed to SRLS integration into the learning process. Moreover, the experimental groups performed significantly better than their peers, in the control group in their assessed writing tests, but not in the research paper as the earlier required similar cognitive and metacognitive strategies to that learnt in phase 1. Furthermore, there was an over dependence on the teacher's feedback because of lack of training in self-assessment and peer-assessment and feedback, learning histories and the teaching approach, however, students' indicated positive initiatives towards self and peer-assessment and feedback, being selective in who to include in their support network.

In response to RQ3, transferability of SRLS was observed in the experimental group's relatively stable perceptions of their SRLS, even when task demands increased. Moreover, there was a delayed effect of the integration in students' writing performance in writing tests. However, a full transfer of strategies entails adaptability and use of SRLS even with new and more challenging tasks such as writing a simple research paper, which did not happen for the reasons discussed above (Conclusion 3).

5.4 Assessment practices in the foundation programme in Autumn 2017 and May 2018

Findings and subsequent analysis from eight teachers' interviews in Autumn 2017 and Spring 2018 indicated that **teachers' beliefs about their roles and students' learning, teachers' literacy about SRLS, course objectives and design, and students' transition from school to higher education were factors that influenced students' attainment and/or development of SRLS**. The Evans' EAT (2016, equity, agency and transparency) framework was utilised to analyse, interpret and organise findings from teachers' interviews; teachers' assessment literacy, feedback and design were considered in the analysis and a summary of important themes is presented in Appendix W, and discussed in detail in the following sections

5.4.1 Equity of assessment

Equity in assessment entails having equal opportunities to assessment practices, access to standards of good work including skills and knowledge of and access to timely feedback and resources. **Interviewed teachers highlighted continuous assessment, clear procedures and standards, frequent and instant feedback as important features of good assessment practice to ensure equity.**

5.4.1.1 Nature of assessment

Teachers' consensus was that continuous and regular assessment is a good practice as it allows students to understand quality of standards and develop students' self-judgement skills **(Finding 36).** For instance, T2 (Control group, phase1) stated "our assessment for this writing class; the writing itself is diverse enough that it makes students interested, and frequent enough: every two weeks or so, two weeks and a half is frequent enough to keep students motivated to perform." T2 explained the marking scheme for the assessment task reflecting, "They are of equal marks. So far the first activity is not that difficult, but it is worth the same as the last activity, which is quite more difficult, but at the same time the skills are lower at the beginning and they increase towards the end, so it kind of measures up." T2 was satisfied with the assessment type, frequency of the assessment tasks, the marks allocation for each task and the rationale behind it, as T2 reasoned, "Kind of feel they are always on command," and this kept student ready, motivated and interested in the task. This aligns with the control group students' high perceptions of self-control by the end of the semester, as frequent repeated practice and structured learning tasks were less

challenging than frequently introducing different and new learning tasks, and they encouraged students to use templates to complete task, and could lead to copying the teachers' strategies.

Moreover, T3 (experimental group, phase 1) advocated having regular quizzes as good assessment practices. T3 thought that the 'best way' to assess the students is throughout the semester as they can have regular quizzes rather than having a mid-term and a final test, which was not the practice used in the reading skills course. T3 justified advocated regular assessment stating,

> *Probably a weekly assessment would encourage students to work harder first and also it would probably encourage them to* **have a sense of how their development** *is going throughout the semester and it makes them feel that they have learnt something every single week rather than every three or four months.*

Similar to T2, T3 believes *that* **regular assessment is likely to maintain students' motivation and preparedness, develop students' sense of achievement, and raise their self-confidence and self-efficacy in completing and achieving tasks, which are key factors for the development of students' self-assessment skills and self-regulation strategies***.* Moreover, T8 (phase 2) stated that,

> *We should [have assessment] at intermitted periods of time, like we should not have 40 marks within an hour and a half or two hours at once, better to have it periodically. The benefit of that is terminating the stress from the students. They will get familiar with it, it will be like a habit, but if it is only once or twice or three times a semester, it is very stressful for the students when it is this way.*

T8 emphasised the advantages of **intermittent assessment in managing 'terminating' stress and its function in habit formation** as important skills for successful attainment of goals. Moreover, **structuring assessment over a period of time in which students receive constructive feedback for improvement meets HE's strive for equality and access, where students can compensate for poor performance, due to human incapability or misjudgement of requirement, in subsequent assessment tasks,** which was strongly argued for by T8. Likewise, **accessible, formative feedback that aimed to improve students' mastery of tasks provides access to less competent students to perform better based on individualised and timely feedback that** they receive from their teachers. As T8 recommended, different types of assessment tasks that cater to students' needs is a feature of good assessment design to target different learning patterns and different students'

profiles of self-regulation, and dose not leave students at disadvantage due to inadequate performance, i.e. in written tests or project presentations.

Despite the rationale for having various and frequent assessment tasks regularly, the question arises as to what extent students had the time to internalise and practice the skills taught in a short time especially at a beginner level, which was pointed out by T1 (Experimental group, Phase1). **Constant change of assessment tasks and/or subject matters can lead to disruption and excessive cognitive load** (Boud, Lawson & Thompson, 2015), **and consequently can delay the development of evaluative expertise**. This appeared to be an issue with the experimental group as frequent tasks in addition to the implementation requirements seemed to burden students and increased their cognitive load in their first semester in HE (Seufert, 2018). Likewise, T7 (phase 2) thought that the writing assessment tasks were too frequent and demanding on the part of the teacher. T7 reported,

> *These students are really assessed in a very constant base. We do have this assessed tasks and we do have this project and the project is going through really like very long steps, eight steps: starting with their topic, up to planning, up to outlining and going through the blog and finding resources and moving through the first draft, second draft and then the final report.*

T7 complained that it was a very 'hectic work' for the teacher, having to guide students through the process of writing different types of essays in addition to the research project for which students had to submit different drafts in one academic semester. Teachers spent the majority of their time, including weekends in the case of T7, marking and providing feedback on the assessment tasks and on the practices given for each assessment task: a time that could have been efficiently used for targeting students' needs. Moreover, **this form of intensive and frequent task submission does not provide students with opportunities to experiment with the language or master writing a form/type of essay or consolidate their knowledge and understanding of the task and strategies to accomplish tasks. On the contrary, it might cause excessive cognitive load that does not enhance the learning process.** *The issue with equity and quality is whether assessment tasks build students' understanding of the subject matter or confuse them, and how aligned are assessment tasks and classroom activities to the final assessment* (Boud et al, 2015).

Moreover, T8 also highlighted the foundation year assessment inefficiency in targeting essential strategies for students such as note-taking and maintaining punctuality and/or regular attendance reflecting,

> *Note-taking for example is missing, and in dealing with that group, I felt a need to have punctuality and regular attendance, honestly, as part of the assessment, because they are not taking it seriously. The homework is not assessed and again because it is not assessed, it has no marks, they never take it seriously. The maximum number of students who do the homework in that group is two-three honestly, out of 23, and this made me stop assigning them the homework because it was not affective.*

While teachers recommended continuous intermittent assessment that tackles various skills and language content, the foundation year assessment was a source of dissatisfaction for teachers for its uneven allocation of marks and time in the semester for one, and for its disproportional focus on content, which led it to become unjust for students and teachers at times. T5 (phase 2), for instance, commented on the speaking and listening assessment practice of level A stating,

> *For the speaking, I think it is fine the one that we use now. We have midterm speaking exam and then they have final speaking exam. They have first time debate and then they will have mini-presentation and then they will have presentation for their project so we have some kind of continuous assessment, but for listening they have midterm and final and I do not think this is how we should assess them.*

According to T5, allocating assessment at two points of time during the semester using tests solely was not sufficient for students to practice and master a skill.

5.4.1.2 Standards of good work

In relation to transparency of assessment, **teachers reported making assessment criteria accessible to students via explanation, frequent practice and mock exams, modelling and providing constant access to assessment requirements via different platforms i.e. online and mobile apps (Finding 37)**. T5 (phase 2), for example, demonstrated assessment criteria to students, explained every single criterion, and suggested techniques to meet requirements. Moreover, T5 gave students mock exams to help prepare students for the assessed exams, which was also T3's and T7's practice. T7 (phase 2) provided practice tasks, discussed students' performance and marked it against criteria with students. On a wider perspective, T8 clarified assessment requirements, "stem of assessment, modes of assessment, the objectives, what they are going to study and the course outline" right from the beginning of the semester to raise

students' awareness and help them be strategically and emotionally prepared for the tasks. Furthermore, T1 explained her use of modelling and reflected her beliefs about students learning stating, "[students] always need someone to guide them through the learning process and if they are ever shown the certain guidelines and how to evaluate themselves, they can do it". However, T3 thought that students lacked the awareness of assessment criteria and those students tended to forget teachers' verbal explanation of standards and according to T8, there were still some students who were not completely aware of the purpose of all, or some assessment tasks. Following on this issue, student E13, for example, reflected,

> In terms of *laughs* distribution of marks, whether what we are doing is beneficial at all. Well, for sure, it is useful for learning, but in terms of marks, we do not know how to be ready for it in the right way or the type of activities and tasks, what do they aim to test, I don't know. [Teachers] just say that you will have activity for unit 1-4 for example.

E13 highlighted study and exam preparation strategies and assessment literacy as important aspects for success and she indicated a lack of awareness of the assessment objectives and procedures. In turn, T8 commented in students' unawareness of assessment objectives saying that teachers keep explaining and uploading documents after discussing them in class, to the Google Classroom app; however, some students are inattentive in class, hugely distracted by social media apps and by their peers as they keep inciting each other to be careless. **This can be attributed to teachers and students' perceptions of each other's roles in the students' learning process, or conflict in teacher and students' expectation of assessment and of each other's responsibilities or miscommunication between them.** *Teachers' adopted approach and strategies for raising students' awareness of quality matter; telling, demonstrating and experiencing are different strategies and they elicit different responses from students according to students' learning patterns and learning experience.*

5.4.1.3 Access to timely feedback

The Evans' EAT feedback aspect highlights equal opportunities to feedback, timely feedback as key to effective assessment feedback, and to the development of SRL. **Teachers' reflections, however, highlighted the medium of feedback delivery, awareness of criteria for good work, strategies for providing feedback, the amount of feedback and students' use of feedback as key factors for effective and sustainable feedback practices (Finding 38)**.

Continuous feedback and providing early opportunities for students to act on feedback was highly recommend in the literature (Evans, 2013; Nicol & Macfarelance, 2006; Sadler, 2010) to make full use of the feedback and internalise it. Teachers claimed that they provided accessible feedback to the best of their knowledge and ability. In terms of the medium of delivery, **teachers reported providing written and/or oral feedback on students work depending on the task and time available**. T2 (Control group, Phase1), for instance, pointed to the importance of immediate feedback, verbal, individual and group feedback. Moreover, T1 (Experimental group, Phase1) emphasized **the importance of raising students' awareness of criteria for success in the feedback practice**. T1 marked students' tasks, explained their achievement level based on pre-set and pre-discussed criteria, directed students to their strengths and recommend strategies to overcome their weaknesses. Additionally, T5, for instance, reported an incident in which students passed the blame on to her because they lost marks on one speaking exam. T5 indicated students' mistakes and explained the criteria demonstrating students' unsuccessful attempt to meet the requirements of the test and encouraged students to record their own presentations to evaluate their performance. Furthermore, T3 (Experimental group, Phase1) explained her strategy in providing feedback as she provided feedback to students in groups of similar achievement levels to have a focussed discussion of mistakes and ways to improve performance.

 It appeared that teachers provided feedback frequently; a feedback that some students confessed ignoring, because they were interested in marks more than they cared about written feedback and subsequent assessment activities. T7 commented that students reacted to her feedback by humour stating, "They [students] always laugh. They sometimes say that your feedback is longer than our written text itself," which highlights the length and quality of feedback as main features of accessible feedback. Despite T7 efforts in providing good quality feedback, **the length could have demotivated students and hindered their effective use of feedback.** This raises the question of whether teachers were providing too much feedback and that students ignored it, because they knew that feedback would be available for them whenever they needed it.

Students' use of feedback does not only highlight the effectiveness of the feedback providing strategy, i.e. some students preferred whole group oral feedback to avoid embarrassment and being put on the spot and consequently feeling the need to protect their self-worth, but also indicates students' awareness of feedback use and their need and willingness to use feedback. T7 reflected on a student (E25) behaviour towards her feedback, stating,

E25 did like a paraphrase or a summary of a paper. He did not understand anything about that paper. He did not. He just paraphrased it or summarised it into his report with no clear connection with his topic. I gave him feedback on first draft, I gave him feedback on the second draft, and when he saw the result, he did not make changes on his second draft. He was not happy, and he promised that he would do some changes, so I gave him a chance for the purpose that he was going to learn the lesson and that he was going to improve. This is what we want in the end.

T7's reflection indicated that E25 did not make use of the opportunities provided to act on feedback either for lack of awareness of such golden opportunity, did not understand the feedback and did not ask for clarification, or did not bother to exert more effort to search and inform his writing as the students claimed that resources were limited. Therefore, **providing opportunity for feedback is partially a teacher's job, but making use of them is students' responsibility.**

Students' use of feedback can be inferred from the students' subsequent performance as teachers' categorises students as 'good students' or otherwise. The good students being those making use of feedback to inform their performance. T7, who dedicated one class for feedback for each draft of the project where T7 is available to answer questions and provide support for students, reflected on students' use of feedback stating,

Not all of them [made use of the feedback provided]. There are some good students, which I can see, usually I ask them for their first draft papers, so that I can see the notes they have taken, the changes they have like made and I saw that some of them really studied very hard their first draft to improve it into their second draft.

T7 defined good students as those who followed instructions and exerted effort to improve. T7 was impressed by some students' drafts, where highlights and notes were written based on the feedback provided (observed learning). However, T8 thought that attention to feedback is usually missing when it comes to students and therefore, the intake from feedback was low on their side. Moreover, T5 expressed that her students behaved similarly at the beginning of the course, but loosing marks forced them to pay more attention to feedback. **Once more providing a dose of challenge proved to be healthy for students' attention and a reality-check urging students to develop their learning strategies like SRLS**.

5.4.1.4 Access to resources

Access to different learning resources is important to promote students' agency and role in their learning process. **Teachers' reflections indicated that teachers depended mostly on the course materials as a source for knowledge and skills.** For instance, T1 and T2 (phase 1) commented that students had all resources within the activities and the in-house material used in the writing classes, however, T2 was not confident that students can use resources outside the classroom. Moreover, T3 (Phase 1) suggested the involvement of the administration at the college to make sure that learning resources are available for students and that teachers' need to guide students to the right resources, which was highlighted by T7 as well. The resources these teachers addressed were mainly related to the assessed tasks for which teachers guided students to the possible reliable sources of information. T5 (phase 2), on the other hand, commented on resources that develop students as independent learners outside the class time. T5 was unsatisfied as she emphasised that there is a lack of resources for students to practice the language; even lack of study spaces. She added that the issue is not only related to physical and learning resources, but also to the human resources represented in the academic support centres, who were not supportive neither for students, nor for the teachers. Joining T5's dissatisfaction, E22 complained that there was shortage of studying spaces where students can complete assignments and prepare for exams at the college, highlighting a possible reason for a common observation of students' quick departure from college soon after they finish attending their lectures (Field notes).

Apparently, the college has to address its resources, as there are few learning spaces such as computer laboratories and a small study room due to the college size (Field note). Access to different learning resources is crucial as relaying on the knowledge and learning experience offered through the lectures is limiting students' development as self-regulated learners (Finding 39).

5.4.1.5 Overview

Equity in assessment highlights access to knowledge and resources in terms of the nature and frequency of assessment, criteria of success, timely and effective feedback and human and learning resources. A balance between the frequency of assessment, cognitive load and objectives is important. Moreover, the amount of feedback and students' beliefs about their roles can promote or limit their use of feedback. One key factor to the development of SRLS is quality of support and resources that the students can have access to.

5.4.2   Agency in assessment practices

Being a key feature of self-regulated learning, students as agents in the assessment process highlights students' roles in the learning and assessment process influenced by assessment objectives and practices, and teachers and students' beliefs about their roles and about learning. *Teachers utilised self and peer-assessment and feedback for practice mainly, provided frequent feedback and practiced a teacher-centred approach to teaching, limiting the development of students' agency and their SRL* **(Finding 40).**

5.4.2.1   Self and peer-assessment and feedback

Self-evaluation and peer feedback are two essential strategies that need to be implemented in programs to prepare students to be lifelong learners. Teachers did not formally address self-evaluation and peer-feedback in the classroom, as these two strategies were not among the course objectives; **teachers used self-evaluation and peer-feedback sparingly as practice exercises to raise students' awareness of standards of quality**.

T1 (phase 1), for instance, commented, "they can assess themselves through practice, but not on actual assessed task," therefore, "asking their peers for feedback or asking the teacher for feedback or asking themselves for feedback will only be very minimal." T1 reflected that there was no lead way to introduce self-reflection in the course as it was not part of the course objectives. T2 (phase 1), also, commented that students were not engaged in any type of self-assessment stating, "They just look at their mark and they are ok." Moreover, T3 (phase 1) commented on students' self-evaluation skills, reflecting, "They are still very subjective when they evaluate themselves and they do not see that they should be objective." Unsurprisingly, students' subjective judgement was a result of a lack of training in and practice of self-evaluation as it is a skill that develops by learning and through practice. ***This highlights a major limitation of the assessment design, course objectives and the teachers' beliefs and approach in promoting students' self-evaluation among other self-regulated learning strategies.***

Teachers did not incorporate these strategies as learning goals within the assessment activities, attributing the lack of focus on self-assessment on the assessment design only. As an example, T6 complained, "Quality assurance has made it clear that there is no room to alter or discuss at the college level something that is structured at the national level …but we have been begging for

opportunities to explore something like that but we are not allowed to." T6 believed that he was forced to execute orders from a centralised educational system that unified English language programs across the six colleges, neglecting contextual distinctiveness and restricting his decisions about what suited his students and limiting his creativity in materials delivery and inclusion of important objectives. Consequently, he was not able to incorporate self-assessment and peer assessment as objectives of the course, which raises the question of **whether centralisation ultimately eliminates teacher creativity and freedom or whether it is the teachers' beliefs about their roles that limit their creativity and freedom.**

Several indications of baby steps towards self-assessment appeared in Spring 2018. As an example T5 reported, "I noticed that at some point, some of the students read the listening script, and then they try to answer from that, and for them it is like we need to answer the question, and impress the teacher, like make the teacher happy." Checking listening script to evaluate one's answers was a sign of self-evaluation, even though it was for the wrong reason, i.e. to impress the teacher. Moreover, T8 considered giving students quizzes as an activity for evaluating one's performance; however, these quizzes were marked by T8, not by the students and students were not serious about them showing inattention to the quizzes and/or to the feedback provided on their performance afterwards.

In terms of peer engagement, T5 reflected

> *I tried to do such for speaking, because I ask them to, as I told you, in groups to present and then they will give feedback to each other, so they are trained to evaluate in terms of speaking. Sometimes I ask them to record their speaking, judge it and give it marks and then they will do it and then they will come and tell me: teacher you were right in terms of the accuracy, you were right in terms of pronunciation and I found that they are doing it better.*

T5 used both self-evaluation and peer feedback as strategies to raise students' awareness of assessment criteria, their weaknesses and strengths and to direct students' thinking towards the value of feedback from self and others. Notably, teachers used self and peer-feedback as a supplementary activity and as a practice not as a main objective in the course, as it was not formally written in the course description and thus students were not assessed in their mastery of these strategies.

5.4.2.2   Teachers' roles

Reflecting on their beliefs about their roles, teachers' responses ranged from scaffolding to modelling strategies and tasks. T2, for example, stated "my role I guess is to just try to push them to write as much as possible, and give them as many activities, where they are writing. They are making their own writing and they are writing from what interest them if possible." T2 was pragmatic stating that the course was structured in nature, because there were many objectives to meet during the semester and thus T2 tried to primarily satisfy requirements. The structured approach teaches students' imitation and limits their self-regulation. However, T3 kept focusing on building students' characters and considered it a teacher's main role stating, "Encouraging students to be confident in the class," by providing the opportunities and platform for students to express their personalities, hobbies, likes and dislikes.

Furthermore, T8 emphasised several roles for the teacher like setting a model and an example for students in terms of language skills, research skills and ethics, and personality. The second role is being a motivator, "we as teachers we should feed our students with motivation. We should constantly motivate our students to learn in general and to learn the English language which is their major" (T8). T8's use of the word 'feed' to indicate teacher's role in motivating student was interestingly ironic hinting at the notion of filling empty vessels, which are deprived of learning histories and agency and it contradicts T8's argument for independent learners. The third role discussed by T8 is that of the teacher as a knowledge provider as students assume that teachers are knowledge suppliers, because students do not read intensively, and thus the knowledge they get inside the classroom is valuable to expand their learning capacity. Fourth, establishing good rapport with the students as teachers are also caregivers and students enjoy telling their teachers their stories-highlighting the relational aspect of learning. Fifth, teachers are also suppliers of skills and strategies, which can be associated with modelling strategies and skills as one mean of supplying them. *The teachers' roles argued for by T8 can be more or less embraced by the teachers according to their* **personality, teaching approach and histories, beliefs and teaching load.** *However, these could be counter effective when it comes to training independent learners and incorporating all of these roles can be over scaffolding; a source of dissatisfaction for teachers*. **This raises an important issue of the gap between beliefs and practice in education.**

However, teachers had little decision about major changes in the assessment design as the foundation year program was unified across six college and accordingly assessment was centralised including type and time of assessment, and allocation of marks. This restriction leaves little room for teachers to cater for specific students' needs as T5 commented, "We just have the

assessment, which are assigned, we administrate it and the students are just performing that assessment." Accordingly, ongoing evaluation that supports the development of sustainable assessment and feedback process was inadequate and inefficient even though teachers proposed change and improvement to the programme based on their expertise and students' needs. According to T6, looking into a proposal of change in assessment, getting consent from the different colleges let alone approval from the ministry was a pain that was not even granted.

The thematic analysis of the student interviews also revealed that the **teacher's role was central in affecting the students' views of teaching and learning, and consequently in the development of students' SRLS**. Accordingly, a teacher could promote students' active engagement in the learning process or marginalise students' own roles in the learning process. To elaborate, a teacher can be a" messenger " (C17), who teaches (C18), delivers knowledge (C6, C20 & E20), shares ideas (C9), assists in developing language skills (C7), diagnoses weaknesses and help overcoming them (E13 & E20), guides, advices and direct students (E2), and/or make classrooms interesting (E25). Students' views of their teachers' roles varied from teaching to a wide variety of roles that indicates students dependence on their teachers to be their compass (over scaffolding) and this role could overtake students' roles at times, and minimise it to be passive recipients of knowledge without actual engagement with learning. E25, for example, argued, "They [teachers] shouldn't make the class very boring. I don't say that they should do funny things all the time, but they should make us feel somehow relaxed in the class." Here, E25 neglected students' role in exciting the classroom environment, passing the responsibility and blaming teachers entirely for their disinterest in class. Students' beliefs about theirs and their teachers' roles in the learning process affect their attitudes towards learning, the roles they embrace and their selection of the strategies that can enhance the learning process.

5.4.2.3   Students' roles

Drawing on the discussion about teachers' practices and beliefs about their own roles, **it was found that students' roles were influenced by students' beliefs about their own roles in their learning process, and/or by context i.e. family and peers, the teachers' practices and perceptions of their own and their students' roles.**
Students' perceptions about their roles at college were influenced by peers, family, learning histories and the teacher's approach, and ranged from performing as instructed to active engagement at the college level. A case in point of exerting the minimum effort is C18, who confessed,

*The least of my responsibilities is writing the report because it has been due two weeks ago and T7 was kind enough to let me do it. I got 0 for draft 1 because I did not submit. For draft 2, I got 100% plagiarism, because it was a copy paste *He laughs* Yes but draft 3 was on 16%.*

C18 reported this incidence intending to show remorse, but a sense of pride can be detected from his words. C18 seemed to view missing classes and deadliness and ignoring instruction as characteristics of personal growth (field note). Although C18 indicated good awareness of his responsibilities at the college, the resources available, and the efforts teachers are exerting, procrastination and carelessness highlighted his reflections. Likewise, C20 showed an understanding of a student role at the personal and college level indicating,

My role is to keep to college's traditions [regulations], to stick to the rules and regulations. For example, participate in the extracurricular activities that I am interested in and that are held at the college. I try to do my best to raise college reputation and name, to the best of my ability, respecting teachers and work to improve my academic achievement. My responsibility towards myself? To try to make use of whatever is provided and can enhance my learning, my language and personality as some students are shy and I need to overcome this. (A view on college student identity)

However, records showed C20's recklessness in attendance and submission of assignment. There was a gap between C20's awareness of roles and his practice, knowing is not doing. Moreover, a humble perception to achieve performance-oriented goals was highlighted by C6 stating, "To study and do homework and exams and get a good GPA" and C9 lowered his goal bars to surviving college indicting, "To not fall under probation and improve my academic attainment at the college". **Students' views of their roles influenced their goal-orientation and effort at the college (Finding 41)**.

On the other hand, students like E13 and C17 claimed responsibility for their learning. E13, for instance, highlighted responsibility for following instructions, time management, organisation, seeking knowledge and help when required, stating,

[My role is] to do what I am asked to do and what I am taught on time and as scheduled, to be organised and do not wait for somebody else to sort me out. If I need to learn and understand something, it is my responsibility to search for it and to seek help and explanation from the teachers as they are busy and cannot ask every student and the rest full upon me in terms of understanding.

E13 pointed to the importance of independent learning highlighting important skills to promote it (indication of student' agency and development of SRLS) such as research skills, taking initiative and responsibility, seeking the right help, setting goals and plans and managing time effectively. Likewise, C17's perception of his future job guided his perception of his role at the college reasoning, "I have to study hard because I will deliver and communicate the information I am learning now to other people or students and they will evaluate me, so it is better to learn and get the knowledge correctly." C17's **beliefs about his role is guided by future-self perspective** as a teacher, therefore training future students to be good learners requires from C17 to experience being a good learner, and exploring effective strategies for learning.

Moreover, students' perception of their roles can be influenced by their peers. Peers' influence, for instance, whether positive, negative or both, can affect students' view of their own roles at the college. An example of peers' positive influence was stated by C2,

> *"They [peers] have a positive effect, especially when we get together and study or do the homework together or request help with regard to remembering a homework or guidance in writing the report, when the teacher is not available or in the weekends or something like that."*

According to C2, having a supportive tribe of peers can have a positive attitude on students' perception of their roles and their study at college. By contrast, some of the negative influence from peers was highlighted by C17 as peers, may become distractors and encourage each other to be careless. They can also demotivate each other by having negative views of learning i.e. passing is what matters, learning can happen in later years. Peers encourage or discourage students taking responsibility and exerting effort beyond the minimum of passing a course.

Furthermore, the teacher-centred approach in teaching and assessment influenced students' role in this process. An obvious example of this is T1, who elaborated that students had a degree of freedom in the selection of topics for some writing tasks, but they were not allowed to decide on the type of writing, i.e. whether essay, story or paragraphs for objectivity and benchmarking purposes as it was a centralised system. T1 also reflected that there was very little assessment participation from the students, but T1 tried to put students in groups to practice group assessment and peer-feedback. Likewise, T2 revealed that students just performed the task and they showed active engagement in completing the task and trying to write better since active engagement is one of students' roles. Moreover, T3 reflected on her beliefs about students' beliefs, "[students] believe that their role is only studying and coming to the exam," referring to

the influence of students' learning histories on shaping their learning beliefs. T3 believed that students should embrace various roles such as being responsible, attending classes, doing homework, participating in class, developing their language skills and learning strategies, building their character throughout the semester and active engagement in the college and stop being passive consumers of knowledge.

Expanding on teachers' expectations of students' roles and entitlements, **it was found that students were mainly passive learners**. **Students' tendency to exert the least effort in learning and assessment, a common feature of the study sample, contradicted teachers' expectations of a college student.** For instance, T5 tried to implement the student-centred approach in speaking, because she believed in empowering students, and found that her approach was effective. Listening as a subject in her view was different and students ended up performing the task only and thus listening activities became teacher-centred. Notably and regardless of her argument about the listening skill nature and teaching procedure, T5 pointed out **the nature of the subject or task demands as an important factor in whether tasks support the development of SRLS and allows for active engagement from students or not (Finding 42).**

In addition, T7 feverishly called for active engagement from the students by which students actively discuss, negotiate, and take responsibility of the course content and of their learning process in general. T7 argued that students should mentor and assess each other as a practice for their future profession. T8 expands on this arguing that students should accept their personality but work hard to develop it. They should be 'self-conscious of their pros and cons' and set goals towards improving their performance at college. T8 also highlighted an urgency for independent learning stating,

> *When I say independent, I mean independent from their friends. They should not depend on their friends, even like to finish simple tasks like grammar activities or vocabulary activities for them. No, it should be their responsibility. Also, in terms of research, so many of our students depend on others to write for them, and they think that this is something healthy or something normal, while it is not. Now the upcoming thing is that they get the help even from their parents, because as you know, now we have educated parents, parents with higher education degrees, so they get even their help to write their research paper and to help them with the presentations.*

T8 characterised independent learners as those who do not relay on their peers or family to complete their assessment tasks for them. While seeking help was recommended,

overdependence on peers and over-scaffold from family was obstructing the development of independent and actively engaged learners, according to T8. She added that students should also be intensive readers as culture of reading is dying for this generation of students especially with the spread of the social media and its distractions. T8 continued that one of students' role is to be active learners,

> *"By taking-part in class, participation, note-taking, again that note-taking. This skill is extincting [disappearing] now in the classroom; now, you rarely find students who take notes and you keep reminding them, but you still find only a handful of them are taking notes."*

T8 summarised the expected roles of students as being responsive, responsible, punctual, independent, honest, committed and active learners, but these were not embraced by students.

5.4.2.4   Overview

Agency in assessment emphasises students' roles in assessment and their beliefs about their roles and that of their teachers which impact practice. Findings highlighted two main issues that limit students' development as agents of their learning and assessment process and as self-regulated learners: 1) lack of emphasis on self and peer-assessment and feedback, and students and 2) teachers' beliefs about their roles and about learning. Teachers rarely utilised self, peer assessment and feedback, and provided extensive feedback, limiting students' engagement. Moreover, students' beliefs about their roles directed their goal-orientation and efforts at the college. Furthermore, a gap existed between teachers' expectations from students and students' practices at college, which were shaped by students' learning histories, the teaching approach and their peers and families' influence, which can all promote or hinder the development of students' SRLS.

5.4.3   Transparency of the assessment practices

Transparency in assessment processes and procedures incorporates transparent objectives and criteria of success, meaningful assessment (relevance and task value) and transparent roles and expectations. Teachers' highlighted the ambiguity or lack of objectives in some courses, and a mismatch between teachers' and students' views and practices of their roles, which was attributed to the context emphasising the need for training to support students' development of SRLS.

5.4.3.1   Transparent objectives and requirements

Ensuring robust and transparent processes and procedures is a key distinctive feature of assessment design nowadays. Clear objectives is but one of these features and both teachers and students should have clear and mutual understanding of the course objectives. However, **there appeared to be a dissatisfaction from some teachers and students in relation to course objectives (Finding 43)**. To illustrate, T5 elaborated,

> *They think that you are teaching just to finish the book and I think it is because the way our courses are delivered; we do not have clear objectives for each of the courses. We have the calendar. We have to follow it. We do not have that clear objectives, where it is communicated to the students, we know it as a teacher, but there is no clear document showing the objectives for this [the taught content].*

T5 highlighted teachers' awareness of the course objectives and goals for each lecture; however, **courses lack clearly communicated written objectives that students could refer to via accessible documents**, which was emphasised by student E13 who indicated being unaware of the tasks' objectives and values. Lack of clear objectives was but one issue with the assessment design. **The other was students' inattention to the objectives explained by the teachers**, as T7 who emphasised that she explained the 'why' part of the course just like she explained the 'how' and added that explaining the objectives is every teacher's job and it is intuitive. T7 exasperatedly reflected,

> *They are not paying attention, because sometimes they keep asking their friends, I can see them when they keep asking 'what are we supposed to do now?', so they are not even sure where we are, until now, for what reason we are doing it.*

T7 reasoned that students' inattention to teachers' clarifications of objectives and tasks requirement was the problem, which could be caused by **students' misunderstanding of the teacher's language**, so they tended to overlook important information like objectives. Moreover, inattention might be a **result of the carelessness that seemed to be common with the group**, or it could simply mean that students are not auditory, and thus objectives need to be communicated using a different technique, in which they can participate (concept maps, tables drawn by students). This raises an important issue, which is **teachers' beliefs about their students' learning patterns and teachers' expectations of learners.** Teachers could assume that students listen and hang on every word the teacher say, but the reality is somewhat different as there are many distractions nowadays represented on peers' influence and social media among

others.

5.4.3.2   Relevance and task value

Moreover, promoting meaningful and focused assessment can be achieved via intermittent assessment that tackles a variety of the course knowledge and skills. T8 was unsatisfied with the foundation year assessment in general, stating that **assessment that was assigned to the students at one or two point every four months did not serve the actual purpose of assessment, which is assisting students through their language process** (mid-term and final exams in the grammar course). **It only encouraged cramming, raised students' level of stress and promoted assessment for marks**. However, T1 pointed out that **very frequent assessment could divert students' attention from mastering the language and skills towards collecting marks and completing assessment tasks only**. Moreover, T8 argued **for inclusive assessment that targets different aspects of knowledge and skills within the course** and dismisses exams and presentations as the most common and convenient modes of assessment in order to cater for the different learning patterns and learning needs of students. T7, however, complained of the amount of work a teacher could spend on a wide variety of frequent assessment within the course, as frequent assessments exhausted teachers and confused students. Therefore, **there should be a balance between the frequency and the type of assessment tasks and the value gained from them, as misbalance between them could lead to minimal effort tendency (Finding 44) as** T8 reflected,

> *[Students] should use all of the period of time giving to them like if they are required to prepare for the exam in a couple of weeks, most of them would do it in a couple of days and this is not effective at all for their learning, because it means they will forget it immediately, one hour after the exam. The same with research, the research project is given almost the whole month, the whole semester for them and again lots of them decide to do it within one week*. (A need for time-management strategies)

The tendency to exert the least effort that grants a pass led to procrastination in terms of setting goals, working on a project or preparing for exams, and therefore, underdevelopment of SRLS. T7, also commented on her students' performance when it comes to presentations stating, "when I gave them chance to present, some of them were just taking, just the main point. They never try to go deep in terms of illustrating and giving examples". A similar behaviour was detected by T7 in a peer feedback task elaborating,

I gave them chance to review other students' papers and correct them, and the same one of them, only one [student] read and wrote comments. The rest were just having an overview and they were just giving a mark and they were like teasing each other like why did you give me 18 out of 20, why not 20 out 0f 20, so I didn't really see any value of doing that among them.

This type of behaviour can be attributed to students' lack of awareness of the value of such activities [task value], their lack of awareness of how assessment elements fitted together and the rarity of such practices within the course, as it is not part of the objectives and therefore not an assessed task [marginalised]. Task value, for instance, was recommended by T6 and T8 as a good strategy to make assessment meaningful for students. Relating assessment to long-term goals i.e. achieving a good IELTS score can encourage students to be motivated and engage them in the learning process. Moreover, incorporating interesting and useful topics, that can enrich life experiences and teach students' skills they may need in the near or far future are likely to buy in students' engagement in learning.

5.4.3.3   Transparent roles and expectations

Having clear roles and mutual expectations of each other's roles, can eliminate any misunderstanding and dissatisfactions that can happen in the learning process. As students' and teachers' beliefs about their roles were discussed in section 5.4.2, field notes and reflections indicated that there was a gap between beliefs and practices, in addition to the issue of lack of awareness in some cases. While some claimed comprehensive understanding of their roles, practice indicated that teachers and students can neglect their beliefs when confronted by context. Teachers, for example, had high expectations of students' roles, however as they encountered students lack of self-regulation (effect of learning histories and task value), lack of resources (time and learning resources), tended to over-structure the learning tasks for students. Moreover, teachers expressed frustration for students' lack of investment in the tasks or adoption of their expected roles as students in HE. This highlights the need for training and professional development to assist teachers and students' in their journey towards being partners in the learning process.

5.4.3.4   Overview

Transparency of course assessment did exist, however it lacked consistency; teachers tended to over emphasise verbal explanations and assumed students' grasp of them, while students relied on teachers to provide all materials and 'keep chasing' them even when documents were available for them through accessible platforms. However, telling is not equal to explaining, demonstrating experience, which are different means of making assessment transparent and meaningful for students. A need for training students and professional development for teachers was highlighted to reshape students' and teachers' beliefs and practice in the student's learning process, as beliefs and values are key to the integration of SRLS.

5.4.4   Summary of the teachers' reflections of their assessment beliefs and practices

Overall, findings indicated a lack of focus on self-assessment and peer-evaluation as they were not core strategies or skills addressed by the course objectives and therefore, students depended on the teachers' evaluation to a large extent. Moreover, restricting some courses assessments to exams limited the value of assessment, as they did not provide equal opportunities and access to assessment for all students. Most importantly students' and teachers' roles suffer the gap that exist between beliefs and practice, which can be restricted by context.

5.5   Synthesis of findings

This chapter presented findings and subsequent analysis of students' responses to SRLS-A scale designed to explore students' perceptions at different points of time: at college entry before intervention (pre-test), directly at the end of the intervention (immediate post-test) and a semester after the intervention (delayed post-test). Students' perceptions results were compared to their writing performance in pre-test writing, different assessed writing tasks, mid-term and final exam tasks and post-test writing. Moreover, students' and teachers' reflections were analysed by using thematic analysis and organised according to Zimmerman's (Zimmerman, 2002) and Evans' (2016, 2018) frameworks key principles supported quantitative findings and analysis. Findings, interpretations, conclusions and answers to research questions are synthesised in Table 5.4.

Table 5.4 A synthesis of the research findings, interpretation and conclusions.

Section	Findings	Interpretations and conclusions
5.1 Students SRLS perceptions and writing	There was no statistically significant difference in the overall SRLS score and sub strategies perception scores for control group and experimental group (Finding1-3).	*Students in both groups had similar perceptions of their SRLS. Students' perceptions indicated overall satisfaction with their task analysis strategies, and self-control strategies, but less confidence in their self-recitation strategies when it comes to task outcomes and feedback. In comparison to Alkahrusi et al. (2012), the study sample perceptions of their SRLS was low at pre-test, college entry level, which supported H1 (Conclusion 1).*
	The Experimental group produced better writing quality in pre-test writing (Finding 4).	*The experimental group students could have been better writers or more motivated than the control group students, indicating different starting points in the writing performance for the two groups.*
5.2 impact of intervention in phase 1	T-test findings indicted that the interventions did not elicit major statistically significant difference neither in students' SRLS nor in their written academic achievements at immediate post-test level (Finding 5 & 6).	*H2 was rejected, as modelling SRLS for the experimental group had no statistically significant impact on students' writing performance scores and both groups were at similar writing performance levels at post-tests despite the intervention, and despite pre-writing test statistically significant difference writing performance between the two groups (Conclusion2). This was attributed to the short intervention time and period, lack of investment in the study, task value and demands, assessment design and the teaching approach.*
	The control group students have statistically significantly higher perceptions of their self-control strategies than their peers in the experimental group (Finding 7)	*Lack of challenge, repeated practice, over scaffolding increased students' perceptions about their self-control strategies. Task demand is a major enabler or inhibitor of acquisition and use of SRLS- highlighting a need for challenge (Finding 8).*
		How individuals selected strategies was unique as performing a task required different strategies from different students, however students' self-control strategies reflected the

There was an overlap between task analysis and self-control strategies (Finding 9).

over structured modelling and the teaching approach their teachers adopted, such as structure/template, organisation and visual representations.

SRL models serve as a guide for teaching or modelling SRLS, however, how students self-regulate is unique and personalised for individuals and can be influenced by prior knowledge and learning experience, task nature and demands and or the teaching approach. Moreover, as students become aware, familiar and experience with a particular task performance, separation of phases and strategies cease to exist. Phases of SRL are not as distinct as SRL models indicate however, they are immersed and integrated.

There was an overemphasis on visual representations, such as structure and content strategies to self-control ones performance of a task (Finding 13) and students sought help according to its accessibility to them- quality of network support is in question (Finding 10, 14). When to scaffold students and when to remove the scaffold is key to teacher training (Finding 12)

It appeared that students' selection of performance strategies was hugely determined by the teacher approach for introducing strategies, task nature and task demand and/or accessibility of strategies i.e. awareness, personality traits, availability and language access (Finding 11).

The classroom environment, learning experience, accessibility and culture can influence students' approaches towards feedback seeking. (Finding 22).

There was a statistically significant decrease in the control group perceptions' scores of self-observation (Finding 15). Students' adopted 'feeling of knowing' and 'trial and error' strategies in the absences of effective strategies to self-observe and monitor task performance and the learning process (Finding 18).

Students' low perceptions of their use of SRLS can be a result of the course and task structure, teaching approach and task demands (Dent & Koenka, 2016; Suefert, 2018), Namely- the over structured course and task, implied low task demands and cognitive load, limited the need for self-observation and resulted in copying strategies. Constant practice solidifies the prior knowledge and limit need to self-regulate (Finding 16 & 17)

While there was a statistically significant increase in the experimental group perceptions' scores of their self-reaction strategies from pre-test to post-test, students in the control group experienced a significant decrease in their perceptions of the same strategies (Finding 19). Students were generally externally regulated by their teachers as self and Peer-assessment were used sparingly and for practice purpose only as they were not highlighted by the course objectives (Finding 20).

Students' reactions to feedback are complex, mediated by the individual context needs, investment in task and outcome value (Finding 23).

For the experimental group, SRLS multi scale, teacher frequent feedback, discussion of criteria and students' understanding of them could have made the difference, while the control group did not need to as the tasks and classroom environment was highly structured.

Transition from school to higher education requires a period of adaption and training (Finding 21).

Teachers and students' roles in the assessment process were affected by students and teachers' beliefs about their roles. Students' adoption of copying strategies, handicapping strategies and reliance on teachers, for example, can be related to the teaching approach (over scaffolding) or learning histories (transition from school to higher education).

The experimental groups' students had statistically higher perceptions of their task analysis, self-motivation and overall strategies than their peers in the control group (Finding 24, 27).

Students' task analysis strategies were closely related to their self-motivational beliefs. Perceived task demands, task value, goals, self-efficacy, future self-perspective and social recognition and community approval (self-image) were the primary sources of students' motivations (Finding 28).

Student's reflections indicated a sustained and increased tendency towards minimal effort and procrastination (Finding 25 & 26).

This was attributed to perceived task demands and criteria for success, expectation of the course, self-efficacy, need for cognition, time-management and self-judgement strategies.

The control group had higher perceptions of their self-judgement strategies than the experimental group at delayed post-test (Finding 29).

Generally, students were externally regulated by the teacher feedback, however, there was an initiative towards constructive self-judgement strategies besides feeling of knowing- some students started being selective when it comes to their sources of help/feedback. Students' reaction to feedback can be associated with their beliefs about their roles in learning.

There was a statistically significant decrease in the control group's perception of their overall SRLS (Finding 30), self-motivation and self-control strategies. This significant drop in the control group students' perceptions of their self-motivation, self-control and overall SRL strategies from pre-test to delayed post-test (Finding 31 & 32).

As task demands increased students' motivations and sense of self-control seemed to decrease, having encountered more challenging tasks- copying strategies were not effective when the task nature and demands changed.

A quality support network, as part of self-control/self-monitoring strategies, requires awareness of the nature and amount of support one needs to enhance their learning, academic achievement and support their development of SRLS.

5.3 transferability of SRLS

The control group perceptions of their self-observations increased significantly from post-test to delayed post-test (Finding 33).

The decrease in their perceptions of their self-motivation and self-control was affected by increased task demands and need for self-regulation, therefore, students started noting their strategies to meet the challenge.

In the experimental group, students' perceptions remained stable from immediate post-test to delayed post-test. There was no significant change in these students' perceptions during the academic year (Finding 34).

Stability of perceptions over nine months can be interpreted as an effect of the intervention as experimental group progressed steadily.

With increased demands of a familiar task, i.e. mid-term and final writing tests, the experimental group had statistically better scores than control group students. The writing tests required similar cognitive and metacognitive strategies to that students used in writing an essay, which they were accustomed to. This can be attributed to the experimental group better performance in writing at the beginning of the study, or an effect of the intervention. However, increased task demands and decrease in motivation and self-control affected the control group students' performance in writing, as copying strategies was not effective.

The experimental group's students scored significantly higher their peers in the control group in their mid-term and final writing test (Finding 35).

In response to QR3, transferability of SRLS was observed in the experimental group relatively stable perceptions of their SRLS, even when task demands increased. Moreover, there was a delayed effect of the integration in students' writing performance in writing tests. However, a full transfer of strategies entails adaptability and use of SRLS even with new and more challenging tasks such as writing a simple research paper, which did not happen for the reasons discussed above (Conclusion 3).

Assessment practice (Equity, Agency and Transparency)

Teachers recommended continuous intermitted assessment, frequent feedback and access to assessment procedures and criteria to ensure equity (Finding 36).	*This stresses the role of assessment design and objectives and the teaching approach. Regular assessment can maintain students' motivation, develop their self-efficacy and self-judgement and allows opportunities for timely and formative feedback. However, constant change of assessment can increase cognitive load, limiting students' development of SRLS.*
Teachers made assessment criteria accessible to students via explanation, frequent practice and mock exams, modelling and providing constant access to assessment requirements via different platforms (Finding 37).	*Students' access to standards of success depended on the teacher delivery method, and students' beliefs about their role and responsibility in making use of available resources.*
The medium of feedback delivery, awareness of criteria for good work, strategies for providing feedback, the amount of feedback and students' use of feedback are key factors for effective and sustainable feedback (Finding 38).	*The amount and type of feedback can improve students' performance or demotivate them. Making use of feedback is the students' responsibility.*
There is a lack of learning resources and support beyond the classroom (Finding 39)	*There is a shortage of study spaces, infrastructure does not support technology use regularly and academic support is limited.*
Teachers utilised self-assessment and feedback sparingly, provided frequent feedback and practiced a teacher-centred approach to teaching, inhibiting the development of students' agency and their SRL (Finding 40)	*This attributed to the assessment design-course objectives and the teacher beliefs and approaches. The teacher role affect students' views about their roles in the learning process. The context and learning histories matter too.*

Students' views about their roles influenced their goal-orientation and their effort at the college (Finding 41).	*Students' views of their roles contradicted teachers' expectations but aligned with teachers' practices. Students' awareness of effective strategies, students' beliefs and expectations about theirs and their teachers' roles in the assessment and feedback process, the teacher approach towards engaging students, course objectives, task value, peer influence, personality affected students' use and selection of self-reflection strategies.*
The nature of the subject and task demands affect the development of SRLS (Finding 42)	
There was a dissatisfaction from some teachers and students about assessment objectives lack of transparency (finding 43).	*Access to objectives was affected by how easy access to them was (in terms of language and form), students' attention (could be related to task value, communication, learning patterns).*
Transparency requires finding a balance between the frequency and type of assessment, and task value and relevance to students (Finding 44).	*A misbalance between the two could lead to minimal effort and/or procrastination tendency. Students need to value the task and understand how assessment elements fit together to invest effort and time.*
A mismatch appeared in teachers and students' view of their roles and their practice (Finding 45)	It can be attributed to context and learning and teaching histories, emphasising the need for training and professional development.

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5.5.1   Overview

In summary, several factors were highlighted in relation to the attainment and development of SRLS such as students and teachers' beliefs and values about learning and assessment, their roles in the learning process, their self-efficacy of students' ability, the teaching approach, students' learning histories, personality traits, assessment design and HE preparedness to assist students' transition of school to HE as presented in Figure 5.8. Each of these factors has the capacity to function as an enabler or inhibitor of the development of SRLS, an essential requirement for sustainable assessment. The discussion chapter discusses each factor, whether it is personal, institutional or a contextual factor, and its capacity to develop students' SRLS to answer the main research question: How can a research-informed approach to the integration of self-regulated learning strategies support sustainable assessment practices at a college of education, Oman?
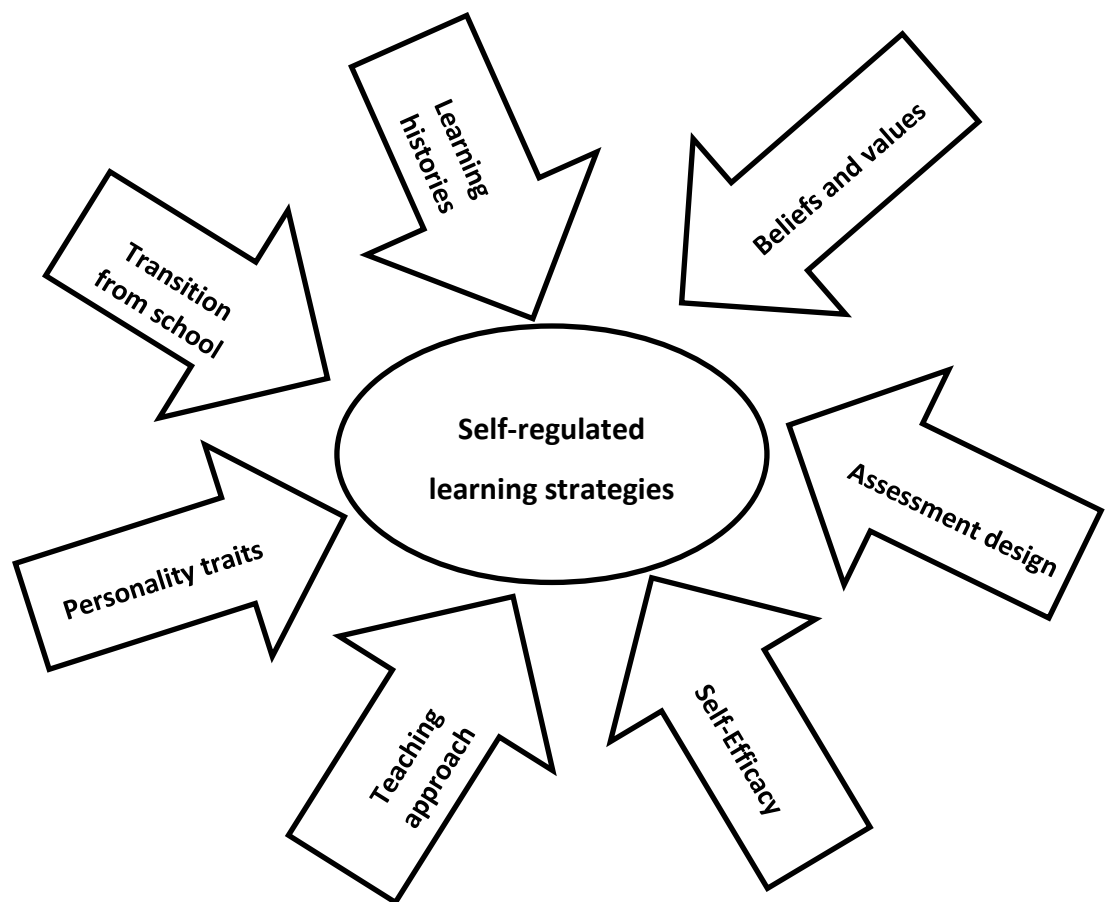
Figure 5.8 Factors affecting the development of SRLS based on analysis of findings.

Chapter 6   Discussion

Self-regulation has gained a growing interest in the literature since the 1960s (Zimmerman & Schunk, 2011) and diverse discussions about SRL became common and SRL as a term became a common language (i.e. in the European, American and Australian literature, not in the context of Oman). However, people's understanding of it is variable. The term is usually used loosely to mean different constructs or processes, and, in many published research, it is used as a throw-away comment filling up two lines in a paper sating that a particular method or methodology assist student development as self-regulated learners (Evans, forthcoming). Are researchers looking at it as a process, or as a construct? How are they defining it? What does the construct involve, phases and/ or processes, and how does SRLS develop is rarely discussed? Why is it so well written about but not enacted?

There are different variables related to the discussion of SRLS and different factors affect its development; the assessment practice can promote or limit SRLS development. A recent report funded by the UK's Office for Students by (Evans et al., 2018), for instance, indicated that interventions in assessment were successful when they targeted a particular skill or specific content in relation to students' major of study and their needs. Literature in SRLS research and assessment revealed two different trends: one that never discusses the assessment design through which SRLS development is affected, and the other trend that emphasizes the importance of integration and discussion of the assessment design (Evans' EAT, updated forthcoming). Exploring SRLS development within the context of assessment is key for a comprehensive understanding of SRLS as a construct to regulate students learning and to understand the process and strategies students' use to monitor learning, including assessment. SRLS research can feed into the assessment practices as a threshold concept that provides explanation for pressing questions such as 'what makes a particular subject difficult?' highlighting, 'why are students struggling with a particular aspect of a subject or a type of assessment?' Self-regulation may appear a straightforward area, but it is bisected with many problems.

In line with the discussion of the SRL and the assessment literature, the aim was to investigate the development of SRLS through a social cognitive theory (Bandura, 1971, 1986) using SRLS model developed by Zimmerman (Zimmerman, 2002) situating the individual learning differences within context. The impact of modelling SRLS in writing tasks using a quasi-experimental design and the transferability of strategies learnt beyond the intervention course was investigated. Several

factors impacted the development of SRLS: personal, institutional and cultural factors. Personality, beliefs and values, learning histories and prior knowledge, self-efficacy, assessment design, the teaching approach and transition from school to higher education were found influential in relation to the development and sustainability of SRLS use.

Fundamental factors that impacted SRLS development through modelling are highlighted in Figure 6.1 to answer the research main question: How can a research-informed approach to the integration of self-regulated learning strategies support sustainable assessment practices? These factors indicate the features of sustainable assessment practices that are considered fundamental to provide teachers with quality training in SRLS, based on the empirical findings of this study.

Figure 6.1 provides a framework for teacher training in sustainable assessment practices and SRLS awareness to assist students' development as self-regulated learners, ensuring that assessment practices equip and sustain students with the core strategies to continue learning in the absence of a formal guidance or supervision. This framework illustrates the need to focus on the different factors affecting students' development as self-regulated learners and emphasising the reciprocal relationship between sustainable assessment practices and self-regulated learning strategies from a teacher's perspective. The upper left part highlighted in blue in the framework lists the students' background personal, institutional and socio-contextual factors affecting the development of SRLS, and the upper right part in pink represents the conditions for a successful integration of SRLS. Designed in the shape of a triangle, the framework places instructional elements for a successful implementation of SRLS into the assessment practice and learning environment at the other end of the triangle, which influence and is influenced by the students' factors and the conditions for a successful integration of SRLS. In order for teachers to implement SRLS for the purpose of promoting SAPs, they need to be aware of the importance of repeated practice and the notion of cognitive load, the addition or removal of scaffolds based on students' needs, training and the need for adequate time to practise strategies to assist students' transition from school education to higher education taking into account that teachers need to question their own beliefs and values about learning and assessment and explore those of their students. Teachers also need to support theirs and their students' literacy of assessment and roles, and as part of that is understanding individual learning differences (ILD).

Students' factors impacting the development of SRLS

Personal factors

Prior knowledge & learning histories
Learning patterns & personality
Self-efficacy & motivation, and
Beliefs & values

Institutional factors

Teaching approach i.e. Support & scaffold
Infrastructure & learning resources, training, and
Curriculum design & assessment requirement i.e. Task nature & demands

Socio-contextual factors

Cultural values
Social recognition
Job market, and
Peer influence

Conditions for successful integration of SRLS

Teachers need to be aware that

Task demands & cognitive load,
Beliefs & values,
Assessment literacy, and
Individual learning differences

influence learning and assessment

Teacher assessment practice

Teacher impact on assessment practices through

Supporting students' transition points,
Addition and/or removal of scaffolds,
Application of training in SRLS, and
Emphasis on repeated practice

Figure 6.1 Teacher sustainable assessment practices (T.SAPs).

6.1   Teacher assessment practices affecting the development of SRLS

The previous section provided a brief description of the features of sustainable assessment practices that teachers need to implement in their classrooms in order to scaffold students development of SRLS, emphasising the significance of students' transition from school and the importance of scaffolding students through it, repeated practice effect on cognitive load and use and development of SRLS, beliefs and values as key enablers or inhibitors of SRLS development and the issue of SRLS use and transfer to new learning situations. This section discusses these key features and the teacher's role in the assessment practice, as proposed in the framework in Figure 6.1, in relation to the findings and literature, drawing on key concepts for the development of students as self-regulated learners.

6.1.1   Scaffolding transition from school to college

Teachers need to be aware that students' transition from secondary school to HE is a critical stage that can enhance or limit students' intake from HE and provide support where needed. HE, within which teachers are occupying a central role, can scaffold students through this transition by 1) providing remedial courses to equip students with the necessary skills to succeed in HE, 2) providing access to useful and reliable learning resources, and 3) assisting their reconstruction of understanding of learning and rethinking about their roles as students.

A successful and smooth transition to HE requires learners' awareness of their roles in the learning process, time as an essential factor in learning, quality support and training. Remedial courses are provided in HE as a form of support for disadvantaged students who lack language or self-regulatory strategies to manage the learning environment, especially if they were not lucky to attend post-secondary preparatory college courses. Academic preparedness refers to possessing adequate educational competences, skills and strategies that are necessary for college success (Gillum, 2006). Academic preparation courses are usually taken before higher education to equip learners with the necessary skills that will assist their smooth transfer to HE and facilitate their navigation of its resources to maximise their learning.

However, as the structure of HE changed to accommodate underprivileged students who might not have the financial resources to enrol into academic preparatory courses, most HE institutions offer remedial college courses to be able to cope with HE expectations; school education and

post-secondary education are not aligned and may mislead students giving two different signals about requirements and expectations (see Gillum, 2006). Students may be able to succeed in school, passing examination and fulfilling requirements, however, as soon as they enter college, they may require remedial courses because skills and strategies utilised to manage school are inconsistent with those necessary to navigate higher education, including passing placement tests and understanding criteria for success. Students, for example, can be misplaced into a different level than where they should be, happened few times in this study particular context do to subjective interpretations of the placement test criteria, student health or quality of the assessment environment, giving a false indication of the student language ability and causing difficulty for students and teachers to cope in such cases. Moreover, students may achieve high grades as externally-regulated students in school, however as soon as the requirements change requiring students to take charge of their learning, s/he may fall behind for lacking the necessary skills and strategies to succeed.

The teacher can scaffold students' transition by providing quality support in their teaching environment, which includes providing access to available resources, raising students of the value of resources and guiding students through the use of resources. Dargusch et al. (2017) argued that providing good assessment support does not mean students can access information only, but also guiding students through their use. Indeed, resources for support need to be highlighted and signposted so that students can access them whenever needed, assuming that the HE environment is well-resourced and supported to assist student's transition to become active learners. Lacking basic infrastructure resources i.e. learning spaces, reliable computer, devices and labs, internet and library access, can limit HE role in developing self-regulated learners. In addition, students may not be aware of the value of resources and support available; therefore, raising students' awareness of their value and how to use them can assist students' literacy and utility of quality support resources (Evans, 2016; Nicol & Macfarlance, 2006). **Moreover, the quality and quantity of the teacher support should target students' needs emphasising timely feedback and support as key to successful development of SRLS to enhance learning (Finding 38). Alternatively, over-scaffolding learners can handicap learners and negatively impact their self-efficacy and their willingness to exert effort (Finding 8 & 9.).**

 In this respect, it is important to differentiate the notion of scaffolding from that of over-scaffolding. Scaffolding is guided by a teacher to stretch students' ability, cognition and skills through careful addition and removal of scaffolding (Waring & Evans, 2015), i.e. at transition points, and it is constructive and helps students gain confidence and identify their limitations and

strengths. However, over-scaffolding is a practice driven from the behaviourism theory and it deal with learners in a form of a trigger and a response, where students are exposed to the same practice several times, even when they no longer needed to keep to consistency and to achieve the same result, such as completing a task as a result of following certain detailed, structured and guided steps as was the case in the control group.

Teachers should also allow adequate time for students to process information and to use strategies to enhance their learning. Learning takes time, effort and energy from the learner as learning in its basic form requires both memory and comprehension. Memory, cognition and meta-cognition are complex. Leamnson (2002, cited in Gillum, 2006), for example, explained that memories do not exist inside boxes in our mind waiting for retrieval, however, they are reconstructed every time we try to remember. This requires using almost the same webs and cells used in the original event; without rehearsal, memories gradually disappear and disintegrate to a point they are no longer reconstruct-able. If this is the case with human memories, comprehension may need more time and complex cognitive processing. Thus, time and effort are essential factors for scaffolding learning and for the development of SRLS (Findings 16, 17, 21 & 34), and they highlight repeated practice as a key factor for a successful integration of SRLS.

The teacher can also support students' understanding and reconstruction of their roles in the learning process as they transfer to HE, which has higher expectations of students. One of the important competences and understandings that students need to acquire before enrolling into their academic majors is an understanding of what constitutes deep and meaningful learning. Struggling students within HE can improve their performance, but they need conceptual change in their beliefs about their roles in learning, i.e. fundamentally learning is not something that happens to them, they have a key role in constructing and enhancing learning (Boud, 2000; Evans & Waring, 2019). Students are agents in the learning process, not passive observers (Evans, 2016; Reeves, 2013). This has frequently been referred to in the findings, as students may experience confusion and doubt about their roles, because of HE expectations of students as active and agentic learners (Reeves, 2013) while students previous experience as secondary school students indicated limited agency for the student. This shift in the requirements of the student role requires a period of adaptation in which students navigate their new learning environment nature and requirements and accordingly identify and reconstruct their roles, guided by the teacher co-constructive approaches to learning and promoted through a supportive-resourceful environment.

As part of scaffolding students' understanding of what constitute learning in HE is building students' knowledge of research and assisting their growth as members of a learning community, which aligns with students' identification of their roles. Establishing a culture of research and learning, is critical to succeed in HE, and a valuable form of scaffold for students, to raise their expectations and awareness of requirements, and to help their development of their discipline social identity. Viewing colleagues as learning communities in which learners are members and they have privileges and responsibilities of membership; they have access to resources and learning facilities, and they also have a responsibility to contribute to the learning community. This can promote students' active engagement and gradually help them to reconstruct their beliefs about their roles and about learning. The so-called 'help' students in the sample of this study predominantly utilised support from their friends to do their work for them. Such dependence does not correspond to that of a learning community or the privilege provided through it as co-constructors of learning. Little value is added for the 'helped' student, which equalled over-scaffold, rather than scaffold, in the sample of this study. However, constructive peer support, which is a form of community learning and an intellectual activity were both the assisted and the assessor benefit, can support the self-regulation of the one providing assistance, and that receiving it. Therefore, nurturing in students the ethic for commitment and for taking responsibility for one's own learning and aiming to enrich the community climate is a necessity in HE (Evans et al., 2018; James, 2014). This emphasises the need to promote students' engagement and partnership as contributors to knowledge instead of mere vessels to be filled (Finding 21). This highlights the teacher's central role in redesigning the learning activities and assessment tasks to promote students' engagement and active participation with assessment.

Overall, the teacher role in supporting students' transition to the new and more demanding learning environment of HE is central and includes offering remedial courses, providing access to resources and guidance for using them, assisting students' reconstruction of their understanding of learning and their roles within it. There is a need to raise the teacher awareness of his/her role through training and professional development that targets their beliefs and practices. Attending to the emotional dimension of learning associated with the challenges students face in transitioning into HE also needs to be taken into consideration in the development of self-regulatory practices.

6.1.2   Training

In line with the discussion of scaffolding students' transition from secondary school to HE, teachers need training on how to support their students. 1) Teachers need to provide enough training opportunities to raise their awareness of SRLS in order to scaffold students' development as self-regulated learners. 2) Training should offer a wide verity of techniques that the teachers can use to promote SRLS use in the classroom. 3) Training should be adequate to influence beliefs and values.

Firstly, it is important to raise teachers' awareness of SRLS through theory and models of SRL, taking into account their limitations in explaining the nature and processes of SRLS. Teachers need a solid background knowledge about SRLS, including the theories informing self-regulation whether the SCT or theories driven from the cognitive psychology as discussed in Table 3.1 (Zimmerman, 2001) to scaffold teachers understanding of its origins and how does each field contribute to knowledge; while cognitive psychology attempts to explain the cognitive processes and how information is processed in the human brain, the SCT assist teachers understanding as it explains the effect of the environment in student learning through the interaction between the individual and the environment. Models of SRLS such as that of Zimmerman (2002) or Winne (1995) are useful to offer a close representation of the strategies students need and the possible factors that teachers and students should be aware of to understand their own learning process and their profile of regulation which can also be task/context specific.

However, teachers should be careful when they adopt a model, considering that these models are usually for universal use and that they need to be adapted for contextual use. Moreover, awareness of models' limitations in their presentation of cognitive, metacognitive and affective strategies exist. This thesis contributes to understanding of SRL processes. **The phases of SRL are not as distinctive as illustrated in many of the models of SRL. Instead, due to the dynamic and cyclic nature of the self-regulated learning process, the phases are interrelated and merged.** Findings indicated that student's selection and use of SRLS is unique and does not follow any particular format or any standard order as represented by SRL models in line with Seufert (2018) work. Students personalise their SRL process influenced by prior knowledge, learning experiences, task nature and demands and/or the teaching approach (Finding 9). Students may plan, perform and evaluate or they may assimilate these phases into one depending on the time allocated, prior knowledge, task nature, familiarity with strategies and tasks and their self-efficacy. The phases and strategies overlap and affect the use of each other, i.e. Wirth et al. (2009, cited in Suefert, 2018) found that the planning processes influence the use of strategies afterwards and vice versa.

Many empirical studies do not differentiate between the different phases of self-regulation but address self-regulation as an overall process or as a construct. This is especially the case for studies on fostering approaches of SRL (Seufert, 2018) as different learning situations typically produce different self-regulation demands for the learner supporting an assumption recently made in the literature (i.e. Winne 2010; Wirth and Leutner 2008, cited in Seufert, 2018), namely that ideal SRL varies with situational demands. Therefore, teachers should use the models as guidelines for self-regulation and to raise both teachers and students' awareness of SRLS, however it should be highlighted that **SRL is a personalised process for each student and that students should not be restricted by the models' structures, emphasising that as students gain experience and expertise as self-regulated learners, the separation between phases as represented in the models cease to exist (Finding 9).**

This argument necessitates the need for a broad understanding of knowledge of SRLS, one that is not limited to declarative knowledge (i.e. recognizing strategies); procedural knowledge (i.e. high-quality application of strategies) and conditional knowledge (i.e. knowledge regarding the suitability of strategies for different situations, demands, and tasks) have to be emphasized (Dresel et al., 2015). This highlights another dimension of the knowledge of SRLS required for teacher training, which involves awareness of strategies, how can students use them and how can teachers introduce them, and when and how to transfer them to different learning situations, including the need for authentic or semi-authentic environments that represent students' future job needs (simulate authentic future context i.e. teachers-to-be).

Secondly, training teachers in instructional designs that can enable and support students SRLS development is fundamental for smooth transition into HE. Stes et al. (2010, cited in Schneider & Preckel, 2017) found that teachers benefitted from training programmes in higher education to guide their classroom behaviour, skills and attitudes. Literature indicated that within the 36 empirical studies investigating the effects of training methods, microteaching and similar approaches had strong positive effects within and outside higher education.

Teachers can promote students' development of SRLS through the remedial courses, adopting a deep approach to learning in their classrooms and especially through the course assessment design. For example, remedial support can be offered integrated within a programme or separately as an extracurricular training programme. These programmes assist students' development of essential skills such as learning strategies, critical thinking or self-motivation as these have been reported as key to academic success. Schneider and Preckel (2017) found that training in study skills had a medium to strong effect on achievement in the literature (r=.28) as

they targeted skills and knowledge necessary to navigate HE resources and succeed in college. Self-management training programmes, which aim to manage affect, came next including anxiety reduction, desensitization and stress management/prevention. In support of Schneider and Preckel's findings, this study findings highlighted that students lack study skills and self-regulated strategies and strongly recommends that development of self-regulation strategies and skills are integrated into the foundation programmes to prepare students for success in their academic majors.

Moreover, teachers can scaffold their students' development of SRLS within their own classrooms by promoting students' adoption of deep approaches to learning. Enhanced understanding is particularly influential for learning transfer (Hoogerheide et al., 2014). Findings indicated that students' adoption of copying strategies and their tendency towards aiming for the minimum was related to the teachers approach in teaching, which encouraged copying strategies and limited students need for deep learning or to self-regulate (Finding 11, 12, 13 & 22). Students' limited use of strategies and subsequent limited transfer of strategies is related to lack of understanding. Students were unaware of how to adapt strategies to the new learning situation or assessment task to achieve tasks efficiently; copying the teacher strategies was sufficient to get a 'pass'. Enhanced understanding and use of self-regulation can assist students' transfer of knowledge and skills from one course or subject to the other, i.e. high attainers used more metacognitive strategies (understand and monitor their own thinking) and transferred these strategies from their English to foreign language classes (Chamot, 2004). However, if learners are not equipped with understanding and efficient use of SRLS, their learning and their transfer of learning and skills to different learning situations including different tasks, subjects or academic semester will be restricted.

For example, findings indicated that students' transfer of SRLS were limited to familiar tasks and requirements. As challenge increased and task demands increased, students demonstrated limited ability to use learnt strategies in new and unfamiliar tasks, indicating surface learning of previous strategies and copying teachers' strategies and approach to task completion (Conclusion 3). However, transferability of knowledge and strategies occurs when the existing knowledge and strategies assisted learners in performing new tasks and affected their subsequent actions in the learning process. The learning environment is considered an important factor for learning transfer, as over-structured environments restrict use of SRLS, which is a precondition to transfer.

Furthermore, the teacher should understand the role of the assessment design in SRLS development and design learning and assessment tasks accordingly. Panadero and Alonso-Tapia

(2013) stressed that the context of the learning environment and context of the task affect how leaners self-regulate to enhance learning. Therefore, assessment should target important strategies and skills and allow time for students' understanding and mastery of their strategies. For instance, it is difficult to transfer strategies from one task to the other when the task criteria and requirements constantly change. Scaffolding students in their development of SRLS increase awareness and metacognitive strategies and reflections of strategies and performance, which requires complex cognitive and metacognitive processes i.e. critical thinking and deep learning. This requires training individuals to use strategies and processes in different contexts, which highlights repeated practice role in students' mastery and transfer of SRLS as an important feature of sustainable assessment design.

Thirdly, one important feature for effective training is allowing adequate time to reflect on beliefs and practices in order to influence teachers' behaviour and their approach to teaching. The training provided to teachers in this study was insufficient due to the constraints of the classroom natural environment, the teacher was mainly directed by the researcher and for less than 40 minutes at different points during the semester. Intensive training for the teacher is required and it should direct teachers' beliefs and values as key enablers or limiters of change. Moreover, teachers' need to be confident implementing change, which implies the need for dialogue rather than guidance only from the researcher. A dialogue can establish co-ownership of the intended change process, redesigning their classroom learning activities to achieve their target, implementing change. This highlights the "incubation period" to observe impact as essential in intervention studies (Evans et al., 2018). The incubation period, modelling for students and training for teachers, was insufficient to observe a significant impact of the study. Research showed that training could take up to 18 months to produce a desirable impact on teachers' perceptions and/or approaches towards learning (Desimone, 2009) and the same could apply to students, therefore a four-months intervention would have a limited observed impact in a nine months period, as there is a need to capture impact beyond this period investigating for possible delayed desired or unintended effects.

Overall, the teacher role in students' development as self-regulated learners is acknowledged and therefore, they should be well informed and equipped to embrace their roles. Teachers' training in relation to SRLS and design of sustainable assessment practices should direct teachers' understanding of these two important areas of students' learning and equip teachers with effective techniques and practices to implement change within a reasonable period of time; i.e. to question own beliefs and practices and for repeated practice occurrence.

6.1.3   Repeated practice

Teachers also need to know the significance of repeated practice as a central factor in the development of SRLS. It is important to indicate that repeated practice support students' new learnings and assist them in forming new understanding based on previous experiences. It improves retention especially if it is distributed practice, the learner associate the material with many different contexts (Waring & Evans, 2015), i.e. adapt SRLS use to complete different assessment tasks. However, the over-structured and over-scaffolding approach to teaching limit students' role and the need to self-regulate to that of copying a teacher's strategies and mirroring his/her approach to teaching (closely related to the behaviourism theory, aiming to produce behavioural change i.e. completion of tasks).

As assessment for learning emphasises the need for opportunities for students to practice and apply the skills they learn while providing feedback for support (Panadero et al., 2016), students need to invest cognitive and metacognitive resources and experiment with these while performing a task, to form a better understanding of the strategies, and of their learning process, and select those that are most beneficial for their learning and task completion. The use of cognitive and metacognitive affordances can cause excessive cognitive load especially if the task is new and unfamiliar to the students as they will have to experiment with different strategies, assess, select and revise their selection of strategies (cognitive load is discussed in the next chapter). As indicated by this thesis findings, the experimental group experienced a cognitive load produced by the frequent change of assessment tasks and activities and the additional element of the modelling intervention, while the control group experienced routine within their comfort zone and reduction in the need to self-regulate (Phase 1 of the study), which helped freeing up the memory capacity and decreased their cognitive load.

Repeated practice and teacher scaffold can both create 'psychological safety' (James, 2004) for the students to learn, however, findings indicated that over-scaffolding promoted a psychological safety to sustain use of familiar strategies for different types and demands of assessment tasks rather than in transferring/adapting strategies to new learning situations. Venturing into using new strategies would have increased the cognitive load of the students trying to incorporate new and existing knowledge (prior knowledge) and strategies to maximise their full potential of learning, however the majority of the students aimed for the minimal requirement to achieve 'a pass' influenced by peers attitude and the foundation programme system of progression to advance level. It is known that if there are significant gaps in knowledge that it is more difficult for students to be able to attend to higher order self-regulatory skills. It is essential, therefore, that

basic knowledge gaps, i.e. knowledge of writing topics, are identified and attended to at the outset to enable the subsequent development of higher level skill sets (Van Zundert, Sluijsmans, Könings, & van Merriënboer, 2012), i.e. SRLS.

Deciding on the amount of repeated practice needed for students to develop their SRLS is influenced by their prior knowledge whether declarative, procedural or conditional (Dresel et al., 2015). The role of prior knowledge in learning new knowledge and forming new experiences was discussed by Vygotsky and Barlett. The Vygotiskian Developmental Level of Ontology illustrates this process stating that learning occur during formative interactions in the teaching and learning environments where new information is provided and stored in the short-term memory, exploiting "moments of contingency" (Black & William, 2009) to exchange ideas and help learners cross the zone of proximal development. Vygotsky highlighted the role of prior knowledge as foundation to the acquisition of new knowledge and perspectives emphasising that new experiences are built on past ones, and particularly stressing the role of SRL in such process (Clark, 2012). Moreover, Clark summarised Barlett's sociocultural view of learning, schematic knowledge, stating that learning happens when individuals interact with each other constructing new meanings while consciously intending to regulate their learning progression. This is where self-regulation is needed not only while constructing new meaning, but also while utilising previous skills and strategies and adapting them to optimise the construction of new understandings. Accordingly, repeated practice is needed then to scaffold students' use of SRLS while constructing new knowledge is built on previous and prior knowledge.

6.1.4 Overview

Training teachers' for effective integration of SRLS within their assessment practices highlights the need to raise their awareness and enhance their understanding of the issue of students' transition to HE and how to support students through it, addition and removal of scaffolding for students, repeated practice, training and the time needed to raising teachers' awareness of SRLS and to integrate SRLS within their assessment practices. Key to the teachers' practices in support of students' development as self-regulated learners is their understanding of SRLS theories, models and processes as well as effective techniques and methods for promoting SRLS use in the learning environment.

6.2   Conditions for a successful SRLS integration into assessment

The teacher role in assessment practices is impacted by the complexity of the learners' brain and how individuals process information and especially in relation to how information is processed and stored (represented in the cognitive load theory), teachers' beliefs and values about learning and their roles and that of their students, and teachers' awareness of the individual learning differences (ILDs) that may impact any attempt at integration of SRLS.

6.2.1   Task demands and cognitive load

The complexity of the human brain, represented in the relationship between task nature and demands, repeated practice and cognitive load is key to teachers' implementation of SRLS for sustainable assessment practices.

In relation to the nature of task and the skills and cognitive load needed, van Zundert et al. (2012) explained peer feedback and domain-specific knowledge in relation to the learning hierarchies which provides an interesting and equally valid implications for the SRLS teaching/training practice. Van Zundert et al. (2012) investigated the relationship between domain-specific skills and peer assessment as a function of task complexity. They explained the two skills through the learning hierarchy of intellectual skills. Van Zundert et al. (2012) positioned peer feedback at a higher learning location within the learning hierarchy. They explained that in order for students to be able to provide feedback, students should have domain-specific knowledge about the task and should be able to recognise the cues available for them to use and be engaged in a social support and higher thinking activity i.e. peer assessment. Van Zundert and his colleagues found that peer assessment/feedback is more complex than domain specific knowledge. By analogy, students involved in a writing task, which is complex by nature, and encouraged to use SRLS to regulate their learning process should have adequate or even a basic knowledge of the nature of the writing process from jotting down ideas, to generating, synthesising and communicating meanings and ideas. Students' awareness of SRLS, their use and selection of effective strategies would constitute, further complexity to the writing process and it can be positioned higher in the learning hierarchy, to the general knowledge of the writing process as the earlier regulate learning using a set of cognitive, metacognitive, affective and behavioural factors while utilising the environmental cues for a maximised performance. Adding to this complexity is writing in a foreign language, which was found to complicate the regulation process even further as it involves a process of translating thoughts and task cues into students' native language, especially practiced by novice learners (AL-Saadi, 2018).

Moreover, The Cognitive Load theory (CLT) provides a deep understanding of the relationship between task, its perceived and actual load and success in achieving a task. Students' use of their SRLS is closely related to perceived task demands and associated cognitive load. While SRL focuses on learners' decisions and strategies to maximise the affordances of a learning situation, CLT concentrates on the analysis of the learning situation affordances. CLT attempts to explain and illustrate the cognitive processes that occur in the working memory to construct mental schema in the long-term memory. The cognitive load constitutes the amount of resources available and utilised to accomplish a task and it can be categorised into intrinsic, extraneous and germane load (see Paas, van Gog & Sweller, 2010; Seufert, 2018; van Zundert et al., 2012).

Intrinsic load refers to the inherent complexity of the task and is influenced by the learner's prior knowledge as increased prior knowledge means having more resources as knowledge schemata, through which learners organise and integrate new information with the existing knowledge. This process reduces the task difficulty and the amount of perceived intrinsic load by utilising the available building chunks of information as a foundation for constructing new meanings. Moreover, extraneous load is caused by irrelevant activities or additional tasks related to design issues i.e. searching and navigating. However, germane load indicates a learner's effort to create a mental schema of the interacting elements of a specific task. Intrinsic and germane loads are considered directly related to processing the task, and therefore are regarded as productive, unlike extraneous load (Pass, Van Gog & Sweller, 2010; Seufert, 2018; van Zundert et al, 2012).

The Cognitive demands of a task refer to the inherent complexity of the task and the instructional design in relation to learner's prior knowledge as a learner's approach of a task depend on their perception and experience of achieving similar previous tasks. The nature of the task can indicate the task difficulty and accordingly the cognitive load needed (Hoogerheide et al., 2014). For instance, multiple-choice items test were often considered easier to process as they require surface-level processes (Ross et al., 2006), however, multiple-choice items can require deep-level processing if they require synthesis, application and/or evaluation strategies (Ross et al., 2006). A learner's thinking and cognitive processing, influenced by the nature of the task, determines the students' approaches to learning i.e. deep or surface-level learning and accordingly the SRLS needed to accomplish a task (Gillum, 2006). Adding to the complexity of the task demands and its effect on cognitive load, Seufert (2018) argued that self-regulation require learners to invest cognitive and metacognitive resources, in addition to the intrinsic load of the task; **the nature and affordances of SRL will cause cognitive load**. Lodewyk et al. (2009, cited in Dent & Koenka, 2016) supported this claim reporting learners' limited use of SRL when tasks are

highly structured. However, learners utilised more cognitive and metacognitive strategies in social studies courses, which are less structured (Dent & Koenka, 2016). Aligning with this argument, writing tasks require SRL, however, the nature of instruction, structure, detailed requirements and teachers' over-structured approach towards teaching, facilitated task completion via repetition and copying strategies as highlighted by phase 1 findings, limiting students need to self-regulate.

The relation between tasks nature and demands, cognitive load and SRLS was highlighted in this research study. When students were required to write descriptive and narrative paragraphs/essays, students achieved tasks using minimal effort and there was less need for complex cognitive and metacognitive processing as indicated by phase 1 findings, however, when task demands increased in phase 2 requiring student to write a research paper applying complex cognitive and metacognitive strategies, students experienced excessive cognitive load and uncertainty on how to manage and complete the task. The task demanded that students search for different sources of information, select, paraphrase, synthesis information to form an argument while acknowledging the sources, which increased their cognitive load and need to self-regulate in addition to the cognitive load induced by the need to self-regulate (Task and SRLS complexity). In addition, AL-Saadi (2018) in her investigations of the difference between writing in L1 (Arabic) and L2 (English) in the same context, found that students' cognition is further loaded by a process of translating thoughts and writing mechanisms from Arabic to English adding to the complexity in relation to self-regulation. Therefore, students focused on translation-related issues, rather than plan or self-evaluate their writing-two key strategies in SRL. The task nature and its demands affect students' cognitive load and subsequently students' selection and use of SRLS (as indicated in Figure 6.2).
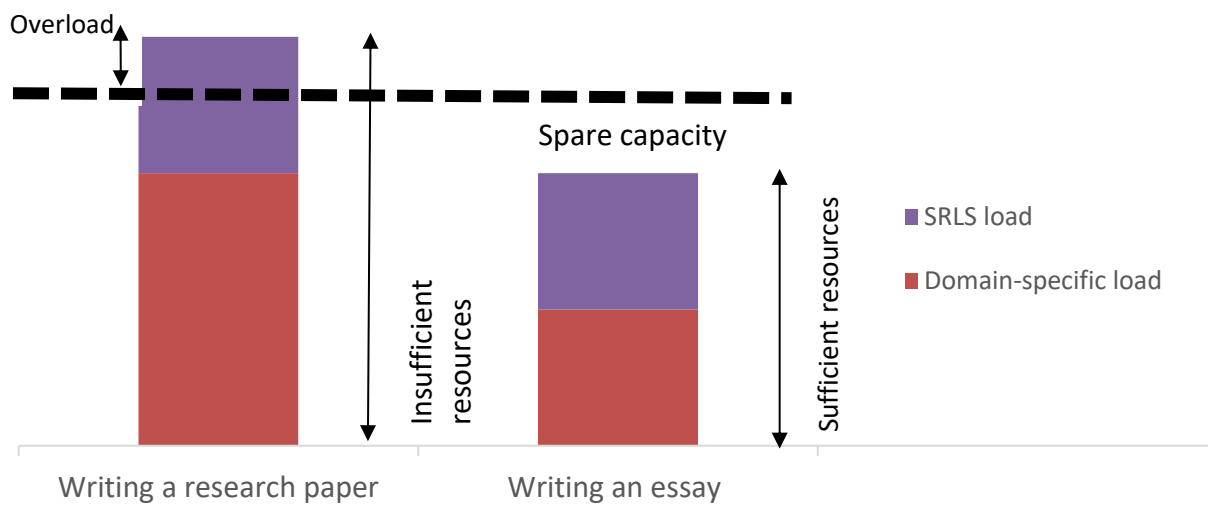
Figure 6.2 Hypothesised effect of task complexity on cognitive load for the combination of domain specific skills and SRLS based on van Zundert et al. (2012) hypothesis.

Furthermore, **the use of cognitive and metacognitive strategies varied according to learners' overall educational level depending on the nature of assessment tasks at the level**. For instance, learners in primary school are extensively externally regulated by teachers and parents. Primary students had limited understanding of the academic tasks and criteria of success (Dent & Koenka, 2016) and rarely monitor or reflect on their performance. It is not that students cannot regulate at this stage of learning; however, the nature of most assessment does not require much regulation as tasks are highly structured, reflect on what students know and consider efforts, attitude, participation and improvement in assigning grades. However, literature indicates a growing research of SRLS use by children, including positive accounts of SRLS effect on students learning (i.e. Harris, Graham, MacArthur, Reid & Mason, 2011; Schunk, 2001; Stoeger & Ziegler, 2011). Students' self-regulation strategies starts at an early age and are expected to develop as students grow and task demands increase.

As learners transfer to higher educational level such as middle, and, later, secondary school, the need for them to self-regulate increases; assessment tasks include standardised test, homework assignments and classroom exams, which require more time management, planning and monitoring of performance from students to improve their academic achievement. At secondary school students would have had experienced and observed models of strategy use and practiced

it, and assessment tasks become complex requires more metacognitive monitoring and reflection. Students experience completing tasks that requires self-study, exam preparation, management of resources and self-organised completion of complex tasks i.e. preparing for a term paper, presentation or a degree thesis requires more SRL to achieve academically (Dent & Koenka, 2016; Dresel et al., 2015). However, complex and difficult tasks that are beyond the student overall academic level can produce a contradicting effect. Ramsden (1992) and Watkins (2001) found that students tend to adopt surface-level processing and learning when they perceive the work load as too heavy and the assessment design and tasks encourage reproduction instead of deep-level comprehension of the task or learning materials (cited in Ning & Downing, 2012). For instance, poor time management and procrastination of writing a research paper resulted in students' use of a surface approach to accomplish the minimal that grant pass to compensate for the wasted time. However, surface-level learning including memorisation is not necessarily a negative or a bad strategy for learning if used as a pre-performance strategy. Webster et al. (2009, cited in Ning & Downing, 2012) found that, in the Chinese context, memorisation of new information was a prior step for learning, and could serve as foundation for subsequent deep-level processing of information.

Furthermore, **learners' perceptions and expectations about a course, a test or a task can influence their approach to learning and their invested mental effort and cognitive load**. For example, Ross et al. (2006) reported that learners who expected exam items requiring deep-level processing such as application or evaluation used deep-level strategies to study, however, those who expected items requiring surface-level items, utilised memorising techniques in studying. The cognitive load for the first group of students may be higher and they would need to self-regulate their learning, manage the different resources, their environment and time. Students then adjust their learning approach and use of strategies depending on their expectation of the task and assessment demands (Ross et al., 2006). Findings from students' reflections in this study supported the significance of students' perceptions on their learning approaches and orientation towards making effort. Students expected semester two requirements to be equal to semester one in the nature and level of complexity and approached the course with high-self efficacy and tendency to exert minimal effort, which did not match actual course requirements. Students' inaccurate assessment of the course requirements caused a drop in students' motivation and their self-efficacy accompanied by a change in their perception of the task from easy to difficult and increased cognitive load (Finding 30-32).

De Bruin and van Merriënboer (2017) highlighted the **commonalities between CLT and SRL** indicating that both 1) are grounded on the psychology of learning and memory, 2) utilise subjective estimates of learners' learning behaviours and 3) focus on self-directed learning situations. However, while CLT focuses on the acquisition of complex cognitive skills and processes influenced by a learner experience using their working memory, SRL addresses the learner's decisions and selections of strategies to complete a task, which can be identified as an extraneous load, which can be another reason for why students avoid or postpone self-regulation. Moreover, agency in SRL is for the learner as the learner take decisions on what strategies would facilitate completion of tasks, why and how, however, the instructional design of learning and assessment tasks in CLT directs and regulate learning (Seufert, 2018). Furthermore, CLT focuses on the cognitive aspects of learning, while SRL addresses the motivational and affective factors as important for processing cognitive processes and strategies. As an example, when the task demands increased and subsequently cognitive load increased, students' motivation and their perception of self-control decreased as highlighted in findings 5.3.1-5.3.3 emphasising the need for more cognitive and metacognitive processing freeing the capacity of the memory to meet the challenge and complete tasks.

The cognitive load theory can assist students' development in SRLS by providing guidelines for assessment design. CLT provides instructional design guidelines to improve learning (Seufert, 2018), as it considers the amount of time learners needs to process new information in relation to prior knowledge, and the amount students need to use strategies to process the information, which has been a major finding of this study. The experimental group students were overwhelmed with the new task's unfamiliar inherited complexity and need for strategies for which assessment did not provide adequate time to practice. CLT is also supportive for making decisions about the number of tasks learners can process effectively and for them to learn content thoroughly. Accordingly, it provides guidelines for instructional design that can assist the development of self-regulation considering that learners need to practice using the cognitive and metacognitive strategies, evaluate their effectiveness and adapt them for new task use, which adds to learners' cognitive load. While SRL does not specifically address instructional design of learning materials and assessment, SRL benefits from the CLT in design issues that can facilitate learners' development of SRL including issues highlighted by this research findings such as amount of practice and repetition, atomisation, time needed to self-regulate, nature of task that requires SR and task demands.

Overall, having a basic understanding of the cognitive load theory and its relation to SRLS integration in a learning context would assist teachers in their endeavour to scaffold their students' growth as self-regulated learners. Teachers are encouraged to develop an understanding of the affordance of the nature of the tasks in developing SRLS and its relation to cognitive load; cognitive load is affected by the task nature and students' expectation and perceived task demand. Teachers are also encouraged to consult the CLT instructional design guidelines to design learning and assessment tasks that integrate and scaffold SRLS development.

6.2.2 Beliefs and values

Teachers have to consider beliefs and values as a source of ILDs and as major influencer in students' growth as self-regulated learners. This section discusses four types of beliefs and values in relation to students' SRLS: 1) Teachers' and students' beliefs about their roles in the learning and assessment practices, 2) students' self-efficacy, 3) task value and 4) identity within the learning context, social identity are all key to discussion of SRLS.

Beliefs about roles

How teachers and students perceived their roles were highly influenced by their past experiences. Expression such as 'used to' and 'familiar' highlighted students' reflections, illustrated the role of previous experiences on their behaviour in assessment and learning. Previous learning experiences in school where teachers decided on students' needs, regulated their learning and supplied learners with knowledge, strategies and feedback informed students' passive perceptions of themselves and informed their roles as passive learners, regulated by teacher. In such a context, learners have little to contribute to the learning process but contribute in situating their teachers at the centre of the learning process acknowledging their credibility and ceasing to question or discuss. Students in this sense are 'vessels to be filled', a view that interviewed teachers seemed to adopt. Teachers aimed to "Build students' character", "feed their motivation", "supply them with knowledge and skill", reflecting a behaviourist views of students' learning, which seems to handicap students' development of SRLS. Teachers' beliefs about students seemed to be affected by their learning histories where they experienced highly structured programmes. Students, however, need to experience challenge and agency in making decisions about their own learning, especially as they have little experience of agency in their previous learning experiences in the study context. The teachers are encouraged to question their own and their students' beliefs about learning and about students' roles, and design instruction and strategies to promote students agency i.e. through self-assessment and peer-assessment

(Boud, 2000; Evans, 2016; Sadler, 1989) in order to eliminate passive learning experiences and encourage more positive ones to shape learners' beliefs about their learning roles, which can enable learners' self-regulation development.

Self-efficacy

Self-efficacy is key to students' academic achievement as it affects students' motivation and learning. It is also key to SRLS as it helps decide on the extent of environmental control and resources needed (Bandura, 1994). In this study, students' self-efficacy affected their selection and use of SRLS (Finding 28) and their tendency towards minimal effort and procrastination (Finding 25 & 26). Perceived self-efficacy is widely discussed as an essential strategy for the development of self-regulated learning. Perceived self-efficacy refers to an individual's judgement of his/her ability to perform, execute, organise and accomplish a specific task.

It is important to differentiate self-efficacy from related motivational and self-agency beliefs such as outcome expectation, self-concept, self-confidence, self-esteem and locus of control. Outcome expectation focus on judgments about expected consequences resulting from performing a task (Bandura, 1994; Van Dinthera et al., 2011) and self-concept as the later refers to generalised self-judgment based on different aspects and beliefs such as self-worth and general beliefs of competence (Van Dinthera et al., 2011). Likewise, self-confidence is a person's beliefs about his/her ability to perform tasks, achieve them and produce results. Although self-efficacy and self-confidence seem related, self-efficacy is always task specific (Dornyei, 1998). Moreover, self-esteem refers to a belief of a persons' self-worth indicating affective reactions of how a person feels about him or herself, while self-efficacy includes a cognitive judgement (Zimmerman, 2000; Zimmerman and Cleary, 2009; Van Dinthera et al., 2011). Locus of control, however, is an individuals' beliefs about the causes behind events in his or her life and whether they are consequences of his/her behaviour or induced by external events.

Self-efficacy is considered a self-agency belief like self-control and both are recognised as critical to the development of self-regulation especially as task demands and cognitive load increase. Self-regulation is necessary for effective learning (Cassidy, 2011); students' selection and use of strategies including task analysis (Finding 28) requires self-agency to decide on goals and the type and amount of strategies needed to perform the task with a time frame; accordingly, it affects students' progress. Low perceived self-efficacy impact students' perceived task value and their invested effort on the task. If students' doubt their ability to perform the task, they may experience fear and keep delaying performance of the task. Likewise, high perceived self-efficacy

can have the same effects as overestimation of one's ability can lead to procrastination assuming that one can achieve a task within a narrower window of time and with the least exerted effort. This highlight the fragility of self-efficacy and it could be mere perceptions if students are not equipped with effective strategies to evaluate their ability in relation to specific tasks. Having an accurate perception of one's self-efficacy help learners plan their time and activities efficiently, select and use strategies that reflect their full potential and accordingly perform a task utilising the best use of their times and resources- self-regulate their learning.

Literature indicates that several factors can enhance the developmental of self-efficacy during elementary and secondary school, such as rewards, modelling, feedback, verbal persuasion about one's ability, task strategies, self-monitoring/self-evaluation and assessment (see i.e. Clark, 2012, Hoogerheide et al., 2014; Ning & Downing, 2012; Raedts et al., 2017; van Dinthera et al., 2011). Moreover, this study advocate's repeated practice, use of low-stake assessment, inducing challenge gradually and the teaching approach should support students' development of self-efficacy. Repeated practice of strategies use accompanied by the right level of challenge can increase students' beliefs about their ability as they implement and transfer learnt strategies into new learning tasks, occupying students with a sense of control over the materials and spontaneously urging them to exert effort with the increased challenge. However, teachers need to be cautious not to cross the line between repeated practices and over-structured and over-scaffold approach where students copy strategies and embark a false sense perception of their ability.

Students' self-efficacy has great impact on students' academic success and teachers' self-efficacy in promoting students' self-efficacy is important too. Teachers' awareness of their roles as facilitators that aim to support students' engagement and partnership in assessment matter (Evans, 2016). Teachers can support students' development of their self-efficacy beliefs through a constructive teaching approach and assessment design, allow self-agency through self and peer-assessment and feedback and distributed practice, ensuring that assessment is varied, interesting, challenging and that assessment task objectives contribute to the overall objective of the course.

Social identity

Students' beliefs about who they are, their identity, how their identity fits within the learning context (Waring & Evans, 2015) is important to promote students agency and sense of belonging and contribution to the learning community. Students' social identity was associated with their learning approach, which in turn is related to academic achievement. Students' social identity

within a discipline can be characterised by strong identification with the discipline content, strong connection to peers and fellow students, pride in being a student, and are more likely to adopt deep approaches to learning. Social and socio-cultural theories highlight relevant students' variables in directing their learning approach. For instance, strong social identity is associated with deep approaches to learning, which is in turn correlated with high academic performance in comparison to surface approaches to learning, which did not induce a positive impact in academic performance (Bliuc et al., 2011). Kuhl and colleagues explore the relation between deep learning approach and academic performance through large-scale correlational studies and found that students adopting deep approach to learning tended to achieve relatively higher marks, however the effect size was marginally statistically significant. Moreover, Wilding and Andrews (2006, cited in Bliuc et al., 2011) found that deep approaches to learning were strongly associated to altruistic life goals, while surface and strategic approaches were linked to 'wealth and status' goals.

In line with these findings, the lack of students' social identity within this research sample can be largely attributed to the Foundation programme, as the later did not emphasis students' identity as future teachers- self-future perspectives or as students at college who feel pride in belonging and aim to contribute to the learning community. The pass-progression regulations contributes to students' lack of social identity and impact their goal-orientation towards aiming for the minimal and encourage students to adopt surface-approaches to learning. The programme should advocate its objective of equipping students with the necessary knowledge, skills and strategies to meet the requirements of the academic major, engaging students with their study and self-regulate their learning, however, the effectiveness of the programme in accomplishing its mission is questioned according to the findings of this study. Students had minor engagement and interaction with their fellow students unless they were friends. Moreover, the lack of learning resources and lack of students' awareness of the available resources, their use and value inhibits students' academic and social identity development. Therefore, an element of promoting social identity, study skills and self-regulated learning with special focus at motivation and goal-orientation is necessary to craft students sense of belonging and direct their study progression, illuminating students' negative influence of each other to one that is supportive for creating strong social identity-namely strong connections with fellow students in the discipline establishing dialogue and quality support networks that can enhance learning.

Overall, beliefs and values are important and they have significant impact in learning. A training course that involves learning and students has to address teachers' and students' beliefs about learning and what constitute learning and students and teachers' roles with the learning and

assessment practices. Training should also encourage teachers' reflections about their own self-efficacy and how to assist that of their students through the teaching approach and effective strategies, including use of repeated practice and promotion of self and peer-assessment and feedback as key to learning objectives. Moreover, students' sense of identity within the learning context has to be addressed and developed, highlighting students' agency and their contribution to the learning community and practice.

6.2.3   Assessment literacy

Teachers' awareness of assessment objectives, standards of quality and design and their competence in communicating these to their students is key to sustainable assessment and the integration of SRLS (Evans, 2016). Assessment literacy targets the teacher role in communicating accessible information about the course whether in terms of transparency, language and use of information. It also highlights the necessity for teachers and students to have mutual expectation of the course and especially assessment requirements, and mutual expectations of each other's role in the learning and assessment process. Students, for instance, need to have clear cues about standards of good work, assessment outline and objectives and guidance on quality support (Clark, 2012; Evans 2016, 2018; Nicol & Macfarlane-Dick, 2006); unless clarified and explained, students' past experiences of assessment may equip students with inaccurate and misjudged expectations of the course (Boud, 2014; Sadler, 2010; Vermunt & Verloop, 1999).

Having cleared any misconceptions about literacy issues, students can have better management and decision about their cognitive, metacognitive and affective strategies use. However, findings indicated that miscommunication between the teacher and the students in relation to assessment literacy. Language barrier and inattention were attributed to the learners' misunderstanding of assessment; the teacher language may be inaccessible and difficult to comprehend the overall academic level of the students. Therefore, students reported being unaware of assessment objective, procedures and sometimes the tasks they have to complete. This highlights the need to communicate assessment elements clearly, in a language that students can understand. In a project carried out in the University of Southampton, students' awareness of assessment requirements was raised by engaging students in rewriting assessment criteria; students unpacked the assessment requirements and represented them in accessible language. Students went through a process of analysing the offered criteria, understanding them thoroughly and represented them in a language that they owned and could understand; engagement and

ownership of assessment was promoted, which are key to the development of SRLS and features of sustainable assessment practices (Evans et al., 2018).

Overall, clear assessment, objective, procedures and processes, tasks and demands with clear identifications of participants' roles and expectations are fundamental for sustainable assessment. Failing to signpost these elements or miscommunication in delivering and highlighting them, limits teachers and students' literacy and hinder mutual expectation, which are key to promote SRLS use.

6.2.4   Individual differences

Literature indicates that individual differences in SRLS exist and that these are related to achievement and personality factors, which can influence SRL training. Winne (1996, cited in Dörrenbächer & Perels, 2016) hypothesised that SRLS differences result from domain knowledge and knowledge of strategies (declarative knowledge necessary acting as building blocks and prior knowledge to perform tasks), performance and regulation of strategies (procedural knowledge that occupy the students with the mechanisms to achieve tasks), and global dispositions (i.e. beliefs and values). In other words, students' cognitive and metacognitive knowledge, awareness, use and regulation of strategies and beliefs about knowledge acquisition and learning, constitute the main factors shaping their SRLS. For example, Artino and Stephens (2009, cited in Dörrenbächer & Perels, 2016) students adopting adaptive motivational emotional profiles have higher SRL skills.

This section discusses personality and character, learning patterns, prior knowledge and learning histories as important factors that can instigate individual learning differences (ILD) in students' response to SRLS implementation into assessment practice, and teachers' general awareness of these factors is conducive to implementation of SRLS in a learning or a language learning environment. ILDs and its possible effect on students' SRLS are discussed in relation to the study findings.

Personality traits

Personality traits were found to impact students' use of SRLS through their effect on students' self-efficacy and help-seeking strategies (Finding 11). Personality traits refer to individuals' characteristics and differences that can explain individuals' patterns of cognition, behaviour and emotions, important aspects of SRL. Personality traits are relatively stable across time and situations (Bliuc et al., 2011). Literature in personality research identified Five Big Personality

traits (Bliuc et al., 2011), namely-extraversion, agreeableness, conscientiousness, neuroticism and openness to experience. Literature indicated that conscientiousness is positively related to motivation, effort, persistence, SRL and analytic learning, and openness to experience is linked to elaborative and constructive learning. In their meta-analysis of factors affecting academic achievement, Schneider and Preckel (2017) found that conscientiousness had a significant impact on academic achievement and it was positively correlated with goal setting, commitment to attaining goals and orientation towards learning goals. Moreover, literature indicated that the association between conscientiousness and academic achievement was equal in strength as the association between intelligence and academic achievement (r=.47 for both).

One important personality factor that has been identified in the finding is feeling shy and reserved, which affected students' help-seeking strategies; students felt insecure and self-conscious about their lack of fluency in English as it involves social interaction and exposing one's self to other people's judgements. Therefore, students avoided seeking-help unless it was delivered in Arabic limiting their network of support; help-seeking is key to SRL. In support of the study findings and in line with the literature on personality traits, shy students can be characterised as low at extraversion reserved, prefer to keep low key and save their self-worth. It is worth mentioning that these students may have accurate judgement of their ability, self-efficacy and self-evaluation are key to success, however, they need to develop their help-seeking strategies and widen their network of support. As personality traits and SRLS were found to be important factors for the learning process, Bidjerano and Dai (2007, cited in Dörrenbächer & Perels, 2016) assumed that the correlation between personality factors and SRLS can influence individuals' responses to SRL training and thus help tailoring SRLS intervention to students' needs. They concluded that conscientious students may require less need for training, while neurotic students can benefit from a training on information processing strategies. Accordingly, students low in extraversion will need support in initiating conversations in the target language and would benefit from strategies assisting their help-seeking skills as quality support networks is a key feature of self-regulated learners.

Building on the previous discussion of personality and students' approaches to and behaviours towards learning, knowledge of ILDs is conducive for instructional design and training programmes for teachers and students. It is important to ensure that learning and assessment tasks accommodate a wide range of students learning approaches and patterns and SRL profiles, as low-knowledge learners can benefit from strong guidance and support, while high-knowledge learners can succeed with little or no support (Fyfe & Rittle-Johnson, 2016).

Learning patterns

Another sources of ILDs is students' approaches to learning, identified as how learners process information i.e. cognitive styles (impacted by interaction between innate characteristics, i.e. need for cognition or need for metacognition, and the learning environment (Waring & Evans, 2015) and how such styles combine to form learning patterns. Learning patterns can be identified through cognitive and regulative processing strategies, conceptions of learning, and learning orientations (Donche & Van Petegem, 2010). Vermunt identified four major learning patterns, namely undirected, reproduction-oriented, meaning-oriented and application-oriented approaches.

Learning patterns are heavily dependent on the context and mode of instruction; the question remains as to how instruction can support deep approaches to learning. The **learning environment** can influence students' approaches to learning, as students' approaches to learning have been found to be contingent with their interactions in the teaching and learning environment (Ning & Downing, 2012). For example, students are more likely to adopt a deep approach to learning if the teaching approach is less structured and if students' personal experiences are triggered in the classroom, however, students are more likely to adopt a surface approach to learning if repetition, structure and rote learning is encouraged in the classroom, and also if students feel overloaded which links to the research on cognitive load. For instance, over structured classrooms that emphasise repetition, routine and structured practice of skills and knowledge led to copying strategies and lack of experimentations with new strategies (Finding 8 & 11).

Teachers can influence the learning environment by improving the instructional quality and making a number of small and easy but fundamental design changes to support student learning. Simulating questions and discussion, providing clear learning goals and course objectives, relating content to students, providing task-focused and development-oriented feedback and allowing students to construct and discuss central ideas are small changes to implement but can induce major changes in the students learning and achievement (Schneider and Preckel, 2017). Teachers in the study sample recommended designing continuous intermitted and varied assessment to ensure equity as it caters to students' learning pattern and scaffold students' development as self-regulated learners (Finding 36). Considering that this research study context does not measure students' learning patterns and that the English placement test is the only method for sorting students into different categories in terms of their academic level, this research recommends exploring students' self-regulated learning profiles in addition to the placement tests at college

level to provide a comprehensive understanding of students' needs to design instructions accordingly.

Furthermore, age and the overall educational level of students has been found to be associated with students' learning orientations. For instance, Klatter (2001, cited in Donche & Van Petegem, 2010) found that secondary education students exhibited a limited range of learning strategies, orientations and conceptions, in comparison to students in higher education, which in turn tend to develop via experience as students grew older. Older students are usually more self-regulated and use deep processing strategies and value construction of meaning in education, which can affect their choice of study in addition to prior knowledge. Moreover, literature suggests that students become more oriented towards application-oriented learning (Vermunt, 2005, cited in Donche & Van Petegem, 2010). Based on the findings of this study, students at entry to HE still had limited awareness and use of SRLS, the foundation year served as students' first introduction to the requirements and therefore it is essential that at such transition points that students should be carefully inducted into the requirements, strategies' needs and standards for success. Students' SRLS are likely to develop as students start their majors, task demands increase and so do standards of success; doing the minimum to secure a pass will not be sufficient. However, students are expected to have a few setbacks on the way to their self-regulation, which could delay their academic achievement and progress, emphasising the importance of raising students' awareness, facilitating and developing use of strategies in the foundation programme by inducing the right level of challenge and providing a variety of SRLS that cater to students' learning patterns and facilitate students' task achievement and learning transfer.

Overall, teachers' awareness of students' learning patterns is important to inform teaching and practices as educational faculties, nowadays, become more sensitive to the different experiences that students bring to the learning environment. Identifying students' learning patterns facilitates providing a consistent and effective instructions that enhances students' learning (Gillum, 2006). It is even more sensible to influence students' learning through informative learning approaches that promote deep approaches to learning and encourage students' use of SRLS.

Learning histories and prior knowledge

Teachers also need a general understanding of students' learning experiences. A learning experience is defined as a learner's interaction with the learning and teaching environment in response to the contextual and situational demands of the learning tasks, which usually results in sustaining or altering study behaviours (Ning & Downing, 2012). Findings indicated that a

student's selection and use of SRLS is unique as their selection can be affected by past experiences of effective strategies. For example, students utilised familiar task analysis, performance and self-reflection strategies that they had experienced and practiced with the teachers and were later transferred to the second phase of the study. This hints at the concept of James' 'psychological safety' (2014) as learner's became encouraged and motivated to write when they experienced feeling of security, familiarity indicating a sense of self-control over the writing process and that they are not stepping in the unknown, which was supported by Finding 7 & 8).

Moreover, conceptual models of feedback emphasise the primary role of prior knowledge (Fyfe & Rittle-Johnson, 2016) in predicting learning from feedback; key to the development of SRLS. For instance, Krause et al., 2009 (cited in Fyfe & Rittle-Johnson, 2016) found that students with low prior knowledge of statistics indicated higher learning in post-test if they received explicit feedback during training as they had longer distance to achieve goals, while explicit feedback did not have the same effect on students with higher prior knowledge. Sweller et al. (2011, cited in Fyfe & Rittle-Johnson, 2016) justified that as higher knowledge learners often rely on existing knowledge to guide their performance of a task, external feedback may provide redundant information competing for working memory resources and therefore, hinders knowledge acquisition. However, this study findings indicated two related issues to prior knowledge affect use of feedback as a self-regulated strategy: awareness and access (Finding 22), both of which implies what students know (awareness/prior knowledge) and how to use (access/strategies) to benefit from feedback. Lack of prior knowledge and experience on the use of feedback, limits their potential especially if lack of knowledge is accompanied by minimal tendency towards learning.

Overall, the findings of this study and previous research emphasises that prior knowledge and strategies are fundamental for learning transfer as transfer of knowledge and strategies occur when relevant and previous learning experiences are utilised to scaffold construction of new knowledge in the learning environment, which may require problem-solving strategies that are part of learners' previous experience. SRLS helps learners transfer learning from one context to multiple contexts (Gillum, 2006; Waring & Evans, 2015) utilising motivational beliefs strategies, which are enforced by past achievement and scaffold transferred motivational future engagement with learning (Schneider & Preckel, 2017). Students' use of SRLS is unique for different tasks and situations, as transfer implies using previously learnt knowledge and strategies in order to construct new meanings.

6.3 How can a research-informed approach to the integration of self-regulated learning strategies support sustainable assessment practices at a college of education, Oman?

Expanding on the SAPs definition provided in this thesis, sustainable assessment targets students' development of their self-regulated learning strategies to scaffold their current and future learning, taking into account learners' individual differences affected by their personality and learning patterns, which can be influenced by previous learning experiences and the current learning environment factors such as the teaching approach, the assessment design and objective and the learning resources. The reciprocal relationship between these factors can be positively enforced to enhance learning and self-regulation through training and mentoring that highlights repeated practice and experimenting with strategies to scaffold students' transfer of knowledge, skills and strategies, noting that students' and teachers' beliefs about learning and their roles requires more than a year to embrace the change induced via the implementation of SRLS. The reciprocal relationship between sustainable assessment and SRLS indicates that implementing SRLS into a course can enhance and sustain effective assessment features.

In response to the study's main question, this thesis proposed a framework for teacher professional development stressing features of sustainable assessment practices that can support students' development as self-regulated learners. These features include providing scaffolds and training for students to equip them with the necessary skills and competences for HE learning. It also involves professional development for teachers that targets teachers' awareness of SAPs and SRL as a construct and as a process and techniques to implement SRLS in the classroom, taking into account time as a major factor in the effectiveness of the training. It also draws the teacher attention to key conditions that impact the quality of teachers' training such as the concept of cognitive load and its relation to the nature and demands of tasks and to repeated practice, learners' and teachers' beliefs and values about their roles and about the learning process and highlight individuals learning differences as possible source of variance in SRLS. Moreover, the T.SAPs framework emphasizes the reciprocal relationship between sustainable assessment practices and self-regulated learning strategies.

Overall, the field of self-regulation and its association to sustainable assessment practices is complex, highlighting different personal, contextual and socio-contextual factors contributing to its complexity. Moreover, personal factors interaction with the context adds another dimension to its complexity. Unfortunately, the interplay between personal and contextual (learning

environment and socio-contextual) factors is rarely investigated (Donche & Van Petegem, 2010), however, these factors seems closely related. For example, prior knowledge is affected by personality traits, learning patterns and previous learning experiences. Moreover, students' social identity can largely be influenced by their beliefs about learning, and their roles in learning, expectations about learning, teachers and context expectations of them and the affordances of the learning environment. Therefore, personal, learning environment context and socio-contextual factors are interrelated and interconnected and each factor affects and influence the other in the development of the self-regulated learning process. As T.SAPs framework indicates the interaction between the different factors as well as the reciprocal link between SRL and SAPs

Chapter 7   Conclusions and Recommendations

Using a social cognitive lens, this thesis sought to explore the relationship between students' development of SRLS and their writing performance. Specifically, it investigated the impact of implementing SRLS into a writing course on students' perceptions of their SRLS and their writing performance in comparison to their initial perceptions and writing performance when they started college (RQ1 & RQ2). It also examined whether the impact was transferable to new learning situations and tasks (RQ3). This quasi-experimental study utilised Zimmerman's (2002) model of SRLS to explore students' SRLS, and Evans' (2016) framework for equitable, agentic and transparent assessment to investigate XCoE assessment practices and whether they supported the integration of SRLS. This chapter provides a summary of the key findings in relations to the research questions. It also highlights key contributions to the understanding of the development of self-regulated learning strategies in assessment practices and learning, feeding into the study's conceptual framework (Figure 3.2), by highlighting factors impacting transfer of SRLS to new learning situations and emphasising the interconnectedness between these factors. It also emphasizes the reciprocal relationship between SRLS and sustainable assessment practices.

7.1   Summary of key findings

This section summarises the findings in relation to the research sub and main questions.

RQ1: What are students' perceptions of their SRLS at entry level?

The question explored students' perceptions of their SRLS when they first entered college during their first week of scheduled lectures using SRL-A multi-items scale. Findings indicated that generally students had a low perception of their SRLS at college entry in comparison to students' enrolled at a public university (AlKharusi et al., 2012) drawing on conclusion 1 In Table 5.8 However, students' performance in a writing task that was used as a pre-test measure of students' writing performance, indicated that the experimental group, who could have been more motivated, performed significantly better than the control group students. These two groups provided two different start points in terms of perceptions and writing performance.

RQ2: Would a SRL integration in a writing Academic English Skills (AES) course, involving teacher modelling of SRLS improve students' academic achievement?

Integrating SRLS in the writing assessment design of the experimental group classes at five different points during Autumn 2017 did not lead to any significant improvement in the students writing performance, which was similar to that of their peers in the control group. This contributed to the assumption that the experimental group's significant writing performance at the beginning of the course was due to their motivation rather than their ability in writing. Several factors contributed to this finding such as the short intervention period, lack of students' investment in the study as the course progressed, the increased writing tasks demands and the number of objectives that had to be met, which did not allow enough time for students to practice and experiment with the strategies they had been learning.

 One key finding was the influence of the learning context represented in the teaching approach adopted; an over-structured approach to teaching and copying strategies was adopted in the control group, which decreased students' **cognitive load** and their **need for self-regulation**. As a response to the constant directive **teaching approach**, students' sense of self-control increased and their perceptions of their self-observation decreased indicating limited need to observe their own strategies or experiment with them. On the other hand, students in the experimental group experienced more stable perceptions of their SRLS during four months of the intervention as they had to manage performing different tasks with different requirements, which increased their cognitive load and increased their need to self-regulate even though the intervention did not scaffold their deep understanding of the strategies or enabled their mastery use of them.

Moreover, **students' use and selection of strategies were unique to the individual** indicating that phases can amalgamate and overlap; students' selection of SRLS were impacted by different factors such as **task demands**, the teaching approach, students' awareness and accessibility of strategies and individual learning differences i.e. prior knowledge, learning patterns. Therefore, students were externally regulated in assessment, including feedback, as self-assessment and peer-assessment were used sparingly and for practice only. **Scaffolding students' transition from secondary school to higher education** was also found to be significant for students' successful integration of SRLS in learning.

RQ3: What evidence is there that the impacts of the intervention are sustained beyond the immediate assessment task(s)?

SRLS modelling had a delayed impact on the experimental group students' writing performance in essay writing tasks that were similar to phase 1 but with increased task demands in Spring 2018. The experimental group's writing quality was better than the control group's in these tasks. However, when students were introduced to an unfamiliar task that involved the use of more complex strategies such as searching for information, supporting them with evidence and synthesising the information into an argument, the writing performance of the two groups was similar. Therefore, a **full transfer of the strategies and adaptability to new learning tasks did not occur** within an academic year, indicating underdeveloped understanding and use of SRLS. The impact of SRLS integration was also observed in the overall stability of the experimental group students' perceptions of their SRLS, while the control group indicated a general decline from Autumn 2017 to Spring 2018 because of the very structured teaching approach and students' perceptions of increased task demands

Moreover, a **continued and increased tendency towards achieving the minimum and a tendency towards procrastination** increased as a result of the change in task demands, a drop in students' self-motivation and inaccurate assessment of the course requirement and of one's own abilities. However, a tendency towards being selective in relation to initiating a support network was adopted by a few students highlighting 'who provides support' and 'how to get it'; **a quality support network** requires awareness of the nature and amount of support one needs.

Main RQ: How can a research-informed approach to the integration of self-regulated learning strategies support sustainable assessment practices at a college of education, Oman?

The analysis of findings assisted in designing a framework for teachers for successful development of students' SRLS. The SRLS framework (Figure 6.1) highlights the reciprocal relationship between the self-regulation of learning and sustainable assessment practices (SRLS-SAPS), and it is a key contribution to the field of teaching for sustainable assessment practices and self-regulation. It highlights the interconnectedness between individual, institutional and wider socio-contextual factors on impacting teachers' ability to promote student self-regulation and also acknowledges the complex interactions between the teacher, the learning environment and the student in realising self-regulatory development in practice.

The T.SAPs framework stresses the importance of scaffolding students' transitions from secondary education to HE, the addition and/or removal of scaffolding during the learning process, training teachers, and the importance of repeated practice on the successful integration of SRLS. In order for a teacher to master the four factors, s/he needs to be aware of the complexity of the human brain represented in the cognitive and metacognitive strategies and processes and their effect on cognitive load. A teacher should also be sensitive to the power of their own and their students' beliefs and values, and, in addition, pay special attention to individual learning differences (as presented in chapter 6).

The framework emphasizes the repeated practices that scaffold students' learning in a positive way to support SRL, and differentiates it from over-scaffolding by teachers, which handicaps learning and limit the need for self-regulation; repeated practice, which assist students' retention of information in order to construct new meanings from previous ones and it encourage students use of SRLS through the addition or removal of scaffolding as needed. Moreover, beliefs and values such as teachers' beliefs about students' learning and their role in their learning process, and students' beliefs about their roles in learning and assessment have a huge impact on the development of SRLS, and it is worth noting that changes in beliefs and values require time to raise awareness of effective strategies, to build trusting relationships, and to eliminate misconceptions in order to secure students' and teachers' commitment to the change. Furthermore, the transfer of knowledge, skills and strategies is highly important for future learning and it emphasizes the role of the learning environment, task demands and the teacher approach in facilitating such transfer, by raising awareness and sustained modelling of effective strategies, inducing challenge and scaffolding students' use of strategies when needed. A key finding and contribution to the field of self-regulation and learning in relation to the nature and boundaries of SRLS phases illustrated in current SRLS models, is that SRLS are interconnected. SRLS can be approached in a holistic manner and can be used as a whole set of strategies from which students can select to use and individualise their order, according to the task nature and demands, task value, students' learning patterns and learning experiences, and the time available to perform the task.

7.2   Limitations of the study findings

This section acknowledges and address possible limitations to this research findings research. Methodology-wise, 1) the study sample was small limiting the generalisability of the study findings, especially when students missed items in SRL-A scale. 2) The SRL-A scale was lengthy as it

included 79 items, which students tended to be reluctant to answer. 3) This addresses another limitation which was students' buy in and commitment, which appeared to fluctuate over the academic year. 4) In relation to the validity of the research tools, students' reflections about their use of SRLS pose another possible limitation, as the students' reported underdeveloped use of strategies can be related to their limited language and limited ability to talk about their strategies even if interviews were conducted in their first language if they preferred. 5) The impact of the study on students' writing performance and their perceptions could have been triggered by confounding factors as these can impact SRLS implementation, i.e. exposure to other good practice, not necessarily the intervention (Schneider & Preckel, 2017; Seifert et al., 2014). 6) The incubation period (Evans, et al., 2018) for both teacher's training and students' practice of SRLS was insufficient to induce the full desired impacts as students need time to practice their learnt strategies and teachers require time to questions their own beliefs and values for a successful development of SRLS. 7) The researcher own knowledge and practice in terms of SRLS at the time of the data collection was lacking, nevertheless, it has developed throughout the study and the researcher is likely to approach classroom implementation differently now based on the research findings.

7.3   Contribution to research in SRLS and sustainable assessment

This research contributes to SRL and sustainable assessment practice research in a number of ways:

1) It looked at SRL as a construct and as a process.
2) This thesis positioned agentic engagement as part of SRLS not a different concept.
3) It investigated assessment holistically and incorporated teachers' voice and practices to construct a comprehensive understanding of students' SRLS.
4) It explored teachers' and students' beliefs and values including self-efficacy as a major factor in the development of students' SRLS
5) It provided new insights about the complexity of the individual's learning and the added complexity induced by the interaction between individual factors and the environment i.e. SRLS assimilated not structured in distinct phases.
6) It adds to the research on regulating the writing process in HE, especially in Oman where published research in the area of self-regulation and writing is scarce.
7) It provides a framework useful for a successful SRLS integration by teachers, designed and created based on the research findings and evidence.

8) It highlighted the reciprocal relationship between SRLS and SAPs.

Firstly, this research defines SRLS as multi-dimensional and a complex, not a unitary, construct that aims to enhance learning and maximise students' intake from the learning process while concurrently looking at the set of strategies that students' use for this purpose. Literature indicates two separate trails of research that either identifies SRL as a construct or as a process occurring at different phases (Evans, forthcoming). However, this research study explored students' use of SRL comprehensively as a dynamic process that is inclusive to the different component, phases and strategies as well as exploring the different factors that can promote or limit students' awareness of SRLS including assessment practices.

Secondly, this thesis positioned agentic engagement as a high degree of self-regulation. Being a characteristic of self-regulated learners indicates that the agentic engagement discussed by Reeve (2013) is not separate construct, however, it is part of being self-regulated, and it can be developed through community of practice, developing help-seeking strategies, developing a social identity and re-defining students' roles to that of active contributors to the knowledge and practice within their field of study or in society.

Thirdly, this research study considered assessment holistically, highlighting its different aspects of assessment literacy, feedback and design and emphasising the importance of equity, agency and transparency of assessment practices to scaffold SRLS implementation in a writing course. This approach has been scarcely applied in research as the exciting literature draws on fragmented investigations of assessment practices and SRLS; Zimmerman (2011) noted that research on SRL was seldom multi-dimensional at the outset. Moreover, students' perceptions seem to attract more attention in research, leaving teachers' perceptions and reflection marginalised; contradicting the call for comprehensive and holistic investigation of assessment practices.

Fourthly, and in line with the holistic view of assessment, this research contributes to the existing research in SRLS and assessment by incorporating teachers' beliefs and values as a major enabler or inhibitor of SRLS development. Beliefs impact the assessment practices and contribute to shape teachers' beliefs about their roles and their students' roles in the assessment process. SRLS learning does not occur in a vacuum, but within a context of factors, and beliefs constitute a major role in that context; self-efficacy is but one of these beliefs, others include beliefs about students' roles and that of others, beliefs about learning and teaching and beliefs about goals and consequences (Waring & Evans, 2015).

Fifthly, building on this, the research findings and discussion provide new insight into the nature and order of SRLS advocating previous views, conceptualisations and limited research-evidence of the individualised uniqueness of SRL, highlighting the interconnected nature of the SRLS phases, which thus far have been illustrated as discrete in the current models of SRLS. Conversely, this research provides evidence that the phases are interconnected and that students' use of SRLS is unique; the students' brain and behaviour are not restricted to a particular structure or use. In fact, students' use and selection of SRLS is task and environment specific, stressing whether students need to self-regulate.

Sixthly, There is a general lack of research in SRLS in Writing regulation in HE; only twenty published research on SRLS in language learning and writing teaching existed in a recent search in EAT research database including 2000 papers (Evans, Forthcoming) and Samanian and Roohani, (2018) found only 15 peer-reviewed papers adopting a socio-cognitive perspective to investigate the writing regulation process, which is limited in comparison to the extensive work that has been done in SRLS and writing at elementary-secondary school level. Since, HE students are particularly concerned with academic writing, having to submit assignment, communicate their knowledge and take exams, which are commonly communicated through the medium of writing, research is especially needed at HE. Knowing that only two of the 20 research papers were based on the Omani context and were based in the Middle-East in Samanian and Roohani systematic review (2018), the case becomes even more critical:, especially, as Omani students' in HE context are expected to communicate in English, including writing, which is considered a foreign language adding to the writing process complexity, especially for novice writers, whose cognitive thinking goes through a process of translation to understand text cues before writing and communicating personal understandings and thought (see AL-Saadi, 2018).

Seventhly, this thesis proposes the T.SAPs framework for teachers to promote SRLS in the learning environment, including assessment. The framework ensures sustainable assessment drawing on the different key factors scaffolding SRLS development. Teachers need to support students' transition from one educational level to another, be aware of when to add or remove scaffolding based on students' needs and task demands, familiarise themselves with different techniques and methods to promote SRLS in the classroom, and encourage repeated practice whenever required. These factors are closely impacted upon by the learners' cognitive load, beliefs and values of teachers and students, assessment design and literacy and/or the time required for effective use and transfer of strategies to new learning situations (as indicated in Figure 6.1).

Eighthly, considering the lack of research on sustainable assessment practices and their relation to SRLS, this research highlights the reciprocal relationship between the two constructs, SRLS and SAPs, and between the personal, institutional and socio-contextual factors within. A successful integration of SRLS sustains assessment practices as students successfully transfer and adapt their mastered strategies into new learning situations, which is a feature of sustainable assessment practices. Reciprocally, sustainable assessment practices provide opportunities for students to experiment with and use SRLS to a level of internalisation and mastery that develop self-regulated learners.

Overall, this research provides an original contribution to the research field of self-regulation learning skills and sustainable assessment practices. It contributes to the understanding of SRLS as a construct impacted by different individual, and contextual factors, and as a process involving different strategies. It also stresses that students' use of SRLS is unique affected by whether they need to regulate or not. This research offers a framework for a successful implementation of SRLS ensuring the sustainability of the assessment practices, emphasizing the importance of training within a reasonable timeframe to affect beliefs and values and to allow adequate time for mastery and transferability of SRLS.

7.4   Recommendations for future research

Considering that there is a scarcity in SRLS' and SAPS' research in Oman, whether separately or linked, both in school and in HE, research needs to address SRLS as important strategies to acquire in the 21st century. In a recent systematic review of assessment feedback practices and self-regulation analysing over 12,000 abstracts and 2000 articles dated 2012-2019, only two pieces of work were focused on Oman (Evans, forthcoming). There is a need to raise stakeholders' awareness, i.e. teachers, students and parents, of these constructs and processes as there is a general lack of awareness of what constitutes SRLS and how different or similar it is to independent learning, how to develop at the individual level and how to implement it within assessment practices. The following recommendations for research are universal in SRLS research, however, it is of particular interest to the Omani HE context where students are generally externally regulated and over-scaffolded, and teachers lack awareness of SRLS or how to promote them in their practices. These recommendations address SRLS's 1) concept, 2) existing models and frameworks, 3) research methodology, and 4) dissemination of findings.

Conceptually, self-regulation is sometimes mistakenly defined as independent learning, which enables learners to learn for themselves with the least interference from teachers or advisors,

however, the self-regulation that is discussed in this thesis aims to optimise students' learning by efficiently and effectively utilising available resources whether financial, learning and/or human resources. There is a need to explore some constructs that are closely related and conceptually part of self-regulation in theory, but are identified in the literature as new concepts and argued as separate from self-regulation such as 'agentic engagement' (Reeve, 2013), which could indicate a high degree of self-regulation. Likewise, researchers need to pay attention to the possibility that although conceptualising strategies into separate phases i.e., forethought, performance and self-reflection can be useful as an instructional method and as a tool for teacher professional development, learners' use of the strategies is unique, and phases tend to be interconnected in practice, as evidence from this thesis suggest learners' individualised selection and use of SRLS. Central to recommendations for research is the need to explore the relationship between self-regulation, sustainable assessment and lifelong learning in theory *and* in practice.

Model-wise, most of the SRL models and frameworks available are designed for universal use, and are based on the European or American Context, and some of these stresses the importance of context and environment in shaping students use or misuse of strategies, for example Zimmerman's (2002). Therefore, researchers and practitioners need to contextualise the self-regulation theories and frameworks to exploit their full potential, taking into account the assessment design and the barriers to change as implementation of self-regulation strategies should align with assessment objectives, methods and procedures. The socio-context factor, included in the framework for a successful implementation of SRLS (Figure 6.1), including parents, peers and society affected the context of the study and require future attention if we are to aim for effective implementation and development of students' SRLS, i.e. teaching should support students' development as SRL instead of over-scaffolding and handicapping students' learning progress, mistakenly referred to as 'support' or 'help' as indicated in the research findings.

Furthermore, it is important to investigate the use and effectiveness of models of SRLS that are suitable for adult learning in Higher Education (HE). Sitzmann and Ely (2011, cited in Panadero, 2017) stated that findings from higher education and workplace training indicated goal level, persistence, effort and self-efficacy were the biggest predictors that have significant motivational value within the socio-cognitive theory aligning with Richardson et al. (2012, cited in Panadero, 2017), who concluded that self-efficacy was the highest predictor of self-regulation; self-regulation is boosted by goal-setting strategies. Accordingly, multifaceted interventions might be more effective in developing learners' SRLS. However, Panadero (2017) emphasised that findings

and conclusions concerning higher education students were not built on meta-analyses that compared the effects of utilising different models of SRLS for this level of learners.

Methodology-wise, there are a variety of tools to explore and investigate self-regulation including online and off-line measures, however, contextual barriers can limit the researchers' choice of data collection tools as some require training due to student lack of familiarity with them, and due to time-constraints, which assessment design may not offer. For example, this research utilised SRL-A scale as it is practical within context. Social desirability can also have a great impact on SRL measures according to context. Moreover, the methodology design of this thesis provided explanation of why students' perceptions change, supported by students' reflection from a social-cognitive perspective, which highlights the need for fine-grained studies that explore and investigate the mechanism of SRL (i.e. understand how self-observation or self-reflection happens and its relation to self-attribution) in addition to the detailed picture of SRLS processes and strategies provided by SRLS models; a cognitive approach supported by quasi-experimental designs and utilising think-aloud protocols or tracking methodologies can help achieve this aim (Panadero, 2017). Moreover, there is a need to explore teachers' as well as students' perceptions of assessment and self-regulation to narrow the gap between the two views and to have a better understanding of assessment objectives, procedures and strategies (Evans, 2013; Dargusch et al., 2017), and SRLS within the assessment practices.

For future research, ***using a person-centred approach*** (Dörrenbächer & Perels, 2016) in addition to variable-centred approach, adopted by this thesis, to investigate self-regulation can indicate individual learning differences and subsequently provide guidelines for developing individualised training programs (Schmitz, 2001, cited in Dörrenbächer & Perels, 2016) such as exploring students' SRLS profiles to identify methods, interventions and strategies that improve students' self-regulation from low self-regulated to highly self-regulated learners based on individual profile needs. Moreover, ***repeated-measures analysis*** can detect differences in students' perceptions of their SRLS (Dörrenbächer & Perels, 2016), and the stage at which they change whether improved or deteriorated, which indicates robustness and eliminates novelty effect. Moreover, there is a need to ***sample students at different academic stages or follow them longitudinally*** (Dent and Koenka, 2016) to detect the immediate and delayed effect of SRLS and identify the time at which students master SRLS use and are able to transfer them effectively to new learning situations and assessment tasks.

In relation to the dissemination of research findings, **researchers need to consider boundaries to context and interpretation while making claims about SRLS research findings**. We need to consider that research is not "value free" (see Farley-Ripple et al., 2018), rather different interpretations and understanding of SRLS findings can be driven by different stakeholders. Moreover, SRLS research findings can be inclusive or even contradictory and often there is inadequate accumulation and exploration of evidence across different contexts, to measure and generalise the effectiveness of a given method or strategy (Farley-Ripple et al., 2018). Likewise, policy makers and practitioners need to consider these issues before implementing SRLS evidence-based research findings in their unique contexts.

Generally, there is a challenge concerning developing "decision relevant culture" among researchers and developing a "research-attuned culture among decision-makers (Farley-Ripple et al., 2018). That is to say, researchers as knowledge-producers of SRLS need to think about *the usability of SRLS research findings in context*; namely, why and how practitioners as knowledge-consumers can use SRLS research and decision-makers need to establish institutional cultures that encourage dissemination, discussion, investigation and implementation of SRLS research findings to promote students' agency in assessment and learning and assist assessment practices sustainability. In the context of XCoE, research evidence use is generally sought by individuals, however, there is a growing interest in research and a research culture for sharing research findings and disseminating external research findings started formulating within XCoE.

Overall, this study argues that SRLS and SAPS as common concepts that extend over a period of 50 and 20 years of research or so, respectively, are requisitioned conceptually, and methodologically to provide a thorough understanding of them and to assist students' development of as self-regulated learning within context. A constructive definition and comprehensive contextualised framework for a successful SRLS development are needed. Moreover, sound methodologies that track learners' development of SRLS and investigate individuals' SRL profiles and its relation to individual learning differences is recommended. Finally, institutions should promote and encourage dissemination of findings and evidence taking into account the uniqueness of the contexts and whether implementation of evidence within a different context to where research has been carried out is possible.

7.5 Recommendations for teachers' practice

Teachers are encouraged to raise their awareness of SRL and features of assessment practices, through engagement in regular training to upgrade their knowledge and skills in developing

students' SRLS or subject knowledge and skills. The T.SAPs framework for successful development of SRLS within sustainable assessment practices, highlights the recommended areas for teacher training.

Firstly, the framework stressed teachers' need to develop their theoretical and conceptual knowledge of SRLS through training. Scaffolding teachers' knowledge of SRL theory and models is recommended to provide teachers with a solid foundation of theoretical knowledge that assists their endeavour in maximising students' learning and academic performance (Panadero, 2017). Training can occur as a pre-service teacher or in-service teacher. Training teachers-to-be during the B.ED degree years can give future teachers a first-hand experience of being self-regulated learners to understand the processes their future students go through and consequently provide the required support needed for students to develop as self-regulated learners. Receiving a pedagogical training during B.ED. Degrees, assists teachers' subsequent transition into the workplace and enhances their understanding of requirements. However, remedial in-service teacher training on the theory and processes of SRLS and what models can suit their students' age and developmental stage is necessary especially for those who did not have the opportunity to be familiarised with self-regulation (Moos & Ringdal, 2012; Panadero, 2017). It is important to emphasize that training should extend to over an academic year as it addresses teachers' beliefs as well as their practices in assessment.

Moreover, T.SAPS framework provides accessible tool for teachers of language learning, including writing as research in the area indicates limited research in HE, and that which exist is not synthesised, exploring different aspects with regard to assessment, language learning and/or self-regulation. The framework provides practical tips based on findings on how to teach writing and implement SRLS in a language classroom.

Furthermore, the development of SRLS ***requires equitable, agentic and transparent assessment practices that features repeated practice, scaffolding and time for practice as key to a successful development of SRLS.*** The literature indicates that self-regulation, motivation and attitude can be improved and developed through educational interventions (Ning & Downing, 2012). Therefore, teachers are recommended to incorporate activities that promote self-regulation, motivation and positive attitude towards learning and assessment to develop positive study behaviours. Moreover, teachers' awareness of the importance of transparency and mutual expectations is necessary in terms of assessment; teachers should raise students' awareness of assessment objectives, procedures and timings and should involve students in the decision-making of some aspects of assessment, if not all, as well as highlighting limitations and boundaries to their

engagement, which can enhance students' ownership of the learning and assessment processes (Evans, 2013; Nicol & Macfarlance, 2006; Ross et al., 2006; Sadler, 1989), and develop key SRLS i.e. self-efficacy and self-evaluation. Moreover, **teachers should be aware of the power of cognitive load, beliefs and values in shaping students as SRL.**

Accordingly, teachers need to be aware of the four developmental stages of SRLS, indicated in the literature, namely-observation, emulation, self-control and self-regulation (Zimmerman and Kitsantas, 2005), to allow time for SRLS to be conceptualised, internalised and utilised by students. The processing and practice time are crucial for performing new tasks as students may experience a high cognitive load (cognitive load theory, Sweller, 1994, cited in Panadero, 2017; Van Zundert, et al., 2012). In line with this argument, Moos and Ringdal (2012) and Panadero (2017) found that higher education teachers do not provide sufficient opportunities for scaffolding SRLS, which both aligns with and contradicts the findings of this research. While teachers kept scaffolding students and handicapping them with support and assistance with their assignments including worrying for them and chasing students to complete requirements, they had not scaffolded their students' development of SRLS i.e. by guiding students to establish quality support networks, setting practical goals and/or managing their time and resources. The teachers' approaches towards teaching limited students' need to self-regulate the assessment tasks, and also did not provide the students with the mechanisms and strategies to think for themselves.

Overall, this research recommends using T.SAPS framework to scaffold teachers' integration of SRLS into their HE classroom, paying special attention to ILDs, beliefs and values and assessment design and literacy. These are important factors that can promote or limit a teacher's endeavour to integrate SRLS into assessment. Assessment design should provide regular opportunities for practice. Training teachers on the knowledge and processes of SRLS are highly recommended.

7.6   Recommendations for policy makers

This thesis recommends 1) raising policy makers' awareness of the importance of SRLS in academic achievement, 2) and the developmental stages of SRLS suggested in the literature. Moreover, 3) policy makers are advised to implement a methodology to explore students' individual SRL profiles to assess students' preparedness to college in addition to the placement tests. Likewise, 4) it is recommended that policy makers utilise their position to disseminate knowledge and research findings and create a culture that invests, in research including SRLS and

SAPS, in terms of funding, training researchers on research methods and data analysis and writing papers for publication, which are major issues in HE.

Firstly, self-regulation of learning should be a priority at HEIs, especially as policy makers consider students' satisfaction and experience at HEIs an indicator of the quality of learning and teaching and may affect students' retention rate and their choice of the institution. Students' satisfaction of college and/or university experience can be related to college preparedness, remedial courses, available resources and students' involvement in the educational system (Gillum, 2006). Therefore, lacking the strategies that enable students to navigate the educational environment effectively, i.e. SRLS can affect students' retention rates let alone their satisfaction of HEIs.

Secondly, as XCoE is part of a centralised system, it is important to raise policy makers and course designers' awareness of the positive impacts of implementing SRLS into educational courses and ensure their alignment with the learning objectives. Considering the importance of SRLS in maximising learning, assessment design needs to consider SRLS four developmental stages especially if designing assessment is conducted at a higher level than the teacher or the college, as is the case of standardised, unified, centralised educational systems.

Thirdly, there is a need to measure students' self-regulation profiles at entry level to decide on students' preparedness for college and consequently design courses that considers students' different profiles of learning. Measuring students' profiles can feed into assessment designs by incorporating interventions that aims to develop and enhance students' self-regulation strategies to prepare them for learning during and after graduation and to develop their workplace skills and strategies especially as high school diploma scores were not sufficient predictors of university academic achievement (see AlKharusi et al., 2012). Moreover, language, mathematics and computer skills placement tests function as a measurement of students' academic domain knowledge and skills needs, however, they do not necessarily indicate students' self-regulatory needs. Students' self-regulated learning profiles can give a better indication of the strategies, students need to maximise their learning.

Fourthly, research needs to be accessible to practitioners and teachers, who in turn need to be able to interpret research findings by developing their research literacy. Policy makers have to provide institutional access to recent evidence-based research including theoretical knowledge of SRLS and SAPS emphasising the importance of contextualising implications of SRLS research (Farley-Ripple et al., 2018). Moreover, contextualisation may imply the usability of SRLS evidence by utilising additional resources and efforts to disseminate knowledge and guidance and training

in use of evidence (Farley-Ripple et al., 2018). Research, where possible should inform educational decision-making, and policy makers should create a culture of research, disseminating research and evidence-based research in practice.

Overall, the use of research findings are influenced by different factors such as the organisational structure (units to evaluate evidence of SRLS research findings, the organisational culture (organisation routines i.e. meetings to disseminate evidence-based, processes and incentives to encourage research use) and the organisational leadership to make decisions and create a culture of research use (Farley-Ripple et al., 2018). For example, students can benefit from personality and SRL test at the beginning of their higher education journey, which can highlight areas for students counselling and monitoring especially the ones who can be found at academic risk (Donche & Van Petegem, 2010).

7.7   Concluding Remark

This original piece of work confirms the complexity of research in learning and assessment; the integration of SRLS into a writing assessment design has highlighted this complexity. However, there are a number of considerations for subsequent successful integration of SRLS into an English language classroom and to improve the ability of teachers to scaffold students' development of SRLS: the quality of training can make a difference, especially if training included an understanding of ILDs. Moreover, training should be discipline-specific conducted by teachers, promoting the understanding of the different variables that impact self-regulation. A lot of research findings in SRLS in the literature are not digestible, and therefore they highlight the need for professional development in SRLS. My thesis stresses the importance of researching and articulating this problematic area – the development of students SRLS in the context of language learning in Oman to support much needed enhancements within the field and to address the relative paucity of research of this nature within the Omani context. In substantiating my warrant, I have also made a significant contribution to the development of new understandings within assessment and self-regulation through the development of new conceptual framework to support teacher learning in self-regulatory assessment practices.

List of References

Abbas, S. (2016). The effect of reflection-supported process-based writing teaching on students'
  writing performance and attitudes. *Arab World English Journal, 7*(4), 42-62. Retrieved from
  https://dx.doi.org/10.24093/awej/vol7no4.4

Al Barwani, T., Al Yahmdi, H., Clayton, D., Al Kalbani, M., Neisler, O., Al Sulaimani, H., AlKharusi, H.,
  & Khan, M., (2012). *Measuring against expectations: Development of a multidimensional
  profile of university readiness of Omani higher education intake 2011 – 2013 (Case of SQU).*
  Presented at Quality Management & Enhancement in Higher Education 20-21 February
  2012 "Measuring against expectations" conference. Retrieved from
  https://www.researchgate.net/publication/297715909_Measuring_Against_Expectations_
  Development_of_a_Multidimensional_Profile_of_University_Readiness_of_Omani_Higher_
  Education_Intake_2011_-_2013_Case_of_SQU

Al Khatib, S. (2010). Meta-cognitive self-regulated learning and motivational beliefs as predictors
  of college students' performance. *International Journal for Research in Education (IJRE),* 27,
  57-72. Retrieved from
  http://search.shamaa.org/PDF/Articles/TSIjre/IjreNo27Y2010/ijre_2010-n27_057-
  072_eng.pdf

Al-Adawi, S., & AL-Balushi, A. (2016). Investigating content and face validity of English language
  placement test designed by colleges of applied sciences. *English Language Teaching, 9*(1),
  107-121. Retrieved from http://dx.doi.org/10.5539/elt.v9n1p107

Al-Badwawi, H. (2011). *The perceptions and practices of first year students' academic writing at
  the colleges of applied sciences in Oman* (Doctoral Thesis, Leeds University, Leads, the UK).
  Retrieved from
  https://pdfs.semanticscholar.org/dafb/3df717c2748ca5bf2ba6c2727b65eed22af9.pdf

Alexandrov, A. (2010). Characteristics of single-item measures in Likert scale Format. *The
  Electronic Journal of Business Research Methods, 8*(1), 1-12. Retrieved from
  www.ejbrm.com

Al-Hajri, F. (2014). English language assessment in the colleges of applied sciences in Oman:
  thematic document analysis. *English Language Teaching, 7*(3), 19-37. Retrieved from
  www.ccsenet.org/elt

Al-Issa, A. & Al-Balushi, A. (2011). English language teaching reform in the Sultanate of Oman: The case of theory and practice disparity. *Educational Research for Policy and Practice, 11*(2), 141-176. doi: 10.1007/s10671-011-9110-0

Al-Issa, A. (2005). The implications of the teacher educator's ideological role for the English language teaching system in Oman. *Teaching Education, 16(*4), 337-348. doi: 10.1080/10476210500345656

Al-Issa, A. (2006). The cultural and economic politics of English language teaching in Sultanate of Oman. *Asian EFL Journal, 8*(1), 194-218. Retrieved from http://www.asian-efl-journal.com/March_06.pdf#page=194

Al-Issa, A. (2011). Advancing English language teaching research in gulf cooperation council states universities. *MJAL, 3*(2), 60-77.

Al-Jadidi, H. (2009). *Teaching English as a foreign language in Oman: an exploration of English language teaching pedagogy in tertiary education (*Doctoral thesis, University of Melbourne, Melbourne, Australia). Retrieved from http://vuir.vu.edu.au/15216/1/Husna_Sept09.pdf

AlKharusi, H., Neisler, O., Al Barwani, T., Clayton, D., Al Sulaimani, H., Khan, M., Al Yahmadi, H., & Al Kalbani, M. (2012). Psychometric properties of the motivated strategies for learning questionnaire for Sultan Qaboos University students. *College student journal*, *46*(3), 567-580.

Al-Lamki, N. (2009). The beliefs and practices related to continuous professional-development of teachers of English in Oman (Doctoral thesis, Leeds University, Leeds, UK). Retrieved from https://pdfs.semanticscholar.org/ede3/91ba669e84068cadd81bc33ef9d2062e500b.pdf

Al-Lamki, S. (2002). Higher education in the Sultanate of Oman: the challenge of access, equity and privatization. *Journal of Higher Education Policy and Management, 24*(1), 75-86. Retrieved from http://dx.doi.org/10.1080/13600800220130770

Al-Mahrooqi, R. (2012a). English communication skills: how are they taught at schools and universities in Oman? *English Language Teaching*, *5*(4), 124-130. Retrieved from www.ccsenet.org/elt

Al-Mahrooqi, R. (2012b). A student perspective on low English proficiency in Oman*. International Education Studies, 5*(6), 263-271. Retrieved from http://dx.doi.org/10.5539/ies.v5n6p263

Al-Rawahi, N., & Al-Balushi, S. (2015). The effect of reflective science journal writing on students' self-regulated learning strategies. *International Journal of Environmental & Science Education, 10*(3), 367-379.

Al-Saadi, Z. (2018). The effects of proficiency in English as a foreign language, gender and writing beliefs on the writing processes and products of undergraduate Omani students (Doctoral Thesis, Southampton University, Southampton, the UK). Retrieved from https://eprints.soton.ac.uk/427370/

Alsaawi, A. (2014). A critical review of qualitative interviews. *European Journal of Business and Social Sciences, 3*(4), 149-156. Retrieved from http://www.ejbss.com/recent.aspx

Alshenqeeti, H. (2014). Interviewing as a data collection method: a critical review. *English Linguistics Research, 3*(1), 39-45. doi: 10.5430/elr.v3n1p39 at www.sciedu.ca/elr

Andrade, M. S., & Bunker, E. L. (2011). The role of SRL and TELEs in distance education: Narrowing the gap. In G. Dettori & D. Persico (Eds), *Fostering self-regulated learning through ICT* (pp.105-121). Hershey: New York, Information Science Reference.

Aoki, Y., Seta, K., & Okamoto, M. (2010). Basic consideration to improve self-regulatory skills using mobile devices. In S. L. Wong et al. (Eds.), *Proceedings of the 18th International Conference on Computers in Education* (pp. 437-441). Putrajaya, Malaysia: Asia–Pacific Society for Computers in Education.

Badiyepeymaie Jahromi, Z., Mosalanejad L., & Rezaee R. (2016). The effect of web quest and team-based learning on students' self-regulation. *Journal of Advanced Medical Education and Professionalism, 4*(2), 80-87. Retrieved from https://europepmc.org/articles/PMC4827760;jsessionid=9002165E87E5994A700CF5F1CEFF632B

Bahari, S. (2010). Qualitative versus quantitative research Strategies: contrasting epistemological and ontological assumptions. *Journal of Technology, 52*(1), 17–28. Retrieved from https://doi.org/10.11113/sh.v52n1.256

Bandura, A. (1994). Self-efficacy. In V. S. Ramachaudran (Ed.), *Encyclopedia of human behavior* (Vol. 4, pp. 71-81). New York: Academic Press. (Reprinted in H. Friedman [Ed.], Encyclopedia of mental health. San Diego: Academic Press, 1998).

Bandura, A. (2001). Social cognitive theory: An agentic perspective. *Annual Review of Psychology, 52*, 1-26. Retrieved from https://www.uky.edu/~eushe2/Bandura/Bandura2001ARPr.pdf

Beck, R. J., Skinner, W. F., & Schwabrow, L. A. (2013). A study of sustainable assessment theory in higher education tutorials. *Assessment & Evaluation in Higher Education, 38*(3), 326-348. doi: 10.1080/02602938.2011.630978

Bembenutty, H. (2011). Self-regulation of learning in postsecondary education. In H. Bembenutty (Ed), *Self-regulated learning: New directions for teaching and learning,* (Number 126, pp. 3-8). San Francisco, USA: Wiley Periodicals.

Bembenutty, H., & Chen, P. (2005). Self-efficacy and delay of gratification. *Academic Exchange Quarterly*, *9*(4), 78–86. Retrieved from https://doi.org/10.2466/pr0.104.2.613-623

Bembenutty, H., & White, M. C. (2013). Academic performance and satisfaction with homework completion among college students. *Learning and Individual Differences, 24*, 83–88. doi:10.1016/j.lindif.2012.10.013

Bembenutty, H., White, M. C., & Vélez, M. R. (2015). Self-regulated learning and development in teacher preparation training. *Springer Briefs in Education*, 9-28. doi: 10.1007/978-94-017-9950-8_2

Bennett, S., Dawson, P., Bearman, M., Molloy, E. & Boud, D. (2016). How technology shapes assessment design: findings from a study of university teachers. *British Journal of Educational Technology, 00*(00), 1-11.

Bercher, D. (2012). Self-monitoring tools and student academic success: When perception matches reality. *Journal of College Science Teaching, 41*(5), 26-32.

Bergkvist, L. & Rossiter, J. R. (2007). The predictive validity of multiple-item versus single-item measures of the same constructs. *Journal of Marketing Research, 44*(2), 175-184.

Bhattacherjee, A. (2012). *Social science research: principles, methods, and practices*. Textbooks collection, Book 3 (2nd ed). University of South Florida: Scholar Commons. Retrieved from http://scholarcommons.usf.edu/oa_textbooks

Biggs, J. (1987). *Study process questionnaire manual: Student approaches to learning and studying.* Melbourne, Australia: Australian Council for Educational Research.

Biggs, J., & Tang, C., (2011). *Teaching for quality learning at university* (4th Ed.). Berkshire, UK: McGraw-Hill companies.

Black, P., & Jones, J. (2006). Formative assessment and the learning and teaching of MFL: sharing the language learning road map with the learners. *The Language Learning Journal, (34*)1, 4-9. doi: 10.1080/09571730685200171

Black, P., & Wiliam, D. (1998). Assessment and classroom learning. *Assessment in Education, 5*(1), 7–74.

Black, P., Wiliam, D. (2009). Developing the theory of formative assessment. Educational Assessment, *Evaluation and Accountability, 21*, 5-31. doi: 10.1007/s11092-008-9068-5

Blandford, A. (2013). Semi-structured qualitative studies. In M. Soegaard and R. F. Dam (Eds.), *The encyclopaedia of human-computer interaction* (2nd Ed). Aarhus, Denmark: The Interaction Design Foundation. Retrieved from http://www.interactiondesign.org/encyclopedia/semi-structured_qualitative_studies.html

Bliuc, A-M., Ellis, R., Goodyear, P. and Hendres, D. (2011). Understanding student learning in context: relationships between university students' social identity, approaches to learning, and academic performance. *European Journal of Psychology Education*, *26*, 417–433. doi: 10.1007/s10212-011-0065-6

Boekaerts, M. (1999). Self-regulated learning: where we are today. *International Journal of Educational Research*, *31*, 445-457.

Bort-Mir, L. (2015). New ways of teaching metacognitive skills in higher education: Converstand, a software for a better knowledge acquisition. *Proceedings of INTED2015 Conference 2nd-4th March 2015, (*pp*.* 4557-4562). Madrid, Spain: IATED.

Bose, J., & Rengel, Z. (2009). A model formative assessment strategy to promote student-centred self-regulated learning in higher education. *US-China Education Review, 6*(12), 29-35.

Boud, D. (2000). Sustainable assessment: Rethinking assessment for the learning society. *Studies in Continuing Education, 22*(2), 151-167.

Boud, D. (2007). Reframing assessment as if learning were important. In D. Boud & N. Facchikov (Eds.), *Rethinking assessment in higher education for the longer term* (pp. 14-25). London, UK: Routledge.

Boud, D. (2014). Shifting views of assessment: from teacher's business to sustaining learning. In C. Kreber, C., Anderson, NC. Entwistle, N. and & J. McArthur, J. (Eds), *Advances and innovations in university assessment and feedback* (pp. 13-31). Edinburgh, UK: Edinburgh University Press.

Boud, D. (2015). Feedback: ensuring that it leads to enhanced learning. *The Clinical Teacher*, *12*, 3–7. John Wiley & Sons Ltd.

Boud, D. and Associates (2010). *Assessment 2020: Seven propositions for assessment reform in higher education.* Sydney, Australia: Australian Learning and Teaching Council.

Boud, D. and Falchikov, N. (2007). Introduction: assessment for the longer term. In D. Boud & N. Falchikov, N. (Eds.), *Rethinking assessment for higher education: learning for the longer term* (pp. 3-13)*.* London, UK: Routledge.

Boud, D. and Soler, R. (2015). *Sustainable assessment revisited Assessment and Evaluation in Higher Education*. *Assessment & Evaluation in Higher Education, 41*(3), 400-413. doi: 10.1080/02602938.2015.1018133

Boud, D., Lawson, R. & Thompson, D. (2015). The calibration of student judgement through self-assessment: disruptive effects of assessment patterns. *Higher Education Research & Development, 34*(1), 45-59. doi: 10.1080/07294360.2014.934328

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*(2), 77-101. doi: 10.1191/1478088706qp063oa

Brown, G. T. L., Peterson, E. R. and Yao, E. S., (2016). Student conceptions of feedback: Impact on self-regulation, self-efficacy, and academic achievement. *British Journal of Educational Psychology,* 86, 606–629.

Brown, J. (2011). Statistics corner: Questions and answers about language testing statistics: Likert items and scales of measurement. *SHIKEN: JALT Testing & Evaluation SIG Newsletter, 15*(1), 10-14.

Burnette, J., O'Boyle, E., VanEpps, E., Pollack, J., and Finkel, E. (2013). Mind-Sets Matter: A meta-analytic review of implicit theories and self-regulation. *Psychological Bulletin, 139*(3), 655–701.

Butler, D. L., & Winne, P. H. (1995). Feedback and self-regulated learning: A theoretical synthesis. *Review of Educational Research*, *65*(3), 245–281. Retrieved from https://doi.org/10.3102/00346543065003245

Cadorin, L., Rei, A., Dante, A., Bulfone, T., Viera, J., & Palese, A. (2015). Enhancing self-directed learning among Italian nursing students: A pre- and post-intervention study. *Nurse Education Today, 35*, 746-753.

Carless, D., Salter, D., Yang, M. & Lam, J. (2011). *Developing sustainable feedback practices. Studies in Higher Education, 36*(4), 395-407. doi: 10.1080/03075071003642449

Cash, R. (2016). *Self- regulation in the classroom: helping students learn how to learn.* Minneapolis, USA: Free Spirit Publishing.

Cassidy, S. (2011). Self-regulated learning in higher education: identifying key component processes. *Studies in Higher Education, 36*(8), 989-1000.

Castello, M., Inesta, A., & Monereo, C. (2009). Towards self-regulated academic writing: an exploratory study with graduate students in a situated learning environment. *Electronic Journal of Research in Educational Psychology, 7*(3), 1107-1130.

Chamot, A. (2004). Issues in language learning strategy research and teaching. *Electronic Journal of Foreign Language Teaching, 1*(1), 14-26.

Clark, I. (2012). Formative assessment: Assessment is for self-regulated Learning. *Educational Psychology Review, 24*(2), 205-249. doi: 10.1007/s10648-011-9191-6. Retrieved from https://www.researchgate.net/publication/229614556

Cleary T., Zimmerman B., & Keating, T. (2006). Training physical education students to self-regulate during basketball free throw practice. *Research Quarterly for Exercise and Sport, 77*(2), 251-262.

Cleary, T. (2011). Professional development needs and practices among educators and school psychologists. In H. Bembenutty (Ed.), *Self-regulated learning: New directions for teaching and learning* (Number 126, pp. 77-88). San Francisco, USA: Wiley Periodicals.

Cleary, T., & Chen, P. (2009). Self-regulation, motivation, and math achievement in middle school: Variations across grade level and math context. *Journal of School Psychology, 47*, 291–314. doi:10.1016/j.jsp.2009.04.002

Creswell, J. (2014). *Research design: Qualitative, quantitative & mixed methods approaches* (4th Ed.). London, UK: Sage Publication.

Dargusch, J., Harris, L., Reid-Searl, K., & Taylor, B. (2017). Creating first-year assessment support: Lecturer perspectives and student access. *Distance Education, 38*(1), 106-122. doi: 10.1080/01587919.2017.1299566

De Boer, H., Bergstra, A., & Kostons, D. (2012). *Effective strategies for self-regulated learning: A meta-analysis*. Groningen: GION onderzoek/onderwijs. Retrieved from https://www.rug.nl/research/portal/files/54332660/Effective_Strategies_for_Self_regulated_Learning.pdf

De Bruin, A., & Van Gog, T. (2012). Improving self-monitoring and self-regulation: From cognitive psychology to the classroom. *Learning and Instruction, 22*, 245–252. doi: 10.1016/j.learninstruc.2012.01.003

De Bruin, A. B. H., & van Merriënboer, J. J. G. (2017). Bridging cognitive load and self-regulated learning research: a complementary approach to contemporary issues in educational research. *Learning and Instruction, 51*, 1–9.

De Bruin, A., Dunlosky, J., & Cavalcanti, R. (2017). Monitoring and regulation of learning in medical education: the need for predictive cues. *Medical Education*, *51*, 575–584. doi: 10.1111/medu.13267

Dent, A. & Koenka, A. (2016). The relation between self-regulated learning and academic achievement across childhood and adolescence: A meta-analysis. *Educational Psychology Review*, *28*,425–474. doi: 10.1007/s10648-015-9320-8

Desimone, L. (2009). Improving impact studies of teachers' professional development: Toward better conceptualizations and measures. *Educational Researcher, 38*(3), 181–199. doi: 10.3102/0013189X08331140

DiBenedetto, M., & Zimmerman, B. (2010). Differences in self-regulatory processes among students studying science: A microanalytic investigation. *The international Journal of Educational and Psychological Assessment, 5*, 2-23.

Dieronitou, I. (2014). The ontological and epistemological foundations of qualitative and quantitative approaches to research with particular reference to content and discourse analysis of textbooks. *International Journal of Economics, Commerce, and Management,*

2(10), 1-17. Retrieved from

https://pdfs.semanticscholar.org/0d0d/7ff7b01e4daed1fc14b54191964076d6581f.pdf

Donche, V., & Van Petegem, P. (2010). The relationship between entry characteristics, learning style and academic achievement of college freshmen. In M. E. Poulsen (Ed.), *Higher Education: Teaching, internationalisation and student issues* (pp. 277-288). Uk: Nova Science Publishers, Inc. Retrieved from

https://www.academia.edu/21100156/The_relationship_between_entry_characteristics_learning_style_and_academic_achievement_of_college_freshmen

Dornyei, Z. (1998). Motivation in second and foreign language learning: Survey Article. *Language Teaching, 31*(3), 117-135. doi: 10.1017/S026144480001315X

Dörrenbächer, L., & Perels, F. (2016). Self-regulated learning profiles in college students: Their relationship to achievement, personality, and the effectiveness of an intervention to foster self-regulated learning. *Learning and Individual Differences, 51*, 229–241. Retrieved from http://dx.doi.org/10.1016/j.lindif.2016.09.015

Dresel, M., Schmitz, B., Schober, B., Spiel, C., Ziegler, A., Engelschalk, T., Jöstl, G., Klug, J., Roth, A., Wimmer, B., & Steuer, G. (2015). Competencies for successful self-regulated learning in higher education: structural model and indications drawn from expert interviews. *Studies in Higher Education, 40*(3), 454-470. doi: 10.1080/03075079.2015.1004236

Duncan, T. G., & McKeachie, W. J. (2005). The making of the motivated strategies for learning questionnaire. *Educational Psychologist, 40*(2), 117-128. Retrieved from https://doi.org/10.1207/s15326985ep4002_6

Dunlosky, J., Rawson, K., Marsh, E., Nathan, M., & Willingham, D. (2013). Improving students' learning with effective learning techniques: Promising directions from cognitive and educational psychology. *Psychological Science in the Public Interest, 14*(1) 4 –58. doi: 10.1177/1529100612453266

Edwards, R., & Holland, J., (2013). *What is a qualitative Interview? 'What is?' Research Methods series* (edited by Graham Crow). London, UK: Bloomsbury Academic.

Effeney, G., Carroll, A., & Bahr, N. (2013). Self-regulated learning: key strategies and their sources in a sample of adolescent males. *Australian Journal of Educational & Developmental Psychology*, *13*, 58-74. Retrieved from

https://www.newcastle.edu.au/__data/assets/pdf_file/0012/100245/V13_Effeney_Carroll_Bahr.pdf

Eva, K., & Regehr, G. (2011). Exploring the divergence between self-assessment and self-monitoring. *Advances in Health Sciences Education, 16*, 311–329. doi: 10.1007/s10459-010-9263-2

Evans, C. (2013). Making sense of assessment feedback in higher education. *Review of Educational Research, 83*(1), 70-120. doi: 10.3102/0034654312474350

Evans, C. (2016). *Effective assessment tool framework*. Based on: Evans, 2013 and developed with Researching Assessment Practices Group, University of Southampton.

Evans, C. (2018). *Effective assessment tool framework*. Based on: Evans, 2013, Waring and Evans, 2015, and developed with Researching Assessment Practices Group, University of Southampton. Updated version.

Evans, C. (Forthcoming). *Effective assessment tool framework*. Based on: Evans, 2013, Waring and Evans, 2015, and developed with Researching Assessment Practices Group, University of Southampton. Updated version of EAT research database.

Evans, C., Howson, C. K., & Forsythe, A. (2018). Making sense of learning gain in higher education. *Higher Education Pedagogies*, *3*(1), 1-45. doi: 10.1080/23752696.2018.1508360

Evans, C., & Waring, M. (2012). Enhancing Feedback Practice: A Personal Learning Styles Pedagogy Approach. In S. Rayner & E. Cools (Eds.), *Style differences in cognition, learning and management* (PP. 188-203). New York, US: Routledge.

Evans, C., & Waring, M. (Forthcoming). *Enhancing students' assessment feedback skills within higher education*. Oxford, UK: Oxford University Press.

Evans, C., Kirby, J., & Fabrigar, L. (2003). Approaches to learning, need for cognition, and strategic flexibility among university students. *British Journal of Educational Psychology, 73*, 507–528.

Evans, C., Zhu, X., Chiorean, C., Chipulu, C., Fair, N., Ford, N., Gobbi, M., Grange, L., Harding, I., Harris, L., Lock, J., Lotti, E., Mashanovich, G., Perisic, V., Pettit, S., Spencer, V., Telford, M., & Thorpe, K. (2018*). Supporting student agency and success in higher education and beyond through the development of assessment feedback skills (the ability to self-monitor*

and self-evaluate). Experimental Innovations OfS Catalyst A report. Southampton: University of Southampton with Office for Students.

Farley-Ripple, E., May, H., Karpyn, A., Tilley, K., & McDonough, K. (2018). Rethinking connections between research and practice in education: A conceptual framework. *Educational Researcher, 47*(4), 235 –245. doi: 10.3102/0013189X18761042

Fastré, G. M. J., van der Klink, M. R., Sluijsmans, D., & van Merriënboer, J. J. G. (2013). Towards an integrated model for developing sustainable assessment skills. *Assessment & Evaluation in Higher Education, 38*(5), 611-630. doi: 10.1080/02602938.2012.674484

Ferreira, P., Simao, A., & Silva, A. (2015). Does training in how to regulate one's learning affect how students report self-regulated learning in diary tasks? *Metacognition Learning, 10*, 199-230.

Field, A. (2009). *Discovering statistics using SPSS* (3rd Ed.). London, Uk: Sage Publication.

Flook, L., Goldberg, S., Pinger, L., & Davidson, R. (2015). Promoting prosocial behaviour and self-regulatory skills in preschool children through a mindfulness-based kindness curriculum. *Developmental Psychology*, *51*(1), 44-51.

Fook, C., & Sidhu, G. (2010). Authentic assessment and pedagogical strategies in higher education. *Journal of Social Sciences, 6*(2), 153-161.

Fyfe, E., & Rittle-Johnson, B. (2016). Feedback both helps and hinders learning: the causal role of prior knowledge. *Journal of Educational Psychology, 108*(1), 82–97. Retrieved from http://dx.doi.org/10.1037/edu0000053

Gillum, D. (2006). Community college students perceived academic preparedness, study skills and habits, college satisfaction, and factors influencing remediation (PhD thesis, Howard University, Washington, USA) Retrieved from https://search.proquest.com/docview/305329084?pq-origsite=gscholar

Graham, S., Harris, K., & Mason, L. (2005). Improving the writing performance knowledge, and self-efficacy of struggling young writers: the effects of self-regulated strategy development. *Contemporary Educational Psychology, 30*, 207-241.

Grant, B., & Giddings, L. (2002). Making sense of methodologies: A paradigm framework for the novice researcher. *Contemporary Nurse*, *13*(1), 10-28.

Gray, D. (2013). *Doing research in the real world* (3rd Ed.). London, UK: Sage Publications.

Greene, J. A., & Azevedo, R. (2007). A theoretical review of Winne and Hadwin's model of self-regulated learning: new perspectives and directions. *Review of Educational Research, 77*(3), 334-372. doi: 10.3102/003465430303953

Grosas, A., Raju, S., Schuett, B., Chuck, J., & Millar, T. (2016). Determining if active learning through a formative assessment process translates to better performance in summative assessment. *Studies in Higher Education, 41*(9), 1595-1611, doi: 10.1080/03075079.2014.988704

Grossman, P., Hammerness, K., & McDonald, M. (2009) Redefining teaching, re-imagining teacher education. *Teachers and Teaching: Theory and Practice, 15*(2), 273–289.

Harlen, W., & James, M. (1997). Assessment and Learning: differences and relationships between formative and summative assessment. *Assessment in Education: Principles, Policy & Practice, 4*(3), 365-379. doi: 10.1080/0969594970040304

Harrell, M., & Bradley, M. (2009). *Data collection methods: semi-structured interviews and focus groups*. Pittsburgh: RAND Corporation, National Defence Research Institute. Retrieved from https://www.rand.org/pubs/technical_reports/TR718.html.

Harris, K. R., & Graham, S. (2016). Self-regulated strategy development in writing: Policy implications of an evidence-based practice. *Policy Insights from the Behavioural and Brain Sciences, 3*(1), 77–84. Retrieved from https://doi.org/10.1177/2372732215624216

Harris, K., Graham, S., MacArthur, C., Reid, R., & Mason, L. (2011). Self-regulated Learning processes and children writing. In B. J. Zimmerman & D. H. Schunk (Eds*.), Handbook of self-regulation of learning and performance* (pp. 187-202). New York, USA: Routledge.

Hattie, J., & Timperley, H. (2007). The power of feedback. *Review of Educational Research, 77*(1), 81–112. doi: 10.3102/003465430298487

Hawe, E., & Dixon, H. (2017). Assessment for learning: a catalyst for student self-regulation. *Assessment & Evaluation in Higher Education*, *42*(8), 1181-1192. doi: 10.1080/02602938.2016.1236360

HEAC (2016). *About us.* Retrieved December, 2016 from
http://www.heac.gov.om/index.php?option=com_content&view=article&id=2&Itemid=2&lang=en

HEAC (2017). *Student guidebook (pp.* 151-153). Retrieved December 2016 from
http://www.heac.gov.om/downloads/student%202017-%202018.pdf

Hetzner, S., Brna, P., Dimitrova, V., Steiner, C., & Colnan, O. & (2011). Adult self-regulated learning through linking experience in simulated and real world: A holistic approach*. In C. Delgado Kloos, D.Gillet, R. M. Crespo García, F. Wild & M. Wolpers (Eds.), Towards Ubiquitous Learning: Proceedings of the 6th European Conference of Technology Enhanced Learning, EC-TEL 2011, Palermo, Italy, September 20-23, 2011* (pp.166-180). Verlag Berlin, Heidelberg: Springer.

Hinkin, R., Tracey, J., & Enz, C. (1997). *Scale construction: Developing reliable and valid measurement instruments*. Journal of Hospitality & Tourism Research, 21(1), 100-120. doi: 10.1177/109634809702100108. Retrieved from
http://scholarship.sha.cornell.edu/articles/613

Hoogerheide, V., Loyens, S., & van Gog, T. (2014). Effects of creating video-based modelling examples on learning and transfer. *Learning and Instruction 33*, 108-119.
http://dx.doi.org/10.1016/j.learninstruc.2014.04.005

Hounsell, D. (2007). Towards more sustainable feedback to students. In D. Boud and N. Falchikov (Eds), *Rethinking Assessment in Higher Education: Learning for the Longer Term* (pp. 101-113). London, UK: Routledge.

James, D. 2014. Investigating the Curriculum and Knowledge in Higher Education: the Value of a Learning Cultures' Approach. *Higher Education, 67*(2), 155-169.

Johns, R. (2010). *Survey question bank: methods fact sheet 1: Likert items and scales*. University of Strathclyde. Retrieved from
https://www.ukdataservice.ac.uk/media/262829/discover_likertfactsheet.pdf

Joughin, G. (2010). The hidden curriculum revisited: A critical review of research into the influence of summative assessment on learning. *Assessment & Evaluation in Higher Education, 35*(3), 335-345, doi: 10.1080/02602930903221493

Kajornboon, A. (2005). *Using interviews as research instruments. E-Journal for Researching Teachers, 2*(1), 1-8. Retrieved from http://www.culi.chula.ac.th/research/publications/4%20Research%20and%20%20Academic%20Ariticles.pdf

Kearney, S., Perkins, T., & Kennedy-Clark, S. (2016). Using self- and peer-assessment for summative purposes: analysing the relative validity of the AASL (Authentic Assessment for Sustainable Learning) Model. *Assessment & Evaluation in Higher Education, 41*(6), 840–853. doi: 10.1080/02602938.2015.1039484

Keats, D. (2000). *Interviewing: A practical guide for students and professionals*. Buckingham, Philadephia: Open University Press.

Kozhevnikov, M., Evans, C., & Kosslyn, S. M. (2014). Cognitive style as environmentally sensitive individual differences in cognition: A modern synthesis and applications in education, business, and management. *Psychological Science in the Public Interest, 15*(1), 3–33. Retrieved from https://doi.org/10.1177/1529100614525555

Langer, V., Linke, K. & Schimanke, F. (2014). Improvement of self-directed learning by using the inverted classroom model for a basic module in business computer sciences. In E. Großkurth & J. Handke (Eds.), *the inverted classroom model: The 3rd German ICM-Conference-Proceedings* (pp. 73-82). Marburg: De Gryter Oldenbourg

Lichtinger, E., & Kaplan, A. (2011). Purpose of engagement in academic self-regulation. In H. Bembenutty (Ed.), *Self-regulated learning: New directions for teaching and learning* (Number 126, pp. 9-20). San Francisco, USA: Wiley Periodicals.

Liu, K., & Chan, C. (2009). Metacognitive mental imagery strategies for training of daily living skills for people with brain damage: The self-regulation and mental imagery program. In I. Söderback (Ed.), *International Handbook of Occupational Therapy Interventions*, (pp. 233-240). Springer.

Loft, M., & Cameron, L. (2013). Using mental imagery to deliver self-regulation: Techniques to improve sleep behaviors. *The Society of Behavioural Medicine, 46*, 260-272. doi: 10.1007/s12160-013-9503-9

Zeidner, M., Boekaerts, M., & Pintrich P.R. (2000). Self-regulation: directions and challenges for future research. In M. Boekaerts, P.R. Pintrich, & M. Zeidner (Eds.), *Handbook of self-regulation* (pp. 750-768). San Diego, CA: Academic Press.

MacDonald, B., & Boud, D. (2003). The Impact of self-assessment on achievement: the effects of self-assessment training on performance in external examinations. *Assessment in Education, 10*(2), 209-220.

Martin, A., & Hand, B. (2009). Factors affecting the implementation of argument in the elementary science classroom: A longitudinal case study. *Research in Science Education. 39*, 17–38. doi: 10.1007/s11165-007-9072-7

McCombs B.L. (1989). Self-regulated learning and academic achievement: a phenomenological view. In B. J., Zimmerman & D.H Schunk (Eds.*), Self-regulated learning and academic achievement* (pp. 51-82). Springer Series in Cognitive Development. Springer, New York, NY.

Mcmahon, M., & Luca, J. (2001). Assessing students' self-regulatory skills. In *Meeting at the crossroads Proceedings of the 18th Annual Conference of the Australasian Society for Computers in Learning in Tertiary Education, Melbourne, Australia, 9-12 December 2001* (pp. 427-434). http://www.ascilite.org.au/conferences/melbourne01/pdf/papers/mcmahonm.pdf on 14.3.2010.

MOE (2017, January 24). *MOE reinforces policies of teacher education programmes within the national standards for the teaching profession*. Retrieved January, 2016 from http://home.moe.gov.om/arabic/module.php?module=topics-showtopic&CatID=1&ID=4525

MOHE (2011). *Foundation Program: 2011-12 final version.* Retrieved December, 2015 from https://sites.google.com/a/cas.edu.om/foundation-programme/.

MOHE (2013). *A guide for academic programs in colleges of applied sciences 2005 – 2013.* Retrived April 1, 2017 from https://rustaq.cas.edu.om/ckfinder/userfiles/files/Academic%20program%2018_3x26new%20size%20(1).pdf

MOHE, (2016a, December 1). *General directorate of colleges of applied sciences.* Retrieved from
https://mohe.gov.om/InnerPage.aspx?id=2F491019-0855-4708-9F7D-AD03EAAB10BB

MOHE, (2016b, December 1). *MOHE vision and mission*. Retrieved from
https://mohe.gov.om/InnerPage.aspx?id=D8D3FCA8-0E81-429E-BF4C-3272D891DF95#

Montalvo, F.T., & Torres, M.C. (2004). Self-regulated learning - current and future directions.
Electronic Journal of Research in Educational Psychology, 2, 1-34.

Mooij, T., Steffens, K., & Andrade, M.S. (2014). Self-regulated and technology-enhanced learning:
A European perspective. *European Educational Research Journal, 13*(5), 519-528.

Moos, D. C., & Ringdal, A. (2012). Self-regulated learning in the classroom: A literature review on
the teacher's role. *Educational Research International,* 1-15. doi: 10.1155/2012/423284

Msaddek, M. (2016). The impact of metacognitive strategy training on comprehension monitoring
among Moroccan EFL university learners. *Arab World English Journal, 7*(4), 139-154.

Mullen, C. (2011). Facilitating self-regulated learning using mentoring approaches with doctoral
students. In B. J. Zimmerman & D. H. Schunk (Eds.), *Handbook of self-regulation of learning
and performance* (pp. 137-152). New York, USA: Routledge.

National Research Council (2001). The relationship between formative and summative
assessment in the classroom and beyond. In J. M. Atkin, P. Black & J. Coffey (Eds.),
Classroom Assessment and the National Science Education Standards (pp. 59-78).
Washington, DC: The National Academies Press. doi: 10.17226/9847.

Nawal A. F. (2018). Cognitive load theory in the context of second language academic writing.
Higher Education Pedagogies, 3(1), 385-402. doi: 10.1080/23752696.2018.1513812

NCSI (2019). *Population clock.* Retrieved on 6 November 2019 from
https://www.ncsi.gov.om/Pages/NCSI.aspx

Nicol, D., & Macfarlane-Dick, D. (2006). Formative assessment and self-regulated learning: a
model and seven principles of good feedback practice. *Studies in Higher Education, 31*(2),
199-218. Retrieved from http://dx.doi.org/10.1080/03075070600572090

Nicol, D., Thomson, A., & Breslin, C. (2014). Rethinking feedback practices in higher education: A
peer review perspective. *Assessment & Evaluation in Higher Education, 39*:1, 102-122. doi:
10.1080/02602938.2013.795518

Nilson, L. (2013). *Creating self-regulated learners: strategies to strengthen students' self-awareness and learning skills*. Virginia, USA: Stylus Publishing. LLC.

Ning, H., & Downing, K. (2012). Influence of student learning experience on academic performance: the mediator and moderator effects of self-regulation and motivation. *British Educational Research Journal, 38*(2), 219–237. https://doi.org/10.1080/01411926.2010.538468

Oman Academic Accreditation Authority, (OAAA) (2014, December). *Report of an audit of the college of applied sciences-X*. Unpublished report.

Osborne, J., Simon, S., Christodoulou, A., Howell-Richardson, C., & Richardson, K. (2013). Learning to argue: A study of four schools and their attempt to develop the use of argumentation as a common instructional practice and its impact on students. *Journal of Research in Science Teaching, 50*(3), 315–347. doi: 10.1002/tea.21073

Pallant, J. (2016). *SPSS survival manual: A step-by-step guide to data Analysis using IBM SPSS* (6th Ed.). Maidenhead: Open University Press/McGraw-Hill.

Panadero, E., & Alonso-Tapia, J. (2013). Self-assessment: Theoretical and practical connotations. When it happens, how is it acquired and what to do to develop it in our students? *Electronic Journal of Research in Educational Psychology, 11*(2), 551-576. Retrieved from http://dx.doi.org/10.14204/ejrep.30.12200

Panadero, E. (2017). A review of self-regulated learning: six models and four directions for research. *Frontiers in Psychology, 8*(422), 1-28. Retrieved from https://doi.org/10.3389/fpsyg.2017.00422

Panadero, E., Jonsson, A., & Strijbos, J-W (2016). Scaffolding self-regulated learning through self-assessment and peer assessment: Guidelines for classroom implementation. In D. Laveault & L. Allal (Eds*.), Assessment for Learning: Meeting the Challenge of Implementation* (pp. 311-326). Dordrecht: Springer.

Paas, f., van Gog, t., & Sweller, J. (2010). Cognitive load theory: New conceptualizations, specifications, and integrated research perspectives. *Educational Psychology Review, 22,* 115–121. doi: 10.1007/s10648-010-9133-8

Perels, F., Merget-Kullmann, M., Wende, M., Schmitz, B., & Buchbinder, C. (2009). Improving self-regulated learning of preschool children: Evaluation of training for kindergarten teachers. *Br J Educ Psychology, 79*(2), 311-327. doi: 10.1348/000709908X322875

Perry, N., & Rahim, A. (2011). Studying self-regulated learning in classrooms. In B. J. Zimmerman & D. H. Schunk (Eds.), *Handbook of self-regulation of learning and performance* (pp. 122-136). New York, USA: Routledge.

Peterson, J. E., & Crystal, J. A. (2016, June 27). *Oman*, Encyclopaedia Britannica, Inc. Retrieved April 03, 2017 from https://www.britannica.com/place/Oman

Pintrich, P. R. & Zusho, A. (2002). Student motivation and self-regulated learning in the college classroom. In J. C. Smart & W.G. Tierney (Eds), *Higher Education: handbook of theory and research* (Volume XVII, pp. 731-810). New York: Agathon Press.

Pintrich, P. R. (2000). The role of goal orientation in self-regulated learning. In M. Boekaerts, P. R. Pintrich & M. Zeidner (Eds.) *Handbook of self-regulation* (pp 451-502). Academic Press.

Pintrich, P. R. (2004). A conceptual framework for assessing motivation and self-regulated learning in college students. *Educational Psychology Review, 16*(4), 385-407.

Pintrich, P., Smith, D., Garcia, T. & McKeachie, W. (1991). *A manual for the use of the motivated strategies for learning questionnaire (MSLQ).* National Centre for Research to Improve Post-secondary Teaching and Learning. (Ann Arbor, Michigan).

Pintrich, R. R., & DeGroot, E. V. (1990). Motivational and self-regulated learning components of classroom academic performance. *Journal of Educational Psychology, 82*, 33-40.

Puustinen, M., & Pulkkinen, L. (2001). Models of self-regulated Learning: A review. *Scandinavian Journal of Educational Research, 45*(3), 269-286. doi: 10.1080/00313830120074206

Raedts, M., Van Steendam, E., De Grez, L., Hendrickx, J., & Mausi, C. (2017). The Effects of different types of video types of video modelling on undergraduate students' motivation and learning in an academic writing course. *Journal of Writing Research, 8*(3), 399-435. doi:10.17239/jowr-2017.03.03.01

Raver, C., Carter, J., McCoy, D., Roy, A., Ursache, A., & Friedman, A. (2012). Testing models of children's self-regulation within educational contexts: Implication for measurement. In

Janette B. Benson (Ed.), *Advances in Child Development and Behaviour* (Volume 42, pp. 245-270. Burlington: Academic Press.

Reeve, J. (2013). How students create motivationally supportive learning environments for themselves: The concept of agentic engagement. *Journal of Educational Psychology, 105*(3), 579–595. doi: 10.1037/a0032690.

Richardson, M., & Healy, M. (2013). Beneath the patchwork, quilt unravelling assessment. *Assessment & Evaluation in Higher Education*, *38*(7), 847-856.

Rijlaarsdam, G., Braaksma, M., Couzijn, M., Janssen, T., Raedts, M., Van Steendam, E., Toorenaar, A., & Van den Bergh, H. (2008). Observation of peers in learning to write, practice and research*. Journal of Writing Research, 1*(1), 53-83.

Ross, M., Green, S., Salisbury-Glennon, J., & Tollefson, N. (2006). college students' study strategies as a function of testing: An investigation into metacognitive self-regulation. *Innovative Higher Education, 30*(5), 361-375. doi: 10.1007/s10755-005-9004-2

Royal Decree 101/1996 (6th November 1996). Promulgating the Basic Statute of the State [Oman], Article 13. Retrieved from http://www.wipo.int/edocs/lexdocs/laws/en/om/om019en.pdf (Accessed: 20 June 2017).

Ruthven, K., Mercer, N., Taber, K., Guardia, P., Hofmann, R., Ilie, S., Luthman, S., & Riga, F., (2017) A research-informed dialogic teaching approach to early secondary school mathematics and science: the pedagogical design and field trial of the epiSTEMe intervention. *Research Papers in Education, 32*(1), 18-40. doi: 10.1080/02671522.2015.1129642

Ryan, A. B. (2006). Post-positivist approaches to research. *In researching and writing your thesis: a guide for postgraduate students* (pp. 12-26). MACE: Maynooth Adult and Community Education.

Sadler, D. (2012). Assuring academic achievement standards: from moderation to calibration. *Assessment in Education: Principles, Policy & Practice, 20*(1), 5-19. doi:10.1080/0969594X.2012.714742

Sadler, D. R. (1989). Formative assessment and the design of instructional systems. *Instructional Science*, *18*, 119-44

Sadler, D. R. (2009a). Grade integrity and the representation of academic achievement. *Studies in Higher Education, 34* (7): 807–826. doi: 10.1080/03075070802706553

Sadler, D. R. (2009b). Transforming holistic assessment and grading into a vehicle for complex learning, In G. Joughin (Ed.), *Assessment, Learning and Judgement in Higher Education*, (Pp. 45–63). Dordrecht: Springer.

Sadler, D. R. (2010). Beyond feedback: Developing student capability in complex appraisal. *Assessment & Evaluation in Higher Education*, *35*, 535-550.

Sadler, D. R. (2013). Opening up feedback: Teaching learners to see. In S. Merry, M. Price, D. Carless & M. Taras (Eds.), *Reconceptualising feedback in higher education: developing dialogue with students* (pp. 54-63). London, UK: Routledge.

Sagasser, M., Kramer, A., Van weel, C., & Van der Vleuten, C. (2015). GP supervisors' experience in supporting self-regulated Learning: A balancing act. *Advances in Health Science Education 20*, 727-744.

Sala-Bubare´, A., & Castello´, M. (2018). Writing regulation processes in higher education: A review of two decades of empirical research. *Reading and Writing, 31*, 757–777. doi: 10.1007/s11145-017-9808-3

Salamonson, Y., Ramjan, L., Van den Nieuwenhuizen, S., Metcalfe, L., Chang, S., & Everett, B. (2016). Sense of coherence, self-regulated learning and academic performance in first year nursing students: A cluster analysis approach. *Nurse Education in Practice, 17*, 208-213.

Samanian, S., & Roohani, A., (2017). Effects of self-regulatory strategy development on EFL learners' descriptive writing and reflective thinking. *Research in English Language Pedagogy, 6*(1), 95-116. doi: 10.30486/RELP.2018.538782

Schneider, M., & Preckel, F. (2017, March 23). Variables associated with achievement in higher education: A Systematic review of meta-analyses. *Psychological Bulletin, 143*(6), 565-600*.* Retrieved from http://dx.doi.org/10.1037/bul0000098

Schunk, D. H. (2005). Self-regulated learning: The educational legacy of Paul R. Pintrich. *Educational Psychologist, 40*(2), 85-94.

Schunk, D. H. (2009). Social cognitive theory and self-regulated learning: In B. J. Zimmerman & D. H. Schunk (Eds.), *Self-regulated learning and academic achievement: Theoretical perspectives* (2nd ed., pp. 125–151). Mahwah, NJ: Erlbaum.

Seifert, T., Gillig, B., Hanson, J., Pascarella, E., & Blaich, C. (2014). The conditional nature of high impact: Good practices on student learning outcomes. *The Journal of Higher Education, 85*(4), 531- 564.

Seufert, T. (2018). The interplay between self-regulation in learning and cognitive load. *Educational Research Review, 24*, 116–129. Retrieved from https://doi.org/10.1016/j.edurev.2018.03.004

Sontag, C., & Stoeger, H. (2015). Can highly intelligent and high-achieving students benefit from training in self-regulated learning in a regular classroom context? *Learning and Individual differences, 41*, 43-53.

Spector, P. (1992). *Summated rating scale construction: an introduction stage, University Papers Series. Quantitative Applications in the Social Sciences*. London, UK: Sage Publications, Inc.

Stoeger, H., & Ziegler, A. (2011). Self-regulatory training through elementary-school students: Homework completion. In B. Zimmerman & D. Schunk (Eds*.), Handbook of self-regulation of Learning and Performance*, (pp. 87-101). New York, USA: Routledge.

Stoeger, H., Fleischmann, S., & Obergriesser, S. (2015). Self-regulated learning (SRL) and the gifted learner in primary school: the theoretical basis and the empirical findings on a research program dedicated to ensuring that all students learn to regulate their own learning. *Asia Pacific Education Review, 16*(2), 257-267.

Suknaisith, A. (2014). The results of self-directed learning for project evaluation skills of undergraduate students. *Procedia- Social and Behavioural Sciences, 116*, 1676-1682.

Swaffield, S. (2011). Getting to the heart of authentic assessment for learning. *Assessment in Education: Principles, Policy & Practice, 18*(4), 433-449.

The Higher Education Academy-HEA, (2014). *Framework for partnership in learning and teaching in higher education* (pp1-7). Retrieved from https://www.heacademy.ac.uk/sites/default/files/resources/HEA_Framework_for_partnership_in_learning_and_teaching.pdf

Tobin, R. M., & Graziano, W. G., (2010). Delay of gratification: A review of fifty years of regulation research. In R. Hoyle (Ed.), *Handbook of self-regulation and personality.* Mahwah, NJ: Blackwell.

TRC (2011). TRC Annual Report 2011. Retrieved from https://www.trc.gov.om/trcweb/sites/default/files/2016-12/Annual_report_2011.pdf

Tschannen-Moran, M., & Hoy, A. W. (2001). Teacher efficacy: Capturing an elusive construct. *Teaching and teacher education, 17*(7), 783–805.

Van Dinthera, M., Dochyb, F., & Segers, M. (2011). Factors affecting students' self-efficacy in higher education: Review. *Educational Research Review, 6*, 95–108.

Van Zundert, M.J., Sluijsmans, D.M.A., Könings, K.D., & van Merriënboer, J. J. G. (2012). The differential effects of task complexity on domain-specific and peer assessment skills, *Educational Psychology, 32*(1), 127-145. doi: 10.1080/01443410.2011.626122

Vermunt, J., & Verloop, N. (1999). Congruence and friction between learning and Teaching. *Learning and Instruction, 9*, 257–280.

Vermunt, J.D., & Vermetten, Y.J. (2004). Patterns in student learning: Relationships between learning strategies, conceptions of learning, and learning orientations. *Educational Psychology Review, 16*, 359–384. doi: 10.1007/s10648-004-0005-y

Waring, M., & Evans, C. (2015). *Understanding Pedagogy: Developing a critical approach to teaching and learning*. London, UK: Routledge.

Warner, B., & Elser, M. (2015). How do sustainable schools integrate sustainability education? An assessment of certified sustainable k–12 schools in the United States. *The Journal of Environmental Education, 46*(1), 1-22. doi: 10.1080/00958964.2014.953020

Weinstein, C., Acee, T., & Jung, J. (2011). Self-regulation and learning strategies. In H. Bembenutty (Ed.), *Self-regulated learning: New directions for teaching and learning*, (Number 126, pp. 45-54). San Francisco, USA: Wiley Periodicals.

Wigfield, A., Klauda, S., & Cambria, J. (2011). Influences on the development of academic self-regulatory processes. In B. Zimmerman & D. Schunk (Eds.), *Handbook of self-regulation of Learning and Performance,* (pp. 49-64). New York, USA: Routledge.

Wiliam, D. (2014). Formative assessment and contingency in the regulation of learning processes. Paper presented in a symposium entitled Toward a Theory of Classroom Assessment as the Regulation of Learning at *the annual meeting of the American Educational Research Association,* Philadelphia, PA.

Winne, B. (1995). Feedback and self-regulated learning: a theoretical synthesis. *Review of educational research, 65*(3), 245-281. doi: 10.2307/1170684

XCAS (2013). *CAS-X quality audit portfolio*. Unpublished report.

XCAS (2016a). *About X College of Applied Sciences*. Retrieved December, 2016 from http://X.cas.edu.om/Pages/About-X-College-Of-Education.aspx

XCAS (2016b). *XCAS organisational chart*. Retrieved December, 2016 from https://X.cas.edu.om/Pages/Organizational-Chart.aspx

Yang, M., & Carless, D. (2013). The feedback triangle and the enhancement of dialogic feedback processes. *Teaching in Higher Education, 18*(3), 285-297. doi: 10.1080/13562517.2012.719154

Zimmerman B.J. & Schunk D.H. (1997). Social origins of self-regulatory competence*. Educational Psychologist, 32*(4), 195-208.

Zimmerman B.J., & Schunk D.H. (2011). Self-regulated learning and performance: An introduction and an overview. In B. Zimmerman & D. Schunk (Eds.), *Handbook of self-regulation of Learning and Performance,* (pp. 1-12). New York, USA: Routledge.

Zimmerman, B. J., & Paulsen, A. (1995). Self-monitoring during colligate studying: an invaluable tool for academic self-regulation. In P. Pintrich (Ed.), *New Diretcions in college teaching and learning: understanding self-regulated learning,* (63), 13-27. Sanfransico, Jossey-Bass.

Zimmerman, B. J. (2011). Motivational sources and outcomes of self-regulated learning and performance. In B. Zimmerman & D. Schunk (Eds*.), Handbook of self-regulation of Learning and Performance*, (pp. 49-64). New York, USA: Routledge.

Zimmerman, B. J., & Campillo, M. (2003). Motivating self-regulated problem solvers. In J. E. Davidson & R. J. Sternberg (Eds.), *The nature of problem solving* (pp. 233-262). New York: Cambridge University Press. Copyright by Cambridge University Press. Reprinted with permission

Zimmerman, B. J. (1989). A social cognitive view of self-regulated academic learning. *Journal of Educational Psychology, 81*(3), 329–339. Retrieved from https://doi.org/10.1037/0022-0663.81.3.329

Zimmerman, B. J. (1998). Developing self-fulfilling cycles of academic regulation: an analysis of exemplary instructional models. In B. J. Zimmerman & D. H. Schunk (Eds.), *Self-regulated learning: from teaching to self-reflective* (pp. 1–19). New York: The Guilford Press.

Zimmerman, B. J. (2002). Becoming a self-regulated learner: An overview. *Theory into practice, 41*(2), 64–70.

Zimmerman, B. J. (2008). Investigating self-regulation and motivation: Historical background, methodological developments, and future prospects. *American Educational Research Journal, 45*(1), 166–183. Retrieved from https://doi.org/10.3102/0002831207312909

Zimmerman, B. J. (2009). Theories of self-regulated learning and academic achievement: An overview and analysis. In B. J. Zimmerman & D. H. Schunk (Eds.), *Self-regulated learning and academic achievement: Theoretical perspectives* (2nd Ed., pp. 1–37). Mahwah, NJ: Erlbaum.

Zimmerman, B. J., & Kitsantas, A. (2002). Acquiring writing revision and self-regulatory skill through observation and emulation. *Journal of Educational Psychology, 94*(4), 660–668. doi:10.1037/0022-0663.94.4.660.

Zimmerman, B. J., & Kitsantas, A. (2005). The hidden dimension of the personal competence. Self-regulated learning and practice. In A. J. Elliot & C. S. Dweck (Eds*.), Handbook of competence and motivation* (pp. 509-526). New York: Guilford

Zimmerman, B. J., & Martinez-Pons, M. (1986). Development of a structured interview for assessing student use of self-regulated learning strategies. *American Educational Research Journal, 23*, 614- 628.

Zimmerman, B. J., (2000). Self-Efficacy: An essential motive to learn*. Contemporary Educational Psychology, 25*, 82–91. ooi:10.1006/ceps.1999.1016, available online at http://www.idealibrary.com

Zimmerman, B. J., & Kitsantas, A. (1997). Developmental phases in self-regulation: Shifting from process goals to outcome goals*. Journal of Educational Psychology, 89*(1), 29-36. Retrieved from http://dx.doi.org/10.1037/0022-0663.89.1.29

Zimmerman, B. J., & Bandura, A. (1994). Impact of self-regulatory influences on writing course attainment. *American Educational Research Journal, 31*(4), 845-862.

Zimmerman, *B. J., & Cleary*, *T*. (*2009*). Motives to self-regulated learning: A social cognitive account. In K.R. Wentzel & A. Wigfield (Eds.), *Handbook of motivation at school* (pp*.*247– 264). NewYork, USA: Taylor Francis.

Zumbrunn, S., Tadlock, J., & Roberts, E. *(2011). Encouraging Self-Regulated Learning in the Classroom: A Review of the Literature.* Metropolitan Educational Research Consortium (MERC), Virginia Commonwealth University. https://www.researchgate.net/publication/325603134

Zusho, A., & Edwards, K. (2011). Self-regulation and achievement goals in the college classroom. In H. Bembenutty (Ed.) *Self-regulated learning: New directions for teaching and learning*, (Number 126, pp. 21-31). San Francisco, USA: Wiley Periodicals.

Appendix A   Organisational Structure of CASs (XCAS, 2016b)
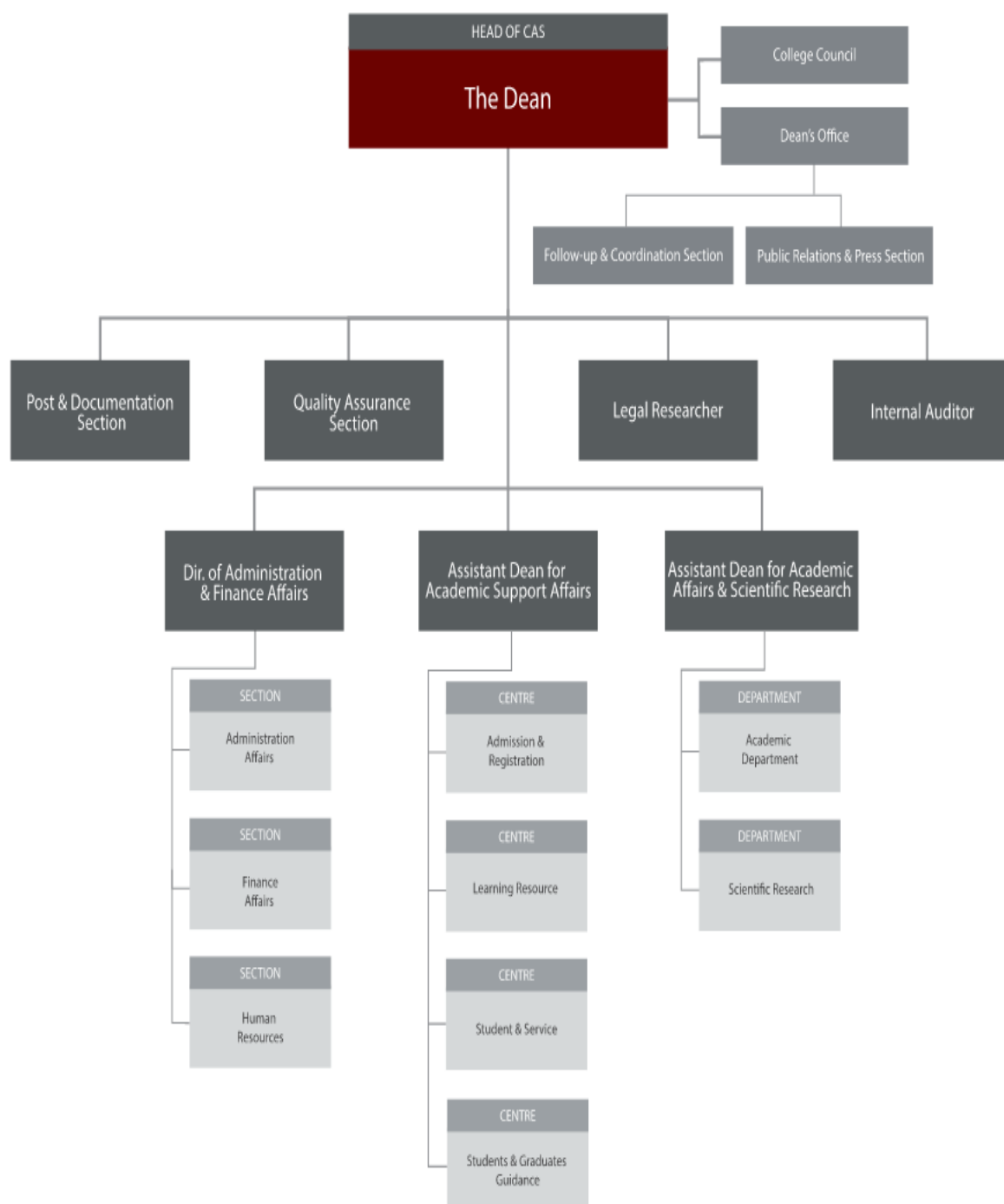
Appendix B   ELT study plan

Study Plan for English Language

تخصص اللغة الانجليزية

Semester 1   Academic Year   /

Course Code&No	Course Title	Credit hours	Theory	Practice	Prerequisites
ENSP 1224	Listening and Speaking	3	2	2	Foundation
COMP 2001	Introduction to Computer I	2	1	2	Foundation
ENSP 1122	Advanced Writing I	3	2	2	Foundation Year
ENSP 1121	Advanced Reading and Vocabulary	3	2	2	Foundation Year
ENSP 1123	Grammar and Usage I	3	2	2	Foundation
ENSP 1212	Phonetics and Phonology	3	2	2	Foundation Year
		17	11	12	

Semester 2   Academic Year   /

Course Code&No	Course Title	Credit hours	Theory	Practice	Prerequisites
ENSP 1225	Advanced Writing II	3	2	2	ENSP1122
ENSP 1226	Grammar and Usage II	3	2	2	ENSP1123
COMP 2002	Introduction to ComputerII	2	1	2	COMP 2001
ENSP 1111	Introduction to Linguistics	3	2	2	
ENSP 2151	Literature I	3	2	2	
EDUC 600	Educational Foundations	3	3	-	
		17	12	10	

Semester 3   Academic Year   /

Course Code&No	Course Title	Credit hours	Theory	Practice	Prerequisites
ENSP 2113	Morphology and Lexical Semantics	3	2	1	ENSP 1111
ENSP2228	Report Writing	2	2	-	ENSP 1225
ENSP 3217	Readings in Applied Linguistics	3	2	1	ENSP 1111
ENSP 3134	Reading and Writing Skills Development	3	2	2	
PSYC 210	Educational Psychology	2	2	-	
ISLM4405	Islamic Culture	2	2	-	
Arab 2003	Practical Arabic Language Skills	2	2	-	
		17	14	4	

Semester 4   Academic Year   /

Course Code&No	Course Title	Credit hours	Theory	Practice	Prerequisites
ENSP 2114	Syntax and Structural Semantics	3	2	1	ENSP2113
ENSP 3135	Vocabulary and Grammar Language Skills Development	3	2	2	
ENSP 4152	Children's Literature	3	2	2	
HIST1008	Oman Across History	2	2	-	
CURR 107	ELT Methods of Teaching	3	3	-	
CURR 088	Educational Technology Using IT	3	2	2	comp2002
		17	13	7	

Semester 5   Academic Year   /

Course Code&No	Course Title	Credit hours	Theory	Practice	Prerequisites
ENSP 2232	Initial Literacy Skills Development	3	2	2	
ENSP 4221	Advanced Listening Comprehension				
ENSP 4222	Creative Writing	2	1	2	
ENSP 4223	Debating and Communication				
ENSP 3228	Error Recognition and Correction	3	2	2	
EDUC 800	School Management	2	1	2	
CURR 170	Practicum 1	3	0	6	CURR 107
ENSP 4245	ELT School Curriculum Analysis	2	1	2	
PSYC 250	Assessement	3	3	-	
		18	10	16	

Semester 6   Academic Year   /

Course Code&No	Course Title	Credit hours	Theory	Practice	Prerequisites
ENSP 2215	Language Acquisition	3	2	1	
ENSP 3211	Psycholinguistics				
ENSP 3212	Sociolinguistics	2	1	2	ENSP 1111
ENSP 3213	Discourse Analysis				
ENSP 3133	Oral/Aural Language skills Development	3	2	2	
PSYC 240	Developmental Psychology	3	3	-	
CURR 180	Practicum 2	3	0	6	CURR 170
CURR 108	Classroom Research & Teacher Development	3	3	-	
		17	11	11	

Semester 7   Academic Year   /

Course Code&No	Course Title	Credit hours	Theory	Practice	Prerequisites
ENSP 2231	Communicative Language Teaching Development	3	2	1	CURR 107
ENSP 3241	Language Through Stories	3	2	2	
ENSP 3116	General Translation	3	2	1	
ENSP 4251	World Literature				
ENSP 4252	Literature 2	2	1	2	ENSP 2151
ENSP 4253	Contemporary Literature and Poetry				
CURR 190	Practicum 3	5	0	10	CURR 180
		16	7	16	

Semester 8   Academic Year   /

Course Code&No	Course Title	Credit hours	Theory	Practice	Prerequisites
ENSP 4143	Differential Learning and Independent Learning	3	2	2	
PSYC 4138	& Research Methodology Statistics	2	1	2	
ENSP 4142	Language through the Arts	3	2	2	
CURR 200	Practicum 4	5	0	10	CURR 190
		13	5	16	

Appendix C   Level B AES Course outline in Autumn 2017

unit	Week	Theme	English-specific skills	Focus OAAA Learning Outcomes
1	1-3	Formal and informal letters	**Vocabulary:** 1.distinguish formal and informal language 2.use formal and informal language in writing **Grammar:** 1.recognize and use different parts of speech in writing 2.distinguish between finite and non-finite verbs **Writing Skills:** 1.write formal and informal emails **Study and Critical Thinking Skills**	OAAA 3.2.d. Write texts of a minimum of 250 words, showing control of layout, organisation, punctuation, spelling, sentence structure, grammar and vocabulary. OAAA 3.2.g. Follow spoken instructions in order to carry out a task with a number of stages. OAAA 6.2.1.a. Work in pairs or groups and participate accordingly i.e. take turns, initiate a discussion, interrupt appropriately, express an opinion.
2	4-5	4. Emails/ Activity 1 Graphs and charts	**Vocabulary:** 1.know and use language related to graphs and charts **Grammar:** 1.indicate which parts of speech can fulfil the role of the subject and verb in a sentence 2. write correct simple, compound and complex sentences **Writing Skills:** 1. connect sentences 2. describe and report on graphs and charts **Study and Critical Thinking Skills**	OAAA 3.2.d. Write texts of a minimum of 250 words, showing control of layout, organisation, punctuation, spelling, sentence structure, grammar and vocabulary. OAAA 3.2.g. Follow spoken instructions in order to carry out a task with a number of stages. OAAA 6.2.1.a. Work in pairs or groups and participate accordingly i.e. take turns, initiate a discussion, interrupt appropriately, express an opinion.

3	6-7	6. Graphs and charts / Activity 2 7. Activity 3: Q & A	**Vocabulary:** 1. use a range of verbs, nouns, and adjectives common in academic English **Grammar:** 1. Use relative pronouns correctly (which/who/that/where). 2.form correct questions and answer them **Writing Skills:** 1. produce texts that are based on sources and answers concrete questions **Study and Critical Thinking Skills**	OAAA 3.2.d. Write texts of a minimum of 250 words, showing control of layout, organisation, punctuation, spelling, sentence structure, grammar and vocabulary. OAAA 3.2.f. Take notes and respond to questions about the topic, main ideas, details and opinions or arguments from an extended listening text (i.e. lecture, news broadcast). OAAA 3.2.g. Follow spoken instructions in order to carry out a task with a number of stages. OAAA 6.2.1.a. Work in pairs or groups and participate accordingly i.e. take turns, initiate a discussion, interrupt appropriately, express an opinion.
4	8-9	Story-telling: first times	**Vocabulary:** 1.use a range of adjectives to add texture to a narrative text **Grammar:** 1.use past simple, continuous, and perfect 2. Use connectors such as when, while, in the meantime, etc. **Writing Skills:** 1.produce narrative texts, especially narrative essays, based on audio-visual cues **Study and Critical Thinking Skills**	OAAA 3.2.d. Write texts of a minimum of 250 words, showing control of layout, organisation, punctuation, spelling, sentence structure, grammar and vocabulary. OAAA 3.2.f. Take notes and respond to questions about the topic, main ideas, details and opinions or arguments from an extended listening text (i.e. lecture, news broadcast). OAAA 3.2.g. Follow spoken instructions in order to carry out a task with a number of stages. OAAA 6.2.1.a. Work in pairs or groups and participate accordingly i.e. take turns, initiate a discussion, interrupt appropriately, express an opinion. OAAA 6.2.1.i. Continually revise one's work.
5	10-11	10. Narrative Essay/ Activity 4		

6	12-13			
7	14-15	14. Essay based on notes/ Activity 5		

Appendix D   **Summary of research design**

	Question	Objective	Strategy	Data collection method	Data Analysis tools and tests
1.	What is students' perceptions of their SRLS at entry level?	Explore	Inductive to explore students' perceptions of their SRLS as they enter college whether they have high or low perceptions of their SRLS	Quantitative SRL scale	SPSS Descriptive
2.	Would a SRLS intervention course involving teacher modelling of SRLS improve students' academic achievement?	Change	Deductive: testing a hypothesis formulated based on previous studies and personal observation (confirmatory)	Intervention: integration of SRLS into AES course by teacher modelling SRL (verbalizing SRLS while performing an activity). Demonstrating SRL in a way similar to think-aloud form Interviews for teachers and students	SPSS Descriptive and analytical statistics , t-tests & two-way ANOVA Nvivo: coding and thematic analysis
3.	What evidence is there that the impacts of the intervention are sustained beyond the immediate assessment task(s)? Are students able to transfer the strategies learnt through the intervention to different courses?	Evaluate	Deductive-inductive: Testing a hypothesis based on regularities and pattern shared between SAPs and SRL found in the literature. Evaluate effects on the hypothesis	Quantitative SRL scale and interviews measuring of students' use of SRL during an AES activity comparing both the experimental and control group	SPSS/ t-tests & two-way ANOVA, Mediation tests Nvivo / thematic analysis

Appendix E   Data Collection Timeline

Piloting study instruments in May 2017		
Study intervention/Group	Experimental group (26)	Control Group (20)
Phase 1		
Talk to HoD and Teachers **Setting timetables** **Placement test** **Confirmed groups**	27/8-7/9 2017	
Information sheet, consent sheet and pre-test scale	Week 1 (10/9/2017) 22 students	Week 1 (11/9/2017) 16 students
Pre-test writing task (first day orientation)	Week 1 (11/9/2017) 23 students	Week 1(10/9/2017) 13 students
Self-evaluate pre-test writing based on a set of criteria (researcher)	Week 3 (26/9/2017)	Week 3 (26/9/2017)
Modelling act 1/ modelling forethought, performance and reflection/evaluation phases (teacher & researcher)	Week 3 (26/9/2017) and students commented on the modelling process	_____
ACT 1	Week 4 (1/10/2017) 24 students	Week 4 (1/10/2017) 20 students
Modelling Act 2 using SRLS **All phases, key words, objectives confidence, writing, evaluation** **(teacher guided by researcher)**	Started in Week 5 (9/10/2017) teacher modelled describing her energy level line chart Continued in week 6 (16/10/2017)	_____
ACT 2	Week 6 (17/10/2017) 24 students	Week 6 (18/10/2017) 20 students
Modelling Act 3 / forethought, emotions, planning (teacher guided by researcher)	Week 8 (29/10/2017)	_____
ACT 3	Week 9 (7/11/2017) 24 students	Week 9 (8/11/2017) 18 students
FEEDBACK TEMPLATE & Focus group	Week 10 lesson (12/11/2017)	_____
ACT 4	Week 11 25 students	Week 11 20 students
Students interviews	Started week 12 (28, 29, 30/11/2017) continued week 14 (10, 11/12/2017)	
	24 students	11 students
ACT 5	Week 14 21 students	Week 14 19 students
POST-TEST WRITING	Week 15 (17-21/12/2017) 17 students	Week 15 (17-21/12/2017) 19 students
POST-TEST SCALE **and 4 teachers' interviews**	Week 15 26 students	Week 15/16 18 students
Phase 2		
Interviews (4 teachers and 21 students)	(29/4-10/5/2018) 13 students	(29/4-11/5/2018) 8 students
Post-Post-test Scale	(6-10/5/2018) 21 students	(6-10/5/2018) 20 students
End of data collection		

Appendix F   **SRL-A**

Self-Regulated Learning Scale **مقياس التنظيم الذاتي لعملية التعلم**

Name:	الاسم	Group:	المجموعة
Semester:	الفصل الدراسي	Week	الأسبوع:

من فضلك قيم العبارات الأتية على مقياس التنظيم الذاتي لعملية التعليم من خبرتك كطالب/ كمتعلم. قيم نفسك من مقياس 1: لا يمثلني إطلاقا، 2: لا يمثلني، 3: لا يمثلني قليلا، 4: محايد، 5: يمثلني قليلا، 6: يمثلني، 7: يمثلني كليا.

Please rate the following items based on your behaviour as a learner in the classroom. Your rating should be on a 7-point scale where **1=not at all true of me, 2= untrue of me, 3= somewhat untrue of me, 4= neutral, 5= somewhat true of me, 6=true of me or 7=very true of me**.

No رقم	Item بند	1	2	3	4	5	6	7
1.A.1	I find it hard to set learning goals for myself. * أجد من الصعوبة أن أحدد أهداف تعليمية لنفسي.							
	I usually think about studying and assignments before I begin revising or writing. عادة ما أفكر في المقرر والواجبات قبل أن أبدأ في المراجعة أو حل الواجبات.							
1.A.2	I have trouble making study plans to help me reach my learning goals. * أجد صعوبة في وضع خطط دراسية تساعدني في تحقيق أهدافي التعليمية.							
	Once I have a learning goal, I can usually plan how to reach it. عندما يكون لدي هدف دراسي، فإنني أخطط لتحقيقه.							

1.B.1	I am certain I can understand the most difficult materials presented in the readings for my college courses. أنا واثق أنني أستطيع فهم أكثر المواد صعوبة في دراستي الجامعية.							
	I am confident I can learn the basic concepts taught in my college courses. أنا واثق أنني أستطيع استيعاب المفاهيم الأساسية في المقررات الدراسية.							
	I am confident I can do an excellent job on the assignments and tests in my college courses. أنا واثق من تميزي في الواجبات والامتحانات المتعلقة بالمقررات الدراسية.							
	I am certain I can master the skills being taught during college lectures. أنا واثق قدرتي على إتقان المهارات التي أتعلمها في المقررات الدراسية.							
1.B.2	I expect to do well in my studies. أتوقع أنني أستطيع أن أفلح حقا في دراستي.							
	I expect to outperform my college classmates. * أتوقع تفوقي على أقراني في الصف.							
1.B.3	I think I will be able to use what I learn in <mark>one</mark> course in other courses. أظن أن باستطاعتي استخدام المعرفة التي أتحصل عليها في مقرر ما في مقررات دراسية أخرى.							
	It is important for me to learn the course material for all college courses. من المهم بالنسبة لي، أن أتمكن من المقررات الدراسية.							
	I am very interested in the content of the college courses. أنا مهتم جدا بمحتويات المقررات الدراسية.							

	I think the course materials taught at college are useful for me to learn. أعتقد أن المقررات الدراسية التي أتعلمها مفيدة جدا لي.						
1.B.4	I prefer course materials that really challenge me, so I can learn new things. أفضل المقررات الدراسية التي تشكل تحديا لي لأتعلم أشياء جديدة.						
	The most satisfying thing for me in my study is trying to understand the content as thoroughly as possible. فهم المادة العلمية على أكمل وجه يعتبر مرض جدا بالنسبة لي.						
	When I have the opportunity in college courses, I will choose course assignments that I can learn from even if they don't guarantee a good grade. كلما حانت الفرصة، سأختار مقررات دراسية تتيح لي تعلم أشياء جديدة وإن كانت لا تضمن درجة عالية.						
	Getting a good grade in my study is the most satisfying thing for me right now. * تحصيل علامات متميزة في دراستي يعتبر مرض جدا بالنسبة لي.						
	If I can, I want to get better grades in my college courses than most of the other students. * أريد تحصيل علامات دراسية أفضل من زملائي في الفصل إذا أمكن.						
	I want to do well in my study because it is important to me to show my ability to my family and friends. * أطمح للإجادة في دراستي حتى أثبت قدراتي العلمية لأهلي وأصدقائي.						
2.A.1	I keep telling myself that I can succeed at college. أستمر في أقناع نفسي بقدرتي على النجاح في دراستي الجامعية.						
	I calm myself and instruct it not to worry about learning or completing assignments. أعمل على طمأنة نفسي وحثها على عدم القلق بشأن الدراسة وحل الواجبات.						

	When I make a mistake in class or exams, I instruct myself to adapt and learn from my mistake. عندما أقترف خطأ ما في الفصل أو الامتحان، أحث نفسي على التأقلم والتعلم من أخطائي.								
	I keep focused on studying by reminding myself of my plans. أحافظ على تركيزي الدراسي عن طريق تذكير نفسي بخططي وأهدافي.								
2.A.2	I try to remember what the teacher said in class while revising or in exam. أحاول تذكر شرح المدرس حين أذاكر أو خلال وقت الامتحان.								
	I try to associate what I read with a mental image or an object to help retrieve information in the exam. أحاول ربط المعلومات المكتسبة بصور ذهنيه لتساعدني على تذكرها.								
2.A.3	When studying, I can stick to a plan that is working well. عندما أدرس فأنني أواظب على الالتزام بخطة دراسية تثبت فاعليتها (مناسبة لي).								
	I force myself to continue studying even if I do not like the subject. أجبر نفسي على الاستمرار فالدراسة/استذكار دروسي حتى وإن كنت لا أحب المقرر.								
	Most of the time I don't pay much attention to what I am studying or writing. * في معظم الأحيان لا ألقي بالا/ لا أركز على ما أدرس أو أكتب.								
	When studying, I usually keep focused and ignore distractions. عادة أحافظ على تركيزي وأتجاهل كل ما يصرف انتباهي أثناء استذكار دروسي.								
	I set a study or assignment time, but I can rarely stick to the plan. أحدد وقت للدراسة والواجبات ولكن نادرا ما أواظب على الالتزام به.								

2.A.4	I make good use of my study time for a course. أحسن استغلال وقت الدراسة للمقرر الدراسي.							
	I make sure that I keep up with the weekly readings and assignments for a course. أواظب على الالتزام بالقراءة والواجبات الأسبوعية المتعلقة بالمقرر.							
	I attend college classes regularly. أواظب على حضور المحاضرات الدراسية بانتظام.							
	I often find that I do not spend very much time on a course because of other activities. * غالبا أجد أني لا أخصص الكثير من الوقت لمقرر بسبب اهتمامي والتزامي بأنشطة أخرى.							
	I rarely find time to review my notes or readings before an exam. * نادرا ما أجد الوقت لمراجعة الملاحظات التي سجلتها أثناء شرح المدرس أو مراجعة المقرر قبل فترة الامتحانات.							
	I usually study in a place where I can concentrate on my course work. عادة أختار المكان المناسب الذي يساعدني على التركيز في الدراسة.							
	Even if I have trouble learning the material of a course, I try to do the work on my own without help from anyone. * أحاول الدراسة بمفردي بدون أي مساعدة من أحد حتى وإن واجهت صعوبة في مقرر.							
	I ask the instructor of a course to clarify concepts I don't understand well. أطلب من مدرس المقرر أن يشرح المفاهيم التي لم أفهمها جيدا.							
	When I don't understand the material of a course, I ask another student in the class for help. أطلب مساعدة زملائي عندما أواجه صعوبة في فهم المقرر.							

2.A.5	When I study, I read and practise saying the materials to myself over and over. عندما أدرس، أقرأ وأتدرب على حفظ المقرر بصوت مرتفع مرار وتكرارا.							
	I make lists of important items of a course and memorize the list. أكتب قائمة بالمواضيع المهمة في المقرر وأحفظها.							
	When I study for a course, I pull together information from different sources such as lectures, readings and discussions. عندما أذاكر لمقرر، أحاول ربط المعلومات التي تعلمتها من المحاضرات والقراءة الإثرائية والمناقشات.							
	I try to relate ideas in a subject to those in other courses whenever possible. أحاول ربط الأفكار التي تعلمتها في مقرر ما بغيرها من المقررات الأخرى.							
	When preparing for a class, I try to relate the material to what I already know. عند التهيؤ لدرس ما، فأنني أحاول ربط المعلومات التي اقرأها بمعلوماتي السابقة.							
	When I study for a course, I write brief summaries of the main ideas from the readings and from my class notes. عندما أستذكر دروسي لمقرر، أكتب مختصرات للأفكار العامة التي تعلمتها.							
	When I study for a course, I try to outline the materials to help me organise my thoughts. عندما أستذكر دروسي لمقرر، أضع خطة للمقرر لتساعدني على تنظيم أفكاري.							
	When I study for a course, I go through the readings and my class notes and try to find the most important ideas. عندما أستذكر دروسي لمقرر ما، فأنني أراجع المقرر وملاحظاتي لأحدد أكثر الأفكار أهمية.							
	I make simple charts, diagrams or tables to help me organise my course materials.							

	أرسم خرائط أو ومخططات بيانية أو جداول لتعينني على ترتيب متطلبات المقرر.							
	I often find myself questioning things I hear or read in a course to decide whether I find them convincing. غالبا ما أجد نفسي أفكر في المفاهيم والأفكار التي سمعتها أو قرأتها في المقرر الدراسي لأقيم اقتناعي بها.							
2.B.1	I usually keep track of my learning progress towards my goal. غالبا ما أتابع تقدمي الدراسي الذي يمكنني من تحقيق هدفي.							
	I keep a list of a course concepts I got wrong. أكتب قائمة بمفاهيم المقرر التي أخطأتها.							
	I keep a record of the concepts I studied and understood well in a course. أدون مفاهيم المقرر التي درستها وفهمتها جيدا.							
	I take note of classes discussions. أدون ملاحظاتي عن المناقشات الفصلية.							
2.B.2	When preparing for class, I make up questions to help focus my reading. عندما أستعد للمحاضرة، فأنني أقوم بكتابة أسئلة تساعدني على التركيز فالقراءة.							
	When I become confused about something I'm reading in a course, I go back and try to figure it out. عندما أحتار فيما أقرأه في مقرر ما، فأنني أعود لقرأته وأحاول فهمه.							
	If a course's materials are difficult to understand, I change the way I read the material. إذا كان مقرر المادة صعب الفهم، أغير طريقة استذكاري للمقرر.							
	Before I study new course materials, I often skim it to see how it is organised. قبل دراسة أي مقرر جديد، أتصفح محتوى المقرر وترتيبه.							
	I ask myself questions to make sure I understand the course material I have been studying.							

	أعد أسئلة لأتأكد من فهمي للمقرر.							
	I often find that I have been reading for a course but do not know what it was all about. * غالبا ما أجد نفسي أستذكر مقرر لا أفهمه البتة.							
	When studying for a course, I decide which concepts I do not understand well. عندما أستذكر دروس مقرر ما، أحدد المفاهيم التي لا أفهمها جيدا.							
	If I get confused taking notes in class, I make sure I sort it out afterwards. عندما أصبح مشوشا بسبب الملاحظات التي أسجلها خلال الدرس، فأنني أحاول فهمها لأحقا.							
3.A.1	My study habits are not that different from other students. * سلوكي الدراسي لا يختلف كثيرا عن أقراني.							
	I don't seem to learn from my learning/ studying mistakes. * لا أتعلم من أخطائي الدراسية.							
	I have personal learning standards and try to live up to them. لدي معاييري الدراسية الخاصة التي أحاول العيش بموجبها.							
	When I am to change a study strategy or a learning habit, I pay a lot of attention to how I am doing. عندما أحاول تغيير عاداتي الدراسية أو طريقة استذكاري للدروس، أركز كثيرا على أدائي الحال.							
	I think a lot about how I am doing in my study. أفكر كثيرا في أدائي الدراسي الحالي.							
3.A.2	If I do well in assignments and tests, I reward myself with a movie or friends gathering. إذا كان أدائي جيدا فالامتحانات والواجبات، أكافئ نفسي بمشاهدة فيلم أو حضور تجمع أقراني.							
	I usually have to make a studying mistake once in order to learn from it.							

	عادة أتعلم من أخطائي الدراسية مباشرة.						
	Little problems or distractions throw me off my learning course, thus I avoid them. * المشاكل والعوائق الصغيرة تحيدني عن مساري أو هدفي الدراسي لذلك أتجنب حدوثها.						
	I attribute my study failure to my teacher or friends. * عادة ما أسند/ أعزو فشلي الدراسي إلى معلمي أو أصدقائي.						
3.B.1	I feel bad when I don't meet my learning goals. * أشعر بالسوء عندما لا أحقق أهدافي الدراسية.						
	When it comes to deciding about a studying/ learning change, I feel overwhelmed by the choices. * أجد صعوبة في اتخاذ إي قرار متعلق بأدائي الدراسي أو عاداتي الدراسية.						
	It bothers me when my learning progress is not what I want it to be. * يزعجني أن لا أحرز التقدم الدراسي الذي أريد.						
3.B.2	I put off making learning decisions. * أأجل اتخاذ قراراتي الدراسية .						
	I give up studying easily. * يتملكني اليأس بسهولة حين يتعلق الأمر بالدراسة أو بذل مجهود دراسي أكبر.						
	I am willing to consider other strategies or ways of learning. لدي استعداد لأجرب طرق واستراتيجيات أخرى في استذكار الدروس والتعلم.						
	I usually decide to change my learning strategies and hope for the best. * عادة ما أقرر منهجية استذكاري للدروس وأمل الأفضل.						

Thank you for your time

*Negatively worded items

1= the forethought phase(1.A.1= goal setting, 1.A.2= strategic planning, 1.B.1 self-efficacy, 1.B.2= outcome expectations, 1.B.3= task vale, 1.B.4= goal orientation), 2= the performance phase (2.A.1= self-instruction, 2.A.2= imagery, 2.A.3=

attention focusing, 2.A.4= environmental structuring, 2.A.5= task strategies, 2.B.A= self-recording,   2.B.2= self-experimenting), 3= the self-reflection phase (3..A.1= self-evaluation, 3.A.2= causal attribution, 3.B.1= self-satisfaction, 3.B.2= adaptive/ defensive behaviour).

Highlighted were the adapted contextualised words.

Items in orange were adapted from the self-regulated questionnaire by Pintrich & De Groot (1990)

Items in Red were adapted from the SRILS by Zimmerman & Martinez-Pons (1986).

Items in black were adapted from MSLQ By Pintrich at al. (1991).

Items in Blue were added by the researcher to align with Zimmerman (2002) model of SRLS.

Appendix G   Interventions and Teacher Modelling Activities

Here a detailed account of the interventions and modelling activities in the experimental group and the strategies that were highlighted during these activities.

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1. Intervention: **Self-evaluate pre-test writing task based on a set of criteria (Week 3)**

Aim: **To raise students' awareness and understanding of the criteria, experience self-evaluation using a set of pre-decided criteria and compare to teacher evaluation.**

Record of the activity: **Students were given a set of criteria to evaluate their pre-test writing from the first week (the written paragraph/ pre-test about their first day at XCoE). The criteria were a simplified version of the PT criteria and the researcher discussed them with the students in English and Arabic and then handed them their paragraph to evaluate their own written productions. They were given about 15 minutes to go through their writing and the criteria, evaluate their writing and grade them, and then they handed them back to the researcher. Students received the researcher evaluation of their work, so that they can compare between my marking and theirs.**

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2. *Modelling activity 1: email writing (week 3)*

1- Work in pairs. Write an email to Mr. Jabir telling him that you would like to have some remedial classes because your midterm exam did not go very well. Ask him who will coach you, and where and when the support classes will be. Do not forget to tell Mr. Jabir when you are actually free throughout the week and what your main weakness on the exam were.

	Strategies modelled
Aim: To raise students' awareness of effective SRLS that can be used to improve their written.	
Record of the activity: Here is a transcript of T1 and the researcher modelling activity 1 in Week 3 during the class time, while students are observing, taking notes and then commenting on the modelling purpose, use and effect. (Modelling forethought, performance and self-reflection phases of SRLS)	
	Task analysis
The teacher and co-teacher model completing the activity.	
T1: So, T2 what is required from us here.	*Understand task requirements and demands*
T2: Let me see 1) we have to work in Pairs 2) write an email to Mr. Jabir requesting remedial classes as a result of not doing so well in midterm exams 3) request information about the remedial classes in terms of who will teach it, when and where will it take place 4) provide information about students' strength and weaknesses and timetable.	*Focus on key words*
T1: Oh, so we need to write a formal email to the teacher.	

T2: yes, that is right	
T1: Do you think it is really important to practice writing formal emails except for exams.	*Understand task value, its objective and relevance*
T2: well, it is important to pass the exam and get good grades but most importantly it is important and useful for everyday life. You know like writing to your teacher, advisor or employer later on when we finish college. So you see our objective should be to learn for life skills not exams. I really want to master writing formal emails.	
T1: Great, do you think we can do it in 30 minutes?	*Setting goals within a specific time*
T2: I think we do. We have learnt the structure and expressions used for formal emails for over a week now and we practiced.	*Planning, Prior knowledge*
T1: Good, so we can start by going over the materials we have been studying this week let's see expressions such as Dear Mr/Ms …,	*Self-control and self-monitoring strategies*
Y2: Yes we should note down our thoughts as we write it down and we can compare texts from the unit what do you think?	
T1: Yeah absolutely, I will cross the aims and expressions as we write them, but what if we got stuck with writing?	*Attention – focusing/ task strategies*
T2: Well, We can consult the teacher or a classmate, or even the dictionary for meanings and words and remember we have each other.	*Help seeking*
T1: Wonderful, I think we are ready.	*Self-efficacy*
Then we should start like this	
Dear Mr. Jabir, or Family name is even better as in, Dear Mr AlRawahi	*Consulting prior knowledge*
T2: Yeah that sounds better and then we should enquire about heath as in, WE hope this email finds you well.	
T1: Yeah, that is good and then we should introduce the topic as in, we are disappointed with regard to our midterm marks and it seems that we have misunderstood many aspects of the course. Would you kindly arrange for remedial classes to rectify our misconceptions and help us highlight the course objectives.	*Peer feedback*
T2: Good and then we have to add the purpose for such request I mean why do we need them.	*Structure of the email*
How about, It appears that our main weaknesses were writing and grammar as exam results indicate.	
T1: I agree. Good. Then we need to request information about the course don't we?	
T2: Of course, that is one of the aims for writing the email.	

We can say, Could you kindly email us the remedial classes schedule including timing, venue and the coach assigned to teach it?	
T1: Yeah but in order for Mr. Jabir to send us the schedule he needs information about our schedule, Right.	
We can say, We have free slots on Monday from 12-2 pm and Wednesday from 10am-12pm.	
T2: Yeah, pretty good work. How can we conclude it.	
T1: We need to thank him. Formally, something like, Your efforts to make learning meaningful is highly appreciated.	
T2: Yeah and then,	
Yours Sincerely,	
Group 4 students	
T1: Done.	
Y2: Let us go through what we have written	
So here is the email.	*Evaluate the written piece*
Dear Mr AlRawahi,	
WE hope this email finds you well.	
we are disappointed with regard to our midterm marks and it seems that we have misunderstood many aspects of the course. Would you kindly arrange for remedial classes to rectify our misconceptions and help us highlight the course objectives. IT appears that our main weaknesses were writing and grammar as exam results indicate. Could you kindly email us the remedial classes schedule including timing, venue and the coach assigned to teach it? We have free slots on Monday from 12-2 pm and Wednesday from 10am-12pm.	
Your efforts to make learning meaningful is highly appreciated.	
Yours Sincerely,	
Group 4 students	
T1: How do we evaluate.	
T2: Well, first we check whether we have accomplished all aims of writing this email.	

T1: Well, I have been crossing the objectives as we proceeded, except for being familiar with writing formal emails, are we?	*Revision and feedback*
T2: Well, certainly we have improved.	
T1: What else? How about grammar and structure.	*Evaluate against objectives and pre-set aims*
T2: Let us edit the email and see. Well, First we need to add the sender, receiver and subject.	
As in, From: *Group4@Xcollege.edu.om*	*Self-reaction*
To: Mr. *AlRawahi@Xcollege.edu.om*	
Subject: Request for Remedial Classes	
Sounds good?	
T1: Yes, indeed. Let's mark mistakes in Red.	
From: *Group4@Xcollege.edu.om*	
To: Mr. *AlRawahi@Xcollege.edu.om*	
Subject: Request for Remedial Classes	
Dear Mr AlRawahi,	
WE hope this email finds you well.	
we are disappointed with regard to our midterm marks and it seems that we have misunderstood many aspects of the course. Would you kindly arrange for remedial classes to rectify our misconceptions and help us highlight the course objectives? IT appears that our main weaknesses were writing and grammar as exam results indicate. Could you kindly email us the remedial classes schedule including timing, venue and the coach assigned to teach it? We have free slots on Monday from 12-2 pm and Wednesday from 10am-12pm.	
Your efforts to make learning meaningful is highly appreciated.	
Yours Sincerely,	
Group 4 students	
T2: Good effort. Now we submit and wait for some comments to improve it.	
T1: Yes, I had fun and feel like accomplished a new goal: writing emails. Thanks.	

3. Modelling Act 2: Describing charts and graphs (Week 5)

Aim: To raise students' awareness of effective strategies that can be utilised for a well-written description of charts and graphs, while working individually or in groups.

Record of the activity: T1 started by writing charts and graphs on the board and then asked students whether they know the meaning of the two words and then she provided an easy definition of the two words.

Then she told the students that there are different types of charts i.e. pie, bar (vertical and horizontal) and the other types of graphs (showed the different types in the handout). Then she drew an arrowed plus sign and asked students whether they know what we call the different axis (vertical and horizontal) and drew something personal like my energy level as shown below.

T1's daily energy level

Then, she asked students 'what is the chart about?' and wrote it down (this is a line chart about T1's daily energy live from 6 am to 6 pm). The she asks the students what do the vertical and horizontal axis indicates (the vertical axis indicates the levels of T1's energy, while the horizontal line shows different hours of the day. The lowest energy level is 1 and the highest is 5 (and this should be the introductory paragraph).

Then the teacher asked the students to flip their handout to the vocabulary section and discuss the meaning and subtle differences of the synonyms emphasizing that they can be used as nouns or as verbs. And then they started the body paragraph describing the study and ups and downs of T1's energy level referring back to the connectors.

Activating students' prior knowledge and introducing new vocabulary

Students and teacher worked as a whole group

The teacher ask students to highlight key words in the instruction, write the objectives of the activity and evaluate your confidence to do the task and based on what (the know the type of the graph and they have a list of vocabulary and they have practiced writing one as a group and set a time limit for all three activities and for each. They may write one and discuss the others but it is better to

Finally the teacher and the students conclude by expecting the general trend and perhaps suggest ways to maintain T1's energy level at a higher level.	write all of them. I can model writing one of them in lesson 3/ Wednesday (perhaps bar chart 2). All phases especially forethought and performance.
4. A non-planned intervention: Raising students' awareness of the assessment design, objectives and marks allocation (Week 7). Aim: Raising students' awareness of the assessment marks allocation, help them redirect their goals and increase their self-motivation to exert effort Record of the activity: T1 invited the researcher to illustrate the assessment weight of level B and they appeared to be in shock as they said we have not been told before and I said yes you were and I was here when she told you about the writing class. I hoped that this would be a motivation for them to discipline themselves and work harder to regulate their learning. (There appears to be a gap between course requirements and students understanding of their roles and what is required form them to succeed in the course: an issue of communication)	*Awareness of assessment literacy to assist students' goal setting and planning process and raise their self-motivation to succeed*
5. Modelling Act 3: Responding to a question based on different types of texts (Week 8) L1: T1 started by giving feedback and commenting on the structure of the writing mock exam for about 15 minutes. Then, she distributed the different questions for each group. Then she gave them question 1 and it created confusion for the students. She started by writing the instruction/ questions, underline-circle keywords, wrote objectives and then what was going to help us to write (25 minutes). Then she taught them how to plan their writing using different techniques such as listing/bullet points, diagramming/web or concept map/Cornell points (20 minutes). Then she gave each group about 5 minutes to plan for the topic distributed for them. She started by asking each group about their topic-not our plan,T1. Not everybody was paying attention. We should have went around (it is difficult for them they need guidance).	*Providing feedback based on criteria* *Task analysis, goal –setting, planning* *(forethought strategies)*
6. Intervention: receiving and providing feedback (week 10) The teacher gave them the feedback template I prepared and she explained the questions to them. 7.Intervention: Evaluating assessment and one's own performance (week 10)	*Self-assessment of performance and of the course assessment*

Then, I took over, had a focus group with some struggling and inattentive students (with attitudes or weak performance) asked them to respond to some questions about their view of the course, where they have issues with it and how can they change it. The initial analysis of the data indicate that students blame external factors on their behaviour.	*design and progress*
8: Modelling activity 4: writing a narrative essay (week 10 & 11) Group work: T1 modelled the activity for the students by engaging the whole group In a process of task analysis, planning, writing and revising their work. The written piece was composed by the group and displayed on the white board.	*Task analysis, motivational beliefs, self-control and observation, self-judgement and self-reaction*
8: Modelling activity 5: Essay based on notes (week 12 & 14) Students were asked to select a topic, search information about it (teachers provided two texts as examples for some suggested topics). T1 modelled forming the research topic and question, analysing the task and requirements, extracting and highlighting important information to support their argument, summarised it and write in their own language, while acknowledging their sources (Research strategies). Unfortunately, students spent about 6 hours on this activity (limited time by the end of the semester, and there was a national holiday for a week)	*Task analysis, motivation and task value, self-control and task strategies, self-judgement and reaction*

Appendix H   Interview guides

UNIVERSITY OF Southampton

H.1   Student interview guide

Participant:

Date: **Time:**

Location:

- **Introduction:**

Thank you for agreeing to take part in this research. As you have read in the participant information sheet, we are going to have a conversation for about 30-60 minutes on the research topic. Please answer the following questions in relation to the most recent task you performed.

- **Interview questions:**

Introduction
1. Could you please introduce yourself to me?
Assessment Literacy: what good looks like and how to achieve it?
1. By looking at the last task you were assessed on, can you summarise the task for me? What did you have to do to complete the task? 2. Where you clear about what you have to do? How did you know? 3. Did you use something to help you? What or who?
Completion of task
1. Can you describe the steps you have followed to complete the task? (i.e. planning, note-taking, outlining, editing)
Phase 1: forethought
1. How did you prepare for doing the task – what were your first steps? 2. Did you think you could accomplish the task well? Was it sufficiently challenging? Too difficult or too easy?

3. What motivate you to do the task?

Phase 2: Performance Phase

1. What strategies have you used to complete the task?
2. What kind of difficulties did you face while performing the task?
3. How did you overcome it/them?
4. Did you feel that you wanted to complete it or not?
5. If you didn't want to complete it, why did you keep writing, what did you do that kept you writing?

6. Were classroom and friends encouraging you to complete it?
7. Who did you ask for help?
8. Were you aware of what you were doing and how?
9. How did you know whether you were doing the right thing or not?

Phase 3: self-reflection

1. How well do you think you did? How do you now? What did you base your evaluation on?
2. Have you received feedback from the teacher? Did you use it and how?
3. How your evaluation of your performance is different from that of your teacher's and what impact does the discrepancy have on your learning?

Thought on self-regulation

1. How do you manage your own work?

2. What are your key strengths and limitations?

Participant bio data

Could you please fill in your contact details and some information about yourself?

Participant's contact details:	
E-mail:	Telephone:
Gender:	Nationality:
Age:	Religion:
Qualification:	Years of teaching experience:
Name:	Age:
Length of experience in English language Learning:	Level:
Mother language:	Group:

Closing

Thank you for participating in this interview. Your time and contribution are highly appreciated. Once this interview has been transcribed, you will be sent a copy of the transcription to ensure that you feel it is an accurate reflection of our discussion and that you are still happy for the content to be used in my research. You will also be sent a copy of the findings' report to have your final say about the content reported (as per your request).

Please note that contact details you provide will be stored on a password-protected computer and will not be accessible to anyone else as part of the ethics procedures.

H.2 Teacher Interview Guide

Participant:
Date: **Time:**
Location:

Introduction:

Thank you for agreeing to take part in this research. As you have read in the participant information sheet, we are going to have a conversation for about 30-60 minutes on the research topic.

Interview questions:

Introduction (information about the teacher, teaching philosophy, perception of students and teachers' role in learning and assessment)
1. Could you please introduce yourself to me? 2. What principles underpin your teaching? 3. What do you perceive your role in the learning and teaching process? 4. How do you perceive the role of your students in the learning and teaching process?
Assessment Literacy (teacher's and students' awareness of assessment)
1. What do you consider to be good assessment practice? (design, objectives, roles of participants) 2. How do you make assessment criteria clear to students so they understand it? (i.e. display criteria, explain them, discuss them with students, negotiate and cooperate with students to make them) 3. What do you perceive the role of your students in assessment? (i.e. receive and perform assessment, active participants, help to improve assessment)
Completion of task: (overall image of steps/strategies used to perform a task)
1. What strategies do you use to encourage students to complete assignments? (I.e. imagery, help-seeking, reminder of grades, reinforcement, punishment, outline the steps for them, provide checklist)
Phase 1: forethought (what are the strategies students use to prepare for a task and what is a teacher role in it?)
2. How do you prepare students for an assignment? (I.e. raising interest, setting goals, time relevance of task to them, and being aware of resources) 3. How are you supporting students' management of their emotions in learning? (I.e. fear of failure, motivation, stress)

4. In your opinion what motivates your students?

5. How are you supporting students to become more confident to do well? (I.e. encourage them verbally, publish their work). Whose role is it to motivate? How do you motivate them via the design of assessment?

6. How are you promoting learning for understanding as opposed to learning for grades?

Phase 2: Performance Phase (what strategies do students use while performing a task and teacher's role in it)

1. From your experience, what are the most dominant strategies your students use? What do they use least often, in performing a task? (imagery, editing, help-seeking, taking-notes, outlining ideas)

2. From your experience, what are the most common difficulties students' experience?

3. How do you ensure promoting a classroom environment that helps students to learn and perform tasks?

4. Do students ask for help while performing a task, and from who?
5. How do you support students to understand their own learning and to act on their deficits?

6. Do they know, what are the available resources for them to complete the task? How do you ensure they know?

Phase 3: self-reflection (investigate students use of self-reflection and its effect on their performance)

1. How do you evaluate students' performance?
2. Are students trained to evaluate their performance? If yes, how? (I.e. criteria, checklist)

3. How do students use teacher feedback? (i.e. ignore it, use it for the following task, keep referring to it)

4. How do students use their own evaluation of their performance?
5. How do students react to the feedback they receive from you and what do you do about it?

How are you trying to promote students' self-regulation

1. What is your understanding of self-regulation? (i.e. cognitive, meta-cognitive, affective or contextual factors)

1. What self-regulation strategies do your students commonly use?
2. Which strategies, do you think, they most commonly need training on?

Participant bio data

Could you please fill in your contact details and some information about yourself?

Participant's contact details:	
E-mail:	Telephone:
Gender:	Nationality:
Age:	Group you are teaching:
Qualification:	Mother language:
Specialty:	Length of experience at CAS:
Length of experience in English language teaching:	
Years of teaching experience:	

Thank you for participating in this interview. Your time and contribution are highly appreciated. Once this interview has been transcribed, you will be sent a copy of the transcription to ensure that you feel it is an accurate reflection of our discussion and that you are still happy for the content to be used in my research. You will also be sent a copy of the findings' report to have your final say about the content reported (as per your request).

Please note that contact details you provide will be stored on a password-protected computer and will not be accessible to anyone else as part of the ethics procedures.

Appendix I   A sample of field note

L1: Sunday 2-4 pm, T2 reported reviewing describing graphs vocabulary of homework 1: T2's hunger levels graph description, half of the students did their homework. He also reviewed homework 2 introduction to Bar chart 1 (the nicest fruits) almost all did that part and then they completed the body and conclusion paragraphs during the class. They have also discussed Bar-chart 2 (wrote the introduction).

L2: Monday 12-2pm, T2 started by reminding students of their homework GPD graph- 3 paragraphs (structure), completed 2 bar charts and 1 pie chart, and reminded them of the vocabulary. T2 asked students of the meaning of some words (review) such as reach a peak, rapid, gradual rise, stable, steady, soar, fluctuate, indicate, slight decline, sharp decline, dramatic rise, dip, oscillate, steep, plateau. They reviewed the GPD bar chart description, writing it on the board and asking different students about what they wrote, selected the better and more accurate ones, wrote the introduction paragraph (about 4-5 sentences). While writing the description, students became more involved. They were following what the teacher was doing. They were copying what the teacher was writing on the board. T2 asked students to write an opinion section for paragraph 3 as T2 provided specific parameters i.e. write 4-5 sentences. T2 discussed the conclusion written by one student and commented on why oil was going down and why services were going up, industrials like factories and buildings). Students were thinking of reasons for the trends. The following day students would be discussing sources of air pollution (homework, activity 67 fill in the right word). Students who completed their work were rewarded by leaving earlier at about 13:11, so that those who did not do activity one had to complete before leaving.

L3: Tuesday 2-4pm, T2 asked about the homework. Remember to ask T2 about students' activity 1 (note for me). T2 and students reviewed the graph-vocabularies such as trend, dramatic decline, indicate, shows, reveal, represent. This group was well behaved, overall, better than the other group (experimental). T2 discussed GPD chart again (rapid fall, fluctuating, reach a peak, dip p. 65-

67. T2 explained the chart about crimes, gradual fall, slight rise, sharp increase, remain stable, using the white board and handouts. T2 encouraged students to write, revise vocabulary a lot. He asked them to write an introduction about the graphs using while and whereas, goes around and check with the students. Students read the description of the graph and added some more details to the introduction written and then filled in the blanks with the right words (are they saying Ms instead of Mr?!). They were discussing the activity as a whole group. T2 and students practiced pronunciation and meaning of new words meanwhile. Questions and expressions such as 'is this conclusion ok, why not?' No opinion', 'what are you going to do now?', 'Why something would goes up and down?', 'write your opinion' were frequent during the lecture. T2 and students reached the essay writing part and it was given as a homework. C21 and C16 are they shy? Or students of low ability? They keep talking to each other. Speculate, upwards. Prior to-before. Teacher selected good sentences and ideas as examples. He encouraged peer-assistance 'if you are done help each other'. C20 was looking at his nails or dishdasha. He was looking at his phone (he was distracted throughout the classes). They sang 'Happy Birthday' song for me (T2 told them it was my birthday) and asked them to do the bar chart (as a gift for me ^_^). They had almost completed the unit activities. Maybe one or two more lectures and they would finish it. Good use of class time per lesson. The teacher told me that C16 and C21 answered his questions and responded well and that C21 was double checking with C16 for understanding only.

Np: L1 = lecture 1

Appendix J   Placement test writing criteria and marking sheet

J.1   Writing Criteria

Mark	Organisation	Grammar	Vocabulary	Mechanics	Task Achievements
5	Shows a topic sentence, supporting sentences with logical 'flow', coherence throughout, appropriate use of cohesion	Shows the range required for the task i.e. has the grammar required to perform the task, largely accurately.	Shows the range of vocabulary required for the task, largely accurate collocation, appropriate register	Largely accurate spelling, punctuation, capitalization throughout. Neat, clear hand-writing	A paragraph, at/ above minimum length, addressing the rubric, relevant throughout, reasonably comprehensive in coverage
4	Shows a topic sentence, supporting sentences with generally logical 'flow' (may meander a little), generally coherent and cohesive	Shows the range required for the task but with errors in complex structures.	Shows the range of vocabulary required for the task, despite lapses in collocation or register	Generally accurate spelling, punctuation, capitalization throughout. Legible hand-writing	A paragraph, at/ above minimum length, addressing the rubric but occasionally irrelevant or lacking coverage of some issues
3	Shows a topic sentence, supporting sentences that lack logical 'flow', with lapses in coherence or cohesion.	Frequency of errors shows insufficient range or accuracy for the task. Meaning will be fairly clear but will not be conveyed consistently through grammar.	Shows insufficient range of vocabulary for the task. General meaning may be clear but lexis will be inadequate to express precise meaning. There may be lapses in collocation or register.	Frequent errors in spelling, punctuation or capitalization OR Difficult hand-writing (i.e. legible but with difficulty)	A paragraph, at/ above minimum length, addressing the rubric, occasionally irrelevant and lacking coverage of some issues
2	Shows no clear topic sentence, supporting sentences that lack logical 'flow' throughout, giving rise to coherence problems and limited cohesion	Frequency of errors in complex and basic structures shows insufficient range for the task and this will affect understanding: the text may be ambiguous in parts.	Shows insufficient range of vocabulary for the task and this will affect even general understanding. There are likely to be errors in collocation and register	Frequent errors in spelling, punctuation and capitalization OR Very difficult hand-writing (largely illegible)	Short (50% or less) OR on-topic but not addressing the rubric (so frequently irrelevant)
1	The text displays no discernible topic sentence, no logical 'flow' throughout, lacks coherence and cohesion	Frequency of errors shows wholly insufficient range for the task and understanding will be severely affected. The reader may understand little of the text.	Shows wholly insufficient range for the task and understanding will be severely affected. The reader may understand little of the text.	Frequent errors in spelling, punctuation and capitalization. Very difficult hand-writing (largely illegible)	Short (50% or less) On-topic but not addressing the rubric (so frequently irrelevant) or off-topic.

0	No assessable sample

1. Assess for **Task Achievement** first.
2. If the script meets the **3** criteria, continue to mark the script. If not enter 1, 2 or 0 on the mark sheet.

TASK ACHIEVEMENT: This is a 'gateway' criterion i.e. a criterion that establishes whether or not the script should be marked in full. The criterion attempts to answer the question: has the student attempted to construct a text, in more or less their own words, that attempts to address the question?

ORGANISATION: This criterion covers the organisation of text above the level of the sentence, so at paragraph and text level. It assesses structure i.e. division into functional sections (introduction – body – conclusion), functionality i.e. the extent to which the sections perform their jobs and linearity i.e. the extent to which the ideas flow in – to Western readers - a logical manner.

GRAMMAR: This criterion covers range, complexity and accuracy of grammar use. 'Range' refers to whether or not the text displays the structures actually necessary to carry out the task in. For example a task that required a writer to describe a sequence of events in a linear way (first A, then B, then C) would require use of the Past Simple and perhaps the Past Continuous. A more complex task would be to describe a sequence of events in a non-linear way (i.e. first B, then back to A and then forward again to C) and this would require use of the Past Perfect, as well as the other two tenses. 'Complexity' is related to range. In this rating scale the common – but contentious and misleading - distinction between 'simple' and 'complex' grammar is used. Simple structures would include one clause sentences, or *co-ordinated* two clause sentences (i.e. He lives in Muscat but he works in Nizwa), noun phrases with no more than three components (i.e. determiner-adjective-noun), single verb, phrases, adverbs rather than adverbial phrases, Past Simple for narrative, Present Simple for description. Complex structures would include subordinated clause sentences, multi-item noun and verb phrases, multi-item adverbial phrases, conditional structures, Past Perfect in narrative, Present Perfect on the narrative/descriptive boundary, modal verb phrases.

VOCABULARY: This criterion also covers range in relation to the task but also considers three common consequences of a lack of range: the use of circumlocution, the simplification of ideas through the use of general words, misuse of words. It also considers register, by which is meant a choice of words appropriate to the type of text and the context of use. In an exam we expect standard academic English and should penalise colloquialism.

MECHANICS: This covers hand-writing, spelling, punctuation and capitalization.

J.2   PT marking sheet

CANDIDATE	ID i.e. Resident card number	WRITING			LANG. KNOW. & READING					PT Total		LEVEL D	LEVEL C	LEVEL B	LEVEL A	CHT
		21	22	Total	1-5	6-10	11-	16-	Total	Total			20-34	35-49	50-64	65-70
				0					0	0	OK					
				0					0	0	OK					
				0					0	0	OK					
				0					0	0	OK					
				0					0	0	OK					
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				0					0	0	OK					
				0					0	0	OK					
				0					0	0	OK					
				0					0	0	OK					

Appendix K   **The teachers' profiles**

code	Gender	Mother language	Qualification	Length of experience till December 2019	Teaching during data collection	Interviewed in
T1	Female	Filipino	MA in Literatures	20 years	Literature & Level B writing	Autumn 2017
T2	Male	English	BA in psychology and English (bachelor of science) and a master of education focusing on English education	19 years (Korea, UAE & Oman)	Reading and writing skills development, practicum course, & Level B writing	Autumn 2017
T3	Female	Arabic	MA in TESOL and PHD in Education	7 years at XCoE		Autumn 2017
T4	Male	Parisian	PhD in Education	10 years	Level B, Assessment, research methods and statistics	Autumn 2017
T5	Female	Arabic	MA in Applied linguistics with TESOL	8 years	Teaching a listening and speaking course and the assessment coordinator	Spring 2018
T6	Male	English	Not provided	8 years in Oman and before that in Japan	Foundation year courses Grammar & reading	Spring 2018
T7	Female	Arabic	MA in TESOL	8 years	QA revision, ELT course & Level A writing course	Spring 2018
T8	Female	Arabic	BA in English language teaching & MA in TESOL	9 years at XCoE	ELT & General English courses	Spring 2018

Appendix L   **Ethics approval**

L.1   Letter from Southampton University

Your Ethics Submission (Ethics ID:23737) has been reviewed and approved [Blue Category]

E ERGO <ergo@soton.ac.uk>
Wed 19/10/2016 13:17
Al'Adawi S.S.A. ∨

Submission Number: 23737
Submission Name: How can A Research-Informed Approach to the Implementation of Self-Regulated Learning Support Sustainable Assessment Practices at a College of Education/Oman?
This is email is to let you know your submission was approved by the Ethics Committee.

You can begin your research unless you are still awaiting specific Health and Safety approval (e.g. for a Genetic or Biological Materials Risk Assessment)

Comments
1.Thank you for your re-submission and for attending to the necessary amendments. Good luck with your study.

Click here to view your submission
Coordinator: Sharifa Al'Adawi

ERGO : Ethics and Research Governance Online
http://www.ergo.soton.ac.uk

DO NOT REPLY TO THIS EMAIL

L.2   Permission to conduct study

Sultanate of Oman
Ministry of Higher Education
Directorate General of colleges
of Applied Sciences

بسم الله الرحمن الرحيم

سلطنة عُمان
وزارة التعليم العالي
المديرية العامة لكليات العلوم التطبيقية

التاريخ: ٢٨ / ١٢ / ٢٠١٦م

الرقم: ٦ / ٥

الفاضل / د . حمود بن عامر الوردي   المحترم

عميد كلية العلوم التطبيقية بالرستاق

السلام عليكم ورحمة الله وبركاته،،،

الموضوع: تسهيل مهمة الباحثة / شريفة بنت سعيد بن علي العدوية

نود إفادة عنايتكم الكريمة بأن الفاضلة / شريفة بنت سعيد بن علي العدوية — تقوم بإعداد دراسة بحثية بعنوان:

Self – Regulated Learning Support Sustainable Assessment
Practices

وذلك ضمن متطلبات الحصول على درجة الدكتوراه من جامعة ساوثهامبتون بالمملكة المتحدة.

عليه يرجى التكرم بتسهيل مهمة الباحثة لإجراء هذه الدراسة، علماً بأن هذه البيانات والنتائج المستخلصة سوف تستخدم لأغراض البحث العلمي فقط.

شاكرين لكم حسن تعاونكم الدائم.

وتفضلوا بقبول فائق الاحترام والتقدير

عزيزة بنت سهيل المهرية
مديرة مساعدة مركز البحث العلمي

*المدير العام

*المدير العام المساعد للشؤون الأكاديمية

نحو تعليم عال ذي جودة عالية يلبي متطلبات التنمية المستدامة
سلطنة عُمان ص.ب:٨٢ روي - الرمز البريدي: ١١٢ - هاتف ٢٤٣٤٠٥٨٠ / فاكس ٢٤٣٤٠٥٧٨
Sultanate of Oman, P.O.Box: 82 Ruwi, PC 112, Tel:24340580 / Fax 24340578   www.mohe.gov.om

L.3   Requesting permission to collect data

Requesting permission to collect data from a higher education institution ⅅ Sharifa ✕   ⤢ 🖨 ⧉

Sharifa Al-Adawi <sharifa.rus@cas.edu.om>   24 Dec 2016, 06:16   ☆   ↩   ⋮
to Halima ▾

Dear Dr. Halima AlBadwawi

I Hope this email finds you well. I am Sharifa Al'Adawi, a PhD researcher at the University of Southampton, School of Education and my research is funded by Ministry of Higher Education to investigate,

"How can A Research-informed Approach to the Implementation of Self-Regulated Learning Support Sustainable Assessment Practices at a College of Education/Oman?"

This study aims to assess the learning and teaching process and involves no additional risk beyond the everyday teaching and learning process. I aim to collect data from the ELT foundation year programme (documents, teachers and students) to test research hypotheses assumed to answer the research question outlined above. Surveys, interviews and observations will be conducted to collect data starting March 2017 (pilot study), with the actual data collection stage commencing September 2017- to June 2018.

This study and the data collected will not negatively impact the curriculum as it does not aim to change the objectives, timing or assessment procedures used and it will not overwhelm students and teachers with additional teaching or study load. It does, however, complement the curriculum and enhance it by adding to what is already implemented.

Confidentiality of data collected is secured via the storage of data on a password-protected computer and all reference to individuals will be anonymised via a coding system. Participation in the study is voluntary and participants may withdraw from the study during the first three weeks of the study without any legal consequences.

Gaining access to conduct this study is important as it is hoped that the findings and recommendations will be of great value to educators in that they are likely to improve and scaffold the foundation programme for ELT students.

The study has been approved by the Research Ethics Committee of the University of Southampton, UK (Ethics reference number: 23737).

Your cooperation is highly appreciated.
I hope to hear from you soon.

Yours faithfully,

Sharifa Al'Adawi
PhD Researcher

Phone: 00447425201245
        0096892791535
Room 2067, Building 32,
School of Education
University of Southampton
Southampton, UK
SO17 1BJ

Appendix M   **Information sheet**

M.1   Student information sheet

Study Title: How can A Research-Informed Approach to the Implementation of Self-Regulated Learning Support Sustainable Assessment Practices at Colleges of Applied Sciences Oman?

Researcher: Sharifa Al'Adawi   **Ethics number**: 23737

Please read this information carefully before deciding to take part in this research. If you are happy to participate you will be asked to sign a consent form.

What is the research about?

 I am a research student at the University of Southampton, and I am an Assistant Lecturer at a College of Education, Oman. I am doing this research in order to achieve my PhD qualification on "How can A Research-Informed Approach to the Implementation of Self-Regulated Learning Support Sustainable Assessment Practices at a College of Education/Oman. I am aiming to investigate the effect of implementing a self-regulation training programme on Foundation year students' academic achievement and on skill transferability across courses. This research is funded by the University of Southampton and the Oman Ministry of Higher Education.

Why have I been chosen?

You have been chosen as part of the group you have been registered in (Level B) and hopefully you will see the fruits of your participation in this study within one year.

What will happen to me if I take part?

You will be required to attend classes normally, do the assigned activities and complete all required assignments as planned just like any other student of the same level. You will be asked to fill in a questionnaire on your learning behaviour and attitudes. In addition, you will be interviewed 2-3 times during the academic year to get rich insights of how you manage your learning and your writing lectures will be observed.

Are there any benefits in my taking part?

Your participation in the study is likely to improve your learning skills, your management of your own learning and improve your academic achievement.

Are there any risks involved?

It is assumed that your participation will improve your learning skills and your academic achievement, however, you may be required to put more effort into your studies. No additional risks beyond the actual teaching.

Will my participation be confidential?

The information you provide as a result of your participation in this research will be confidential and stored on a password-protected computer and your responses will be anonymous and used solely for research purposes. No indication of your identity will be mentioned anywhere in the presentation of the findings. My research complies with BERA (2011), UK Ethical Guidelines.

What happens if I change my mind?

You have the right to withdraw from the study during first three weeks of the first semester (September-December 2017) without any legal consequences, however, you will still receive the treatment as part of the intact group which is not going to negatively-affect you.

What happens if something goes wrong?

If you have any concern or complaint regarding the research or the researcher, you can contact the Head of Research Governance (02380 595058, rgoinfo@soton.ac.uk).

Where can I get more information?

If you have any additional information and require to get it from another source here are the research team contact details:

Sharifa Al'Adawi   ssaa2g15@soton.ac.uk

Prof. Carol Evans   C.A.Evans@soton.ac.uk

Dr. Andri Christodoulou   A.Christodoulou@soton.ac.uk

M.2   Teacher information skeet

Study Title: How can A Research-informed Approach to the Implementation of Self-Regulated Learning Support Sustainable Assessment Practices at a College of Education/Oman?

Researcher: Sharifa Al'Adawi   **Ethics number**: 23737

Please read this information carefully before deciding to take part in this research. If you are happy to participate you will be asked to sign a consent form.

What is the research about?

I am a research student at the University of Southampton and I am an Assistant Lecturer at a College of Education, Oman. I am doing this research in order to achieve my PhD qualification on "How can A Research-informed Approach to the Implementation of Self-Regulated Learning Support Sustainable Assessment Practices at a College of Education Oman?" I am aiming to investigate the effect of implementing a self-regulation training programme on foundation students' academic achievement and on skill transferability across courses. This research is funded by the University of Southampton and the Oman Ministry of Higher Education.

Why have I been chosen?

You have been chosen because you are teaching one of the groups that I am hoping to study and because of your experience of learning and teaching.

What will happen to me if I take part?

You will be required to teach classes normally, clarify the assigned activities and guide students through required assignments as planned. You will need to attend a pre-semester one-week training programme to practice modelling Self-Regulated Learning Strategies to students and to make sure you incorporate training into all activities throughout the semester [for experimental group teacher only]. You will be interviewed and your writing lectures will be observed for 4 months. I will be co-teaching with you for the first few weeks at the beginning of the semester (for experimental group only).

Are there any benefits in my taking part?

Your participation in the study is likely to improve your students' learning skills and academic achievement and hopefully provide you with new insights on teaching techniques that could benefit students beyond the course objectives and your own professional development. I also feel that I can learn a lot from working with you to support students' learning.

Are there any risks involved?

To harvest the fruits of such implementation, this project does require time and effort in the planning of activities for supporting student self-regulation. It is hoped that this work will be supportive of your teaching beyond the programme. There will be no risk beyond everyday classroom-based teaching process at the college level.

Will my participation be confidential?

The information you provide as a result of your participation in this research will be confidential and stored on a password-protected computer and your responses will be anonymous and used solely for research purposes. No indication of your identity will be mentioned anywhere in the presentation of the findings. My research complies with BERA (2011), UK Ethical Guidelines.

What happens if I change my mind?

You have the right to withdraw from the study during the first three weeks of the first semester (September-December 2017) without any legal consequences, but we may need to change the group you teach which may result in changes to the timetables and students you will be teaching.

What happens if something goes wrong?

If you have any concern or complaint regarding the research or the researcher, you can contact the Head of Research Governance (02380 595058, rgoinfo@soton.ac.uk).

Where can I get more information?

If you have any additional information and require to get it from another source here are the research team contact details:

Sharifa Al'Adawi   ssaa2g15@soton.ac.uk

Prof. Carol Evans   C.A.Evans@soton.ac.uk

Dr. Andri Christodoulou   A.Christodoulou@soton.ac.uk

Appendix N   **Consent sheet**

Study title: How can A Research-informed Approach to the Implementation of Self-Regulated Learning

Support Sustainable Assessment Practices at a College of Education/ Oman?

Researcher name: Sharifa Al'Adawi

Ethics reference: 23737

Please initial the box (es) if you agree with the statement(s):

I have read and understood the information sheet (16 September 2016, V1) and have had
the opportunity to ask questions about the study.

I agree to take part in this research project and agree for my data to be recorded and used

 I understand that my responses will be anonymised in reports of the research.

 I understand my participation is voluntary and I may withdraw during the first three weeks
 of the first semester (September-December 2017) without my legal rights being affected

Data Protection

*I understand that information collected about me during my participation in this study will be
stored on a password-protected computer and that this information will only be used for the
purpose of this study and later publication.*

Name of participant (print name)…………………………………………………

Signature of participant………………………………………………………………….

Date……………………………………………………………………………………………...

Appendix O **Pre-test Writing task**

Name: _____ ID: _____ Section: _____

> Write a paragraph of 150 words about your first day at college during the Orientation
> Week. Use these questions to guide you.
>
> - What did you do?
> - Who did you meet?
> - How did you feel?

Appendix P   **Activity 4/Writing task**

Autumn 2017 - (ELT) Level B - Activity 4

Name: _____ ID: _____ Section: _____

Write a <u>narrative essay</u> of approximately 200-250 words about one of these prompts:

1- Your first week at College.

2- Learning to drive and taking your driving test experience.

3- Your happiest moments doing what you love (e.g. your hobby).

4- The best day of your life.

5- The worst day of your life.

6- The greatest fright of your life.

Plan for _____ (Write 1, 2, 3, 4, 5, or 6).
You can use this space to plan your essay. You can make a mind map or other diagram to help you.

Appendix Q   **Post-test writing task**

Autumn 2017 - (ELT) Level B – Post-test Writing-Task

Name: _____ ID: _____ Section: _____

Write a 150- 200 words essay about 3 skills you have learnt this semester:

What are these three skills?

How did you learn them?

Why are they important?

Plan for _____ (Write 1, 2, 3, 4, 5, or 6).
You can use this space to plan your essay. You can make a mind map or other diagram to help you.

Appendix R   A sample of thematic Analysis

R.1   A sample of a student interview

<table>
<tr><td colspan="2">Student: C18, 7/5/2018 (34:14 min)</td></tr>
<tr><td>Interview conducted in Arabic and translated into English</td><td>Initial codes</td></tr>
<tr><td>I: C18, what is your opinion about this semester, in general?</td><td></td></tr>
<tr><td>C18: From which aspect? (Your study, difficulties, problems, courses, teachers, compare it with last semester.) Alhumdulilah, last semester was different for us. We were not used to the college system, lecturers, and marks system. Everything was different. Alhumdulilah, we got used to the change, but it is a little bit difficult because of the report (In writing?) Yeah, but write more than in the first semester. All teachers are good, maybe one or two changed this semester. (So all is good?) Yes, Alhumdullilah.</td><td>Getting familiar with college system

Awareness of the college system and regulation

Increased assessment tasks demands</td></tr>
<tr><td>I: Ok, Do you remember the last task given by T7? I think it was a graph or bar chart?</td><td></td></tr>
<tr><td>C18: Yes, it was a bar chart. (Ok, what was it about?) I can't remember that well, but I think it was about women and men working in the UK, their percentage from 2012-2014 or 2013-2014 (Excellent) on the different occupations. (Alright)</td><td></td></tr>
<tr><td>I: Do you remember the steps you used to complete the task?</td><td></td></tr>
<tr><td>C18: The steps, first we describe the bar or the line in a short summary, then we describe them in details and after that we write a simple and a short conclusion without opinion (aha) but the vocab differs and there must be some mistakes. All humans make mistakes and we learn from our mistakes (ok).</td><td>Structure and content of the essay</td></tr>
</table>

I: Before submitting your completed task, did you revise what you have written?	
C18: Of course, *hahaha* (what did you revise exactly?) *interruption, somebody knocking on the door* (aha) could you please repeat the question? (Did you revise your paper before submission?) Yes, of course, I must revise. (What did you revise?). The steps did I follow what T7 said because if I followed even if I made mistakes in writing – grammar or vocab, I still get some marks (I see), because everything is assigned marks, so if I lose marks in vocab, I receive some in steps *he means structure of the essay*.	Revision based on teacher previous instructions Following teacher instruction to get marks **Performance-oriented**
I: Ok, are there specific strategies you use to write?	
C18: To be honest, No. (SO you start writing directly without planning?) I am the only one who doesn't plan (why?) I don't know. T7 was teaching us how to plan a few days ago, but I did not. (Is that in general or just for this task?) I just start with introduction, body paragraphs and conclusion. (Ok)	**No plans before writing** Spontaneously plan while writing
I: Did you need help to understand the question or was it clear?	
C18: I understood the question. It was easy. The questions she` gave us were easy.	**Clarity** of assessment task
I: Were you satisfied with your performance in this task?	
C18: I don't know how many marks I got. (How did you feel about performance? Were you satisfied?) No. (Why not? What was difficult?) It was not difficult, but we are supposed to practice writing, but we don't. We are still in the school mood, behaving like school students. (aha) I mean, a person doesn't learn unless encountered by a problem. We take our books home and we bring them back the next day untouched. (The same routine?) Yes, still the same. This is the problem. (^_^ so what do you do to overcome it?) You know because it is the foundation year and the community says relax in the foundation. Nobody encourages me to study hard. (Aha, who do you mean by the	Aware of the importance of repeated practice Learning histories, **lack of Maturity**, **Need for challenge** Stereotypes, effect of **context**, **Family and**

community?) For example my brothers, my friends. They all say relax in the foundation because you are going to work harder later. (Ma shaa Allah. A good advice!) *He laughs* At the sometime, classmates and friends are not helping. We stay playing PlayStation till down (It shows). Yeah we don't sleep well and then our absenteeism percentage increase. C20, for example, is 21% absent. (Which means he is out of the course) I don't know, but I hope they will help him. (You hope!) We are all on 17 or 18%, (Ma shaa Allah!) *He laughs* relaxed to the maximum as if we are not college student. (So you know?) Yes we know. Everybody knows it is wrong. We think about it and question it, but the problem is that we don't improve. (In the foundation course, you have 20 hours and that's why you are not out of the course already. Next year, courses allocated hours maybe 3-4 which means missing a couple is problematic.) Yes. (So, You will have to reflect on you behaviour right now, that's if you passed this course) *He laughs* I think either we fall into C20's situation or we fail to learn (Are you waiting to fail to learn!) Maybe not fail, perhaps very low marks (God help! PlayStation at college level?) *He laughs* Yeah I need to be honest with you, why should I lie. (Please be honest.)	**peers** influence and pressure **Beliefs and expectations** about the foundation year Carelessness Perception of being cool **Aware of responsibilities but not embracing them** **Challenge and learning from mistakes to act**
I: Ok did you have any aims before the beginning of the semester?	
C18: No, I am honest with you.	No goals
I: Are you aware of the resources available at the college that can help you study?	
C18: There isn't much time as I told you we don't stay at the college. Most of the time we are playing computer games or we go to Muscat and then I go home (The best kind of friends!) *He laughs* That's my choice, you see. Maybe if C20 fails, my friend and I will repent. (So, we should fail C20 for you) *He laughs* But it isn't fair to fail him the whole semester because he attended. (I see, will tell you later if it fair or not, let us complete now.) *He laughs* Ok. (Right now, I am asking you, are you aware of the resources available? Am not asking you whether you use or not?) No, I don't have any idea about them. (How about	**Lack of knowledge and interest in learning resources**

computer labs?) Half of the labs are not working. (Did you inform the technicians?) Yes and even my user name and password were not working and they change them. It is fine now. (How about the library?) No, I have never used it. (How about the study or readying room?) We don't study. *He laughs* (yeah, right) Yeah let's be honest, we enter exam rooms without studying. We think of English as four skills and doesn't need studying just like in high school in the study day for English exam, we go to play. Nobody study English and that's why my friends have either failed or stayed at home (Good) except for few. (And still you have not learnt your lesson?) At school a teacher encouraged me to study English and told me it will be useful for me, because my brother is also an English teacher (aha) and I though may be my brother will help. At times, I give him or his wife my homework to do it for me. His wife is a translator *He laughs* (What a supportive family!) and I guess that's why I don't pay attention, but mostly I depend on them when I have a presentation. I give it to him to do it and then I come and present it without even preparing for it. (Where is your brother? I need to talk to him?) He teaches in 'name of town'. (I need to tell him a few words) maybe if I am on probation, he will come. (Don't wait to be on probation, it is difficult to get a normal load after that.) Difficult? (Yes ask students who had that experience, they might spend a year or two trying to get a normal load and if you get 0 in a course, it is again difficult to raise it. So study hard C18 don't wait to fail to change your behaviour.) *he laughs* In shaa Allah.	Inefficient computer labs

Physical resources either inefficient or student don't utilise them

Attributing consequences to effort

Peers influence

Over-scaffolding from family |
| *I: Ok, on your opinion, what is your role as a student in a college? What are your responsibilities even if you don't do them?* | |
| C18: Towards the college or …? (Towards the college and towards yourself?) The least of my responsibilities is writing the report because it has been due two weeks ago and T7 was kind enough to let me do it. I got 0 for draft1 because I didn't submit. Draft2 I got 100% plagiarism because it was a copy paste (my God) *He laughs* Yes but draft3 16% (OK?) *He laughs* Yeah she even told me it was the first time that a student score 100 in plagiarism, because it was all copy and paste um | **Student's role** at the task level is not met |

even the hock is copy paste (maybe even the name was a copy paste?) which name, there was not even a name *He laughs* No I know my name (But you see if you fail in the report, it means you fail the whole course) Yes she told us, but the problem is that at the end and I was thinking, see I am neither a poor nor a very good student. I am somewhere in the middle and if I exert some effort and study I might be a very good student. In the mid-term I got 31 out of 40 and I thought I will pass, but she told us that report is on its own (Yes just like last semester.) But she did not tell us and she told me, C18 you are gonna fail and that made me study and reduce plagiarism from 100% to 16% (Ok, it worked. That was the pinch you were talking about.) *He laughs* yes. (And who did it this time? You or your brother?) 50/50 (Told you your brother need to hear from us.) No, not my brother this time. It was my sister in law because my brother is building a house. He is busy. (As well, Great) *He laughs* Yeah, not around that much.	**Transparency/aware-ness of criteria, requirement and consequences** **Awareness of strengths and weaknesses** **Family influence**
I: Ok and in your opinion what is your teacher's role in your learning?	
C18: I don't understand. (What is your teacher's role and responsibility in your learning?) A normal role, s/he does not have to interfere or interact, just teach like the other lecturers (so teach and be in the classroom?) Yes.	**Teacher's role** **Teaching**
I: Ok, How about your classmates, do they have any effect on your study?	
C18: Oh, a lot. *He laughs* as you can see. It is known a friend is an influencer. It is a proverb (so their effect is negative most of the time?) A lot, positive and negative. (How?) As you see know missing classes and absenteeism record in English 17.87 and in IT, 18. One more absenteeism and I will fail the course and 'touch typing', I have not submitted it (what is that?) a task in IT worth 15 marks, which I can easily get, but I have not yet and I might fail the course because of it. You see we play all the time and we don't have time to study. In the weekend they go home and if one of them start doing it, we will be encouraged (aren't you from 'name of town'?) Yes (How comes you are	**Negative effect of peers** **Admitting bad habits**

living with your friends?) I am living with my brother, but I spend my time with my friends. (I see)	
I: What about your family? You said your brother helps you although it is a negative help,	
C18: Yes, he told me that too. He said you are going to struggle later and I told him it is fine, because at the beginning I didn't feel like studying. I entered a program for nominating officers and that's why my attendance rate was low and I asked my brother to do my homework and tasks, even at time I read the presentation during the presentation and face difficulty pronouncing some words and read it fast (Ok) beautiful right *He laughs* (indeed, ok how about the rest of the family, your parents, siblings are they attentive to your study?) No, I am the youngest and my father is about 75 years old and my mother perhaps 5 years younger (Good bless them) They don't care or they don't understand they think college is just like school and they think just like I passed school, I will pass college. Maybe my sibling know better because they are all educated except for one … (Ok).	**Lack of interest in the programme** **Lack of motivation** **Lack of parents awareness of HE requirements**
I: C18, do you know what feedback is?	
C18: feedback? Comments? (Aha, It is whatever tells you about your performance on a task) do you know about my performance? (Huh?) You have it? (No, I am asking you about the meaning of feedback?) Yes, T7 gives on the report. (Yes feedback is a mark given to you or comments about your performance.) Yes. (where do you get feedback from? The teacher? And How do you get it verbally or in writing?) No, nobody gives my except for T7 when she told me about failing the course. That's it. (How about the exams, don't you receive marks?) Yeah, of course the teachers write comments but they don't tell me your level is like this and that, receive when teachers write it. (How about your classmates, do you ask them about your performance, do you discuss?) No. (So you depend on the teacher?) Yes, but not to a large extent half the time we don't pay attention, talk or use our mobile phones. (I see) I seems this is the worst interview *He laughs* (^_^ No I	**Narrow definition of feedback** **Teacher-feedback** **Limited use of feedback**

would like to know all you want to say) Yes and I am honest with you. (That's what I want. I want to know your problems, whether you are making an effort as we are trying to help through this research) We are not stupid, we are just not making an effort, which is why we are not getting high marks (Of course, it is all about studying hard and practice) Yes and there is not a difficult and an easy specialisation and those who study and do thing on time, won't find it hard. (Yes)	**Positive attribution of consequences to effort rather than intelligence** **Growth mind-set**
Ok, If I ask you now to evaluate your performance, what would you base it on, marks, teacher's opinion or criteria given in class? How do you know that you are progressing or not?	
C18: I depends on the marks and on the teachers. For example, For example, T. you know your students, for example, C18 is good, C1 could score high if he study and C20 etc. You know them with time (Alright).	**Depend on teacher feedback only**
I: At the beginning, you told me that you are not self-regulated, you don't have aims, or make timetables or evaluate yourself…	
C18: I was like that even in high school. I don't study, but I scored in English even if I don't study, because you can do it without studying and we had a very good female teacher (In high school? Female teacher, how comes?) Yeah, I am from 'name of village' and our school had both genders (I see). And I chose the scientific major with girls and that's why my level improved but went down in grade 12 (OK.)	**Study habits and routines transferred from school,** **Peers positive influence/ girls are studious, task demands**
I: Ok, C18 evaluate yourself. What are you good at and what needs improvement?	
C18: I am good at reading. I need to improve speaking. I am ok at listening. I can understand what is said but still not good in listening tasks, because it needs practice and I don't practice as I told you my brother did not study at college, but because he practiced with foreigners in an English institute for one semester, he has good English. We are here at college and we should improve just like him, but because he was unemployed he studied hard and also he spent time	Aware of strength and weaknesses **Importance of practice** **Motivation, task value**

with foreigners, his pronunciation is even better than my other brother, the teacher, because he practice and he has been doing this job for 14 years now and he travels and use the language. (I see) If I was on a scholarship abroad, my speaking will be better, because I would be using English all the time. Here after college I use Arabic and with you I am speaking Arabic, but if I was in America or England, I would be interviewed in English. Like last semester, foreign teachers, taught us like T2 and we had to communicate in English, although the Omani is still better, but foreigners like T2 care about time and he is very organised. (Do you Omani teachers speak in Arabic?) No, but it is different. For example, Omani teachers get angry if we don't do the homework but with T2 he check the homework and make us write if we didn't and he sits with us and even the bar chart, he taught us and make us learn the vocabulary of the bar chart and his way is attractive (So, his teaching ways is working) Yes. If he was 5 minutes late and you left it is ok and if it is 30 minutes before the end of the class you can leave. He is very organised and manages time, but if you did not do the homework, you cannot leave earlier, so the next time we would do the home work so we can leave with our friends and have fun (so the punishment worked?) yes and we did the homework.	**Practice/** **Excuses** **Effect of the context/ learning environment and context** **Beliefs about foreign and Omani teachers/ expecations and teaching approach** **Time-management**
I: Ok, C18 you said you want to improve speaking, how are you going to improve it?	
C18: Um speaking is a bit difficult. I live here and go back home where nobody speaks English, maybe if I lived here, I would improve in speaking. I can go on trips with my brother and the tourists he guide and learn from them and at the same time get money. That's the best way I could think of. (Ok, why don't you speak with your classmates in English?) Nobody speaks in English. (I Know, but you could start) What can I say Ms, people laugh at those who speaks English. For example they would say, why do you speak in English, speak in Arabic, we are not in class. (Ok! They will laugh once, twice, three times and then it will become a culture, we have tried it) Yes Ms, but girls are dedicated then boys. I studied with girls from grade 1-12. (What would you say if I tell	**Expectations and beliefs about the Learning environment** **Beliefs and stereotypes about gender effect on studying behaviour**

you that boys are more adventures in speaking than girls) I know there are bold boys, but you see even oil crises affect them (How?) Many of them want to leave college, because filling petrol is expensive (Where do they want to go?) The army, but if they think about it 4 years here and get a better salary, but they don't think. (There are so many things that can affect students, but the most important thing is to have motivation. I want to finish this. I want to succeed.) Yes. It is important but the problem um (Don't you want to get a job?) Huh? (Don't you want to get a job?) Yes, who wouldn't * He laughs* (Then this is a motive.) Yeah but most of the guys … (I am talking about you now. I know students who reached year 6 at the college and left without a degree. Is it fair to waste 6 years of your life for nothing? They had the same carelessness you are talking about now, missing classes, barely coming to exams and exhausted all chances of repeating) So we have 6 years (Yeah, I think 6 years including the foundation. Now you spent a year in the foundation.) Yes if I don't fail in the report. (Well, if you do you will have to repeat the course) Yeah but they should tell us about the hours, courses, fail and pass (Is it possible that nobody told you? These are said in the first week of study?) I was here most of the week. (Well, that is your problem then, because that week they told you about the study hours, college system, failing/passing, probation) I think there was a tour around the college too and we were not present, because we had a placement test. (yes they give you the lectures first and then the exams) Yeah I attended something like that, but it was not detailed like for example the absenteeism, I thought if I had 21% absenteeism and provided an excuse, it goes down. (How?) I thought if I have sick leave and provided it registration I will get a chance to stay in the course (No. No. sick leave grants you withdrawn, to repeat the course not to stay for the current semester) Yeah I just knew that when I had the problem I was at 18%, thank God.	**Context, job market and motivation** **Future self-perspective** **Long-term goals** **Lack of assessment literacy and requirements** **Lack of awareness of college regulation**

R.2   A sample of a teacher interview

Teacher: T8, 13/5/2018, (1:17:51)	
Interview transcript	**Initial codes**
I: What principles underpin your teaching T8?	
L: Like, because principles can cover a lot of things. (Yeah, what do you want your students to gain from your teaching basically, something like your methods, your approach to teaching?) Yeah, well we can divide them into language –related like principles and um personality-related principles. Let's start with the personality-related principles, I want to <mark>create responsible students, punctual students, and regular students in their attendance</mark>. Those who are interested in what they are doing, who are interested in what they are studying. I want to <mark>create students, motivated students</mark>. This concerning personality-related principles. Also, I want to create students who have um lots of love and responsibility towards their country. (Ok) um for language-related principles um I want um, I want students um who really strive for their proficiency for their language proficiency in all the four skills and the two aspects of language of language (aha) I want them to graduate from here with band 7 or more. I want students who balance their fluency with language proficiency. I want students with robust research skills. (aha) This all I can think about know concerning my principles. (Great)	Develop students' personalities and build their character **Teacher has a rounded students expectation, Constructivist approach: wants to create students** i.e. Responsibility and commitment to study, Enhance student motivation, Passionate about learning and teaching, patriot citizens **Teachers' beliefs about students' roles:** Learning and mastery-oriented students, teacher is setting high standards for students, Develop research skills (Teacher has an ideal student image)
I: And what's your role in their learning and the teaching process in general, what do you perceive it to be?	

L: Yeah, I believe it is more than one role. The first and more basic role, which I believe that is the role of all teachers from kindergarten to the most advance educational degrees, is setting a model and um I believe that everybody is working this way, we are searching for a model to follow, and we as teachers, we should set a good model, a perfect example for our students to follow in terms of our language proficiency a, our research skills and also in terms of our personality. This is the first role that I strongly believe in. The second role is a motivator, we as teachers we should um feed our students with motivation. We should constantly motivate our students to learn in general and to learn the English language which is their major. (Ok) Yeah, umm the third role is knowledge provider (aha) yeah although lots of people are not believing in it anymore but I still believe in it, especially, or at least in the context of our country where um our students assume the teacher to be the knowledge suppliers and um the um knowledge resource (Ok) So, this is why we should keep reading, we should update ourselves and I am so delicate in that like if I am to present any grammatical point or vocabulary item, I conduct lots of research prior to the class, to make sure I deliver it correctly and comprehensively with a lot of expansion, with a lot of elaboration to the students, because I believe in that role of providing the students or supplying them the knowledge and I believe that they gain lots in the classroom, because our students are not that um like great readers. They rarely read outside the classroom. We don't have this culture of like constant, continuous reading. We don't have the culture of the reading habit, so the knowledge they get in the class room is very very valuable and um this is why we should provide them with lots of stuff about the language they are going to teach after 5 years, so this is the role we are assuming as teachers. Um what else *silence* (How about the students role?) Um, also, let me add this role of being care-givers (what's that?) I believe a lot in the rapport between the teacher and the students. Again, lots think it is not needed in the higher institutions, but I believe it is even needed more than in the earlier	**Teachers beliefs about her role**

Being a model

directive teacher approach/spoon feeding approach

She believes that motivating students is teacher job and that students are vessels to be filled

i.e. Knowledge provider- can lead to students' overreliance on teachers

Being constantly informed of emerging theories and strategies

Reality or assumptions and stereotypes |

stages, because here they are away from their families, so um if they don't like the teacher they will not do their best in the course. They link the course a lot to the teacher, so I try to break the ice between me and them, within the zone of respect, of course. Again some do it too much to the extent that students no longer respect them (aha) Yes, we should listen to their problems, to their personal problems. Their um, some of their private life stories and I feel that our students really enjoy talking about because they feel that someone is paying attention to them, someone is attending to them and um this has a positive effect on their performance, when they see that the teacher is listening to their problems and trying to solve them and listening on its own is providing a lot of care to the students and um it provides like a stress-free environment in the classroom, so yeah I also believe in that fourth role for us as instructors here (Yeah, I agree with that, how about you perceive to be the students' role?) *Laughs* let me add, also, one role. (Alright). I said we are suppliers of knowledge, but we are also, one more role is we are also, um like suppliers of skills and strategies. We should keep telling our students like how to do this task, how to read, how to gain the grammatical or learn the, or intake the, so that how is also important, that whatever skills umm we can deliver to our students, we should never like wait one moment. We should equip our students with the learning skills or the study skills. Sometimes even basic once they may, it may not occur to our mind like how to study the vocabulary items and the importance of taking notes. The importance of keeping record of all the vocabulary that they study, even these simple like study skills, lots of our students lack, we should keep reminding them of that, like even with my reading classes, I start by showing them list of strategies to follow like how to answer true/false questions, how to answer the heading questions or reading for main ideas (aha) Yes, I show them to the students on the PowerPoint before we start the reading textbooks, so they follow these skills as I told you lots of our students lack the study skills (Alright) Yes so we should provide them not only with	Teacher believes that students do not read: a cultural phenomenon

Rapport between teachers and students/relational aspect of learning and teaching is very important for students

Foundation year is a transition stage literally from being school students to higher education and emotionally from being protected by family to starting being adults

Rapport help motivate students and build their self-worth and self-confidence and liking the teacher improve student performance in a course

Teacher are models Supplying effective skills and strategies

i.e. Instructions and guidance on the use of strategies Study

students lack skills and self-observation strategies |

fixed knowledge but also with the skills to learn. (Alright) Sorry, Sharifa, your next question? (No, you are actually enriching the interview, so go ahead ^_^) I hope so *laughs*.	
I: Ok That's your role as a teacher, what are the students' roles, at least what do you perceive it to be in their learning process?	
L: Yeah. There are lots of roles expected from the students' sides. (Like?) The first is um, like um accepting their personality or their characters, but also working very hard and doing their best to develop themselves, to improve their perception of thins, their personalities. They should be very very aware. They should have self-consciousness of their pros and cons, um their strengths and weaknesses, and um their faults and their merits, they should be aware of that. Ummm Also, ummm they should be independent learners, and when I say independent I mean independent from their friends. They should not depend on their friends even um like to finish simple like grammar activities or vocabulary activities for them. No, it should be their responsibility. Also, in terms of research, so many of our students depending on others to write for them and they think that this is something healthy or something normal, while it is not and now the upcoming thing is that they get the help even from their parents, because as you know , Sharifa, now we have educated parents, parents with higher education degrees, so they get even their help to write their research paper and to help them with the presentations, but I believe all of these duties should be done the student himself, so this is one of roles for the students, they should learn dependently in terms of skills and knowledge. They should take charge of their own whole learning process. (Be responsible.) They can seek, of course, others help, but don't depend on them, I mean that highly, so they, we said they should develop their personality, they should be independent learners. They should be active learners by taking-part in class, participation, note-taking, again that note-taking. This skill is extincting now in the classroom; you rarely find now students who take notes and you	Teachers' beliefs about students roles

Teacher expect students to be metacognitive learners i.e. being aware of who they are, their strengths and weaknesses

Develop their personality and their character

Defined independent learning as being independent from friends and family, which students think is good networking as family handicapping students

Taking charge of their learning process and establishing good quality networking |

keep reminding them, but you still find only a handful of them are taking notes. They will depend either on the textbook, or the handouts or depending on each other's notes, so yeas one of their roles is to be active learners through note-taking and participation in class. Umm another role is being expansive um readers. They should be intensive readers, they should read intensively. They should be extensive readers, they should read extensively. Umm they should be involved a lot in the academic environment at the college. When I say involved, I mean pay attention at whatever given to them in class and outside the class, through google classroom, by email and respond. This is one more role, they should be responsive to their teachers, to the assignments given. They should not postpone them until it is too late. (Aha). They should don't like exceed the deadlines or meet the deadlines. They should be so much involved in their studies. The more involvement and processing they have, they stronger their learning is. That's why we sometimes have students graduate with band 5 while their classmates studying under the same ceiling graduate with 7. Why? Because these were more involved than the other group. So, yes, they should be involved learners, active learners. These are their role, responsible, punctual, regular attendance, they should learn independently, they should not depend on others. They should also be honest learners. They shouldn't try here and there to cheat in the exams, to plagiarised, to use all of these like bad websites to help them with writing and fabricating their reports, so yes, they should, one of their roles is being honest learners and they should be passionate about their major. I keep telling them if you are not interested in it, just change it to another major, but don't waste your years on something that you are not interested in and this is what god has chosen for you and parents have chosen for you, then believe that this is the best thing that matches your potential, but you should take it with passion with interest, but don't waste your time just whining and complaining about um the fact of being teacher. Um also their role is um enriching their knowledge about teaching and the updates of the	active engagement with learning by taking part in class activities (Behaviourist view)

i.e. disappearance of self-recording and self-monitoring strategies

ideal image of rounded students (Utopia)

i.e. attentive to study and responsive to the teacher, Honest/ethical/ research skills and ethics/

Students need to feed their interest in the major

Professional role/ future career |

teaching method. Those are the roles I can think about from the students' side. (Alright, that's great, T8)	
I: Um what do you consider to be a good assessment practice?	
L: Yeah, um (In terms of design, objectives, procedures?) Yeah, I believe um strongly in the um, in having assessment that considers um different skills um and also assessment that is, that has got different modes, that, so for example, when talking about the foundation, I don't think that it is enough to have those traditional modes of assessment the presentations and the two exams, because we have, I mean these too are great but they aren't enough. Also we should at intermitted periods of time, like we shouldn't have 40 marks within an hour and a half or two hours at once, better to have it periodically (alright) ummm the benefit of that um is terminating the stress from the students. They will get familiar with it, it will be like a habit, but if it is only once or twice or three time a semester, it is very stressful for the students when it is this way. The second benefit is that when dealing with humans we are living with different moods and also sometimes we are sick, sometimes we feel well , so we are controlled a lot by our moods and our spirit (aha), so accumulating lots of marks for one day, I don't think this is fair, so better to have it every one, every week or every two weeks instead of have it, having it like at three spots in the semester I don't think this is fair um (so you believe in the short term goals, it is better?) yes um I believe in like assessing various skills, like again if we refer to the foundation, um presentation may not be favoured by those quiet and inhibited students, they may prefer the written exams. Written exams, also, may not be the favourite of those bold students who try to show. Umm there are lots of skills that are missing in our assessment um. Also we don't consider the different learning styles in our students. There are those visual students, physical students, kinaesthetic learners and yet we all, we test them all with the same kind of test, written and oral tests. Um the oral assessment is not also given the weight it should be given like we	Beliefs about assessment

Good assessment practice is varied delivered in different modes and cater for different needs

e.g Continuous intermitted assessment to eliminate stress/ incremental

Making assessment a normal part of the teaching/learning process

Fair/meaningful assessment/equality

Inclusive assessment

Students access to assessment

Distribution of assessment weight |

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allot more marks for the written rather than the spoken-like assessment. Um (More for test rather than presentations and other stuff?) Yes there are so many other things that should be assessed. Let me try to figure them out. Umm note-taking for example is missing, and in dealing with that group, I also felt <mark>a need to have punctuality and regular attendance</mark>, honestly as part of the assessment because they are not taking it seriously. The homework is not assessed and again because it is not assessed it has got no marks, they never take it seriously, only like the maximum number of students who do the homework in that group is 2-3 honestly and this (out of 23?) out of 23 and this made me stop assigning them the homework because it was not affective. We are in a country um whose students um are like controlled by the marks. <mark>If you don't assign marks, they don't take it seriously</mark>. Also we have quizzes after every three unit, but because they are not assessed, they don't take it seriously, so they come unprepared and some of them even miss these quizzes, so if the quizzes were assessed, it will help a lot. So to make it more effective and to push students to study, I make in believing the assessment like <mark>more frequent</mark> rather than keeping it at once, like happening at once, like 50 marks for the final, I would say it doesn't really represent their level and it does not show us a very <mark>accurate portrait of them as English language users</mark>. Um, also the mid-term, it is allotted, I would say, too many marks to be done within 2 hours or two hours and a half in level A. concerning the research again I don't think that it is run effectively, because there are lot of plagiarism attempts which are not shown in safeassign. Yeah and um my colleague came across so many of such examples like someone helped by this one or another one is not shown there, so for more Effective assessment of research the students should be divided among so many teachers, like given that tasks, like monitoring more than <mark>20 research work is so much for the teacher</mark>. The maximum number should be 5 because if the teacher was more able to monitor them on a weekly-basis, those plagiarism attempts would, like, they would reduce, or they would even be eliminated	Lack of focus on strategies, teachers' awareness but in ability to change

Advocating summative assessment to motivate students:

Attendance should be part of assessment weight to encourage students' investment in learning and assessment

Lack of students' engagement with assessment: attendance and marks

Students are motivated by marks as culturally students value marks

Distribution of assessment task and weight

Meaningful assessment address students learning and needs

Alignment between allocation of marks and objectives

Teacher load increases when it comes to writing |

but handling more than twenty research papers, everything is online and they have the time limitation um is ==overwhelming for the teacher== (Yeah) um. I would also um suggest that grammar should be more strongly linked with the writing hours. I can see that with the writing they are taught essays but also they need to write research papers (Yeah) Yeah, so more hours should be allotted for that or the research should be separated from essay writing (Ok) yeah because research skills are somehow different than essay writing. The processes, the two processes are different um. Yeah the assessment should also be different. I am not that really knowledgeable about how writing and um research are assessed, but ==concerning grammar they aren't really that serious== with me because they are sure, or this is what is happening they are tested in very very general grammatical rules and they are tested only twice in grammar; in the first mid-term and also in the final exam, as I told you it is only allotted 5 marks in both assessments and test very general grammatical rules like the tenses only or plus models, so they don't test the other deep rules that we are tackling that seriously. Although ==I keep reminding them== this is for the sake of their language not for the sake of the exam, but they still don't take it seriously. How they take it seriously, when we link it with assessment, when we make it assessed. So if we are allotted like marks for the quizzes we are giving them, they would take it more seriously. They will study these rules more deeply, it is going to be more effective and it will show more on them.	Integrative language skills, assessment design Assessment conditions Assessment design Task value Students investment in assessment Teacher load Teacher approach i.e. telling versus experience Assessment distributions
I: What would you say to the students who say it is the foundation year and we can pass easily because it is a pass or fail program and we don't have to work hard?	
L: Yeah, I keep hearing that a lot from our students, unfortunately. I analysed the word foundation for them. I write on the board (OK^_^). Yeah and we explained it. We started with the linguistic analysis that means 'found plus the suffix ation'. I asked them what it means. What the meaning is of found? How that building is able to	Students beliefs about foundation year: surface approach to learning attributed to Being misinformed

survive? And yes this is just to deliver the idea of the importance of foundation for their coming years, in their career and in their language use. (Yeah) um Also I keep, I convince them by telling them that this is a bridging year and you know the, we all know the importance of bridge in linking two different banks and I told them that it is even a key to success in the IELTS. Um and I keep telling them that this is a year, it is a basket and they decide to take how much from it. (aha)the take the minimum or they take the maximum it is up to them and I keep telling them lots of examples of students with broken English and low proficiency and who, who fall on probation right from the first semester and I keep telling them lots of real stories from my older batches students about students who didn't take the foundation seriously and then they got like um in their um study plan they are falling behind and lots of them, they were even dismissed. I told them lots of real stories and real examples from students who were dismissed from college because of broken language and low proficiency. (Did it work?) Um not that much. <mark>The problem is that they are inciting each other,</mark> which means that they are negatively encouraging each other to do it this way and to show laziness and carelessness towards it and for them they think that this is even part of manhood to be so um. What else, some other ways (It is ok T8) Yeah I think these are the things I used with them, yeah.	& Programme not helping

Teacher approach: setting the scene, teacher expectation of course, holistic overview, constructivist)

Using personal anecdotes to motivate students

Link to future learning and future careers to motivate students

Perception of students

Students are inciting each other i.e. show laziness and carelessness

Peers pressure/influence |
| **_I: With regard to the assessment itself, how do you make assessment criteria clear to the students?_** | |
| L: Again? (How do you make assessment criteria, the objectives, what is needed from them, clear to the students?) Um I clarify all these things right from the first week, I raise their awareness about the stem of assessment, modes of assessment, um the objectives, what they are going to study, the course outline, so I do that right from the beginning and ,, (do you think it was instilled from the first week?) um, yes usually yeah. You mean the documents are ready by the first week? (No, I mean do they take it, even if you like explained | Explain right from the first week/ course and assessment outline

Mechanism to support understanding criteria |

to them, do they take it in or they keep asking you later on?) Oh, yes? (Why are we doing this, what is the assessment or you think they get it from the first week?) The majority, yes got it, get it, but yes still have some students who are coming and asking. I also post all of those documents to google classroom, so they can refer to it any time in case they have questions, but if they still have queries, they come and we discuss it orally with the students and <mark>yes I always try to give it to them in a persuasive way like I tell them these are the objectives</mark> and why these are the objectives and these are the assessment, why is it made this way even if it is not shown in the document, I try my best to figure it out and explain it to the students, so they would become convinced about what to do. Yeah (How about, how would you explain that some students come and say that we are given so many tasks, but we don't know why, we don't know the objectives. Ok, teachers become mad because we don't know it, but we don't see the point, why are we doing this? What could be the problem there since teachers explain the objectives|? Where is the gap?) I think the reason for this gap is inattention of the students. Lots of them are not really attending, even if you keep saying them, I mean telling them things, <mark>they play dumb sometimes</mark> and say that we were not told such things or because you told them so many times in class, but they were just like not attending to you *she coughs*, because even with the documents in post in the google classroom, I still receive students asking for them and it is really driving me mad like with one of the ELT students, he asked for a document, which I posted months ago, so I had to repost it because so many still asked for it and today I still receive the student who wants me to post it for the third time and I refused to do so, because they need to exert more mental effort and more attention with the teacher and <mark>that attention is really deteriorating among our students and this is something like lots of our teachers noticed and I think one of the reasons is social media</mark>. It distracts their attention a lot and their smart phones. They are really stealing the attention from the students and sometimes they use	Tells

Website

Meetings

Gifting the criteria

Gap between teacher and students understanding and expectation

Awareness/ attention focus

Accessibility of information/ students behaviours

Teacher' approach towards making criteria accessible is Explanation

Inattention and maybe strategies used to raise awareness

Minimal mental effort

Don't want to think or exert effort/ teachers' beliefs about these students |

this as only as excuse to justify their carelessness. They justify they are not told although they were told in fact and even if they weren't told they should go and refer to the people concerned. (Yeah) and I would never believe that there is a teacher who doesn't tell them so, because this is something intuitive. It is part of our career to explain the why aspect before we explain anything. Yeah.	Blamed social media & Students using excuses: Causal attributions Trust teachers to raise students' awareness because it is intuitive? Simplistic view
I: Alright, So, do you think they use the google classroom?	
L: Um (because I kept like sending them emails and they said we don't use emails. Some of them said I don't even open it.) Yeah Sharifa google classroom is more effective than the email, because service-wise they download, they download the application to their phone, so they get notification each time we send them or post them anything on their phones, unlike the email they have to go to the mail website to check their emails and they rarely do it, but for the google classroom, they just. They get notification just the same way like other social media. (Alright) so they have no excuse at all. (Aright)	Mobile phones apps are accessible therefore teachers use it to promote students engagement
I: Ok, T8, what do you perceive your students' role to be in the assessment itself? Do they have any other role other than performing the task?	
L: Yeah, they should believe in that assessment even if they are not happy with it. They should believe in it and they should, yes, programme their selves to that assessment required form them. They shouldn't complain about it, because this has a negative like effect on their performance. They should be very very very responsive to the assessment. Like others will just take it in a very cool manner. They will take it carelessly. They will do the minimal requirements, but if they exert lots of responsiveness, they will do a lot. Again, they should be so much involved in the assessment required like sometimes they are required to write a research, they will do it superficially, in a very shallow manner, but if they involve	Students should believe in the assessment and trust it even if they are not satisfied with it. (view that assessment is something imposed on the students) Students' investment and buying in in assessment Students should engage with the assessment i.e.

their selves a lot, they will learn more. They will score higher in the assessment. Also, they should use all of the period of time giving to them like if they are required to prepare for the exam in a couple of weeks, most of them would do it in a couple of days and this is not effective at all for their learning, because it means they will forget it immediately, one hour before the exam. The same with research, the research is given almost the whole month, um the whole semester for them and again lots them decide to do it within one week. They think that it is doable within one week, but they should take it this way, if my institution put it like in 4 months, I should do it in 4 months for it to be more effective for me and also to get a higher mark. (Yeah) yeah, so they should use like the whole assigned time. Also, concerning assessment, they need to use all the resources available. They should use longer time in the library, they should use the internet and browse the internet a lot.	Responsibility, Responsive and engaged

Students tendency towards procrastination and doing the minimal requirement in assessment: students adopt surface learning approach: rushed submission and superficial production of tasks

Exerting minimal effort that can grant them a pass i.e. Mind set or cognitive need

Procrastination and time-management, Overconfidence or a way to save self-worth |
I: Do you think they are aware of these resources?	
L: Yeah, I don't think so, Yeah, we need to raise their awareness about it. Yeah. Yeah, this is all I can say in that regard. (Ok, great.)	I don't thinks students are aware of all resources available
I:Are there any strategies you use to encourage them to complete tasks , activity other than sending it to google classroom, you said you send it to google classroom and it keeps reminding them?	
L: strategies to encourage them completing their tasks? (Yeah) Umm I would think of the very easy activities like the grammar activities we have in class I model it for them or we do one or two items as example before they do the rest (Ok) um (Any type of reinforcement, punishment, you use?) Um oral praising, I use it a lot and um, what else? (What sort of punishment, or do you use punishment strategies?) N, I don't really like to punish them. I treat them like matures and I keep telling them you are adults. You are	Teacher use Modelling , Oral praising, Treat them like adults and Mark absent chatty ones as they are not participating/ active engagement/ Contribution to class

mature. You should take charge of your own learning um, but I do threaten them and sometimes I follow my threats like those who keep chatting instead of doing the activities, I would threaten them to ==mark them absent== and this really effective especially for those and the majority in fact are of high absenteeism percentages, so it worked with the majority, like if you don't do the activity, you are physically present, but mentally absent, then I should mark you absent (Yeah) and it worked with the students, I would say. (Ok) Also I separate those ==really close friends, when I don't see them really working with activities and again it works==. It is an effective strategy with student. (Ok, good) Yeah.	To encourage students to complete their assignments Again attendance and marks make a difference to force students' engagement Separating friends seems like treating them like children not adults/ teacher directive constructivist approach
I: You said there are not marks except for the mid-term and final?	
Unfortunately, yeah. (So reminding of marks wouldn't work ^_^?) Not at all yeah and this idea of having u, of having these grammatical rules where the majority of them are not coming in both exams, they don't take them seriously. (alright) Yeah, if they are assessed after each unit they will take it more deeply, (ok)	Mode and distribution of assessment tests encourage students to behave irresponsibly and carelessly
I: Um preparing them for an assessment, you said you model the activities, any other strategies to prepare students?	
L: Yes, ==I prepare them extra activities,== extra grammatical activities um we use the additional; um book which is grammar in use and it has nice worksheet for the grammatical rules we are covering in the course um also the ==mock exams==, we use them and they are really like helpful in telling them about the structure of the exam and also providing them with practice of the language knowledge part which is coming in the exam. (Ok) I try my best to do all the workbook activities and they are really helpful like some teachers would do only one or two, but I use the maximum time to do all of these activities, because they are really, because they provide excellent practice of the rules in the book (You are talking about headway, right?) Yeah, Headway.	Teacher use Practice and mock exams to prepare students for assessment, which are helpfully in familiarising students with the structure and content of the exams

I: And how do you support students' management of their emotion, whether it is like overestimating their ability or stress, fear of failure um or being shy?	
L: I approach it in a very transparent way, in a very straightforward way and I express it with the students whenever I notice any such like abnormal things or excessive emotions from them, I approach the student individually and make it clear to him and her (Ok) and I always compare their experience with our experience when we were students and the good thing is that I studied in the same place and by doing so, I do two things at one: I let them, I break any ice, any barrier between me and them and I show them that I was just like them and I assure them and I raise their confidence and it really calms them down. (Alright, any special cases you can tell me about from this group 750?) That group *silence* let me think. Yes, there is a student (say the name, I know them) You know them? (Yes, it is ok) like for example the case of C18 (What about him?) um, C18, has got really like a very pure mind and I was very surprised to see his really high mark in the mid-term, which means he really has like a very good English but he doesn't show it that much in my grammar classes. Again, they are underestimating the grammar classes, because they are relatively lower, only 4 hours a week, but when I discuss it with my colleagues teaching them, they all they behave like, the same way in their classes, so I made it clear to him in front of the rest, I mean the whole class. I told him C18 like you are a very good student. You have a very good English, but that doesn't mean you don't work on grammar. You still need these grammatical rules. I mean and if you practice them this will add to your language' (Ok) What else, we have Salim, who is really a great student and he is very hardworking, very persistent, but he disappoints me with grammar, with his grammar performance (who?) E18 umm he scores somehow poorly in the grammar quizzes, so I talked to him individually 'you are a very good student, why do you score these low marks' I told him 'you need to have more concentration when	Transparent management of emotions

Teacher approach students individually and explain, tell stories from teacher previous experience(make it personal

Rapport/ motivate)
Sometimes ignore to manage students attention of fear or stress or lack of confidence

Students underestimate grammar course because it has relatively low weight (Task value and investment)

Teacher Sometimes point to individual behaviours in group to attract and raise students attention encourage or minimise certain behaviours

Teacher establish rapport with her students by being Close to her student/ understand their character to guide or influence |

you answer' (Aha) Yeah, so I directed him to the fact that you should pay more attention and um I think that he is the kind of person who is hurried in his answering, so yes I warned him about that and I told him to think twice before deciding on the answer in order not to lose marks umm what else?	their behaviour and motivate them
I: Ok, what motivates them T8, in your opinion, if they are motivated at all, these students?	
L: Yeah, what disappoints me is that these are the least motivated students I have ever dealt with. I was really like um down, especially at the initial weeks and I was even like to supplement them from different grammatical books, but when I saw the absenteeism of motivation in them I was really surprised and when asking about why, maybe because the majority are boys and most of them are living together in the same flat and even though some of them were, they progressed less seriously than at the beginning, so again incited by each other, discouraged by each other, so concerning what motivates them *silence* (Because from what I see is that they used to say we are motivated etc., but when it came to the second semester, most of the students I interviewed they said 'we are not, we know it is more demanding, this semester and there are lots to do, but we don't put effort' you know and they know it) I think the reason (but they are not willing to do it) I Think the reason is assessment. It is that pass/fail binary assessment and also the pass mark is very low, so if it is raised I am sure this will push their motivation, like at our time it was 60 or 65. Now it has been lowered to 39/35 (35 even) 35, so how comes an ELT student would pass with 35 and I come across some of these students and they struggled and they struggling in their first semester, exactly like the first semester of their study plan. They have been withdrawing lots of course. They are doing poorly in the remaining courses, so they are really struggling. We are not doing good for our students this way, so what will motivate them is raising the um the passing mark to somewhere over 50 (Ok) this will push them to study and to do	Teacher is frustrated by this group of students lack of motivation

Students are incited by peers and don't want to exert more effort i.e. Peer pressure

Students motivation was going down

Assessment, pass/fail is demotivating students i.e. Low standards & lack of challenge

Negative attitudes from students

Students can manage to get pass without much effort or |

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their tasks well and I think this is why they lost interest like they knew, lots of them they knew that they didn't do very well and yet they passed. The other thing that will motivates them and I am sure about that is changing the materials, like the materials or books or even the whole system of level A is exactly the same as level B, so they found it tedious to do it a second time. They find it something dull, something boring to be done a second time, because even the like, things are just like repeated, just like the grammatical rules some of them are introduced repeatedly, um yes from the book writers side they said that this is the more you repeat the more they learn, but from the students' part no, they take as something like a routine, something repeated, something boring (even if they have not mastered it?) so what will motivate them is dealing with different books, different ways of assessment um in each level, but if they deal with the same series form level A to level A, they lose interest. (Yeah) so, these two things raising the pass marks, making it more challenging, um again if the assessment moved in a way to be done biweekly, rather than to be done twice a semester, this will also motivates them. (Ok) So, these three things (I agree) Yeah.	active engagement/ sort of self-regulation but lack of meaningful learning Course content and objective are not interesting and not challenging/ does not require full use of SRLS
I: And you said to raise their confidence, you talk to them individually or you compare and tell them stories from your own um experience as a student, any other thing, or have you even faced situations with this group where you had to talk them out of being shy or something?	
L: Um there is a case of a student, whom I found out, but right from the beginning that she registered one of the ELT courses, Grammar and Usage 1 and I was very surprised (How comes?) Yes and she said I don't want anyone to know that and I asked her why. She said 'because I want to make my courses like lighter in the coming semesters' So I was reluctant to reveal it to FY coordinator or not. When I consulted my colleague, she advised me to report it to FY coordinator and FY coordinator said it shouldn't be this way, because she is already loaded with 20 hours, how can she balance	

that with that ELT course (plus she cannot. It is foundation) Yes this is the weird thing how was she able to register, the system. It should be blocked in the system. So, FY coordinator contacted the registration and um she was dismissed from that course and from that time on, she took it personally (Ok) So, yeah, she stopped participating, she ignored me, she um like would never raise her hand to take part in class, so it was mutual. ==I also ignored her I decided to do so and now like in the last weeks==, she got back to the normality, so she takes part in class. So, probably she knew that it was something wrong and what the teacher did was for her own good. It was not something against her, so sometimes I use ignoring with the, with the students (and it works). It works I would say, yeah. (That's good. Um) Is there any other case? No I cannot think of another case now.	A Student took feedback or teacher behaviour personally, so teacher ignored
I: And T8, how do you promote learning for understanding as opposed to learning for grades? You said it. You had a problem because they don't have marks allocated for tasks (Yes) So, how can you balance this like promote learning for understanding itself?	
L: Again it is like ==repeated explanation== to them (Aha) that they should learn for the sake of learning, not learn for the sake of exams (alright), but I don't see it is working with students (so everything is about marks?) yeah, they link everything to marks, but I have not given up (^_^) like I always ==remind them== of these two things and that the other one is ==the key to their success in the ELT studying and also in the IELTS==. I keep reminding them of these two. I keep reminding them they are going to deal with books written by English native speakers, so if ==they don't work in their language proficiency== they will struggle. I keep reminding them of the on probation and um IELTS and the fact of being dismissed from college and losing that golden opportunity (Ok) ==I sometimes I do it funnily like do you want to have your car or I will start by what is your dream car do you want to have your own family, your own life, do you want to live a==	Teacher strategies to promote learning for understanding is Repeated explanation and advocating Learning/mastery oriented goals i.e. Relational link to future learning and future studies (task value and goal orientation) Self-development

luxurious life, then that really motivate students when we talk about those things and those luxuries (Ok) and I link it to studies (To studies?) yes like if you want to gain all that, you need to have the bachelors and it should be with a very high GPA. I keep reminding them of the GPA and how it is correlated with their success in the foundation. (Aha) So, you will not be able to get a job, you will not be able to get the IELTS without it and you will not be able to by your Lexus car, your Mercedes, because they really named high class brands of cars (Yeah, for sure?) so I keep telling them that how can you get all of that if you don't have the bachelors and I keep comparing the salary of the teacher with the salary of the military soldiers or whatever to show them the blessings that they are going to have as teachers and also the distance, advantage they are going to work close to their homes (Aha) so yeah I keep linking that to their personal life in order to see umm so I keep telling them that like this is strongly-dependent on what they are doing right now and I keep telling them and even show it on the board like this one did not pass the IELTS so his income is now within 400. This passed the IELTS with 6, so his income is 950 and they now the exact salary they are going to gain and when I asked them about their car, only one has a car now, so I told them after 5 years if you do your best, you will all have cars, you will all be able to get married, start a family and build your houses and if you don't take it seriously, you will never be able to do it after 5 years. You may do it after 10 or even 15 years (Ok) so I told them if you pass with 6, this is going to be your income 950, if you passed with 7 or 7.5, your salary will be even much higher. It will even go up to 2000 (Ok) so I keep telling them that your future is underlined by what you are doing now and by your hard work (I hope it works?) Yeah I hope so ^_^.	Joke about future luxuries and pleasures Degree attainment and graduation Teacher attribute success and future luxuries to effort and success in the foundation programme Teacher use both performance and learning oriented goals to motivate students to learn Performance oriented Long-term goals Being competitive/ task value / motivation
I: Ok T8, what do you observe or from your experience what are the dominant strategies students' use in the classroom? You said that they don't write notes mostly, anything that you observe they do?	

L: Umm um while teaching you mean? (Yes during the class.) This is what upsets me. <mark>They react passively, so I hope to see them taking notes.</mark> I direct them to the grammatical explanations, because they are given in the appendix at the end of the students book of the headway, but again a few of them would read and um *silence* strategies would be like um (Editing, help-seeking, taking notes, outlining ideas, or for example, whenever you say something they draw like a picture to remind them) *she laughs* you are too ambitious Sharifa. (ha-ha) unfortunately they are not applying these strategies, sometimes they will try to process what I am giving them by chatting with their friends, so I would find some like actively taking it. Yeah. Note-taking is used by some and yeah some of them would compare it to what is given in their book and they would like underline (Ok) Yeah um um sometimes I push them or force them to give examples and write it on their notebooks and I go around to make sure they are at least writing. (alright) Yeah these are all the strategies I could see in the group. (alright, good) Of course, they when answering the activities yea, they write and when we have a class check they check their answers. <mark>They correct their incorrect answers,</mark> yeah in the three books, because we have practice activities in the student book, the workbook and grammar and use, which is the extracurricular book. (aha, alright) Yeah.	Students show passive reaction to teaching from a behaviourist perspective i.e. Lack of note-taking strategies, Self-monitoring or self-control strategies, Study strategies

Frustration

Students may indicate engagement with the lesson by Talking to peers or May provide examples/ explanation

Students Use feedback to correct their mistakes and improve their writing |
| ***I: And what are the most common difficulties they face, again from your perspectives, is it language-wise or strategies-wise?*** | |
| L: Language, yes they have difficulty with language. They don't think that language accuracy is very important. They think that as far as meaning is delivered and is clear, that's it. Um. They don't really see that need to study grammar like in depth, um and so many of them think we already the basic grammar, why would we need any additional grammatical or grammar lectures. Um they lack the study skills, they need to be more aware of the importance of involving themselves through class participation. Only a few of them, so my strategy is taking, is taking them in the class list turn or seating turns | Students lack language accuracy and active engagement and contribution to class (i.e. surface learning, comfort zone and Need for cognition) |

to make sure that I involved everyone and everyone is taking part and to push everyone to pay attention, because they know that their turn is coming (Ok) Yes. Um yes they need a lot concerning study skills. <mark>They need also a lot of motivation</mark>. They need to like to believe that this, all of what they are doing now is (Important) yes very very important for their ELT studies and for IELTS preparation.	Teacher Forced students to participate and they lack the motivation
I: Would you suggest T8 that we have a study skills course for self-regulation strategies or we should like immerge them in what they ever do?	
L: Yeah I think the <mark>immersion will be more effective</mark> than treating it like a separate course. (Ok) they are already fed-up with courses and if we deliver it to them as <mark>a separate course they would look at it as a fixed knowledge</mark>. Something I should prepare for in that semester and that's it. We want them to take it as something for life (aha) for their whole life and it is not happening yet unfortunately and I think the reason is again motivation, intrinsic motivation. If you ask the, only a few of them want to be teachers (Yeah) unfortunately and again assessment like um when one of the teachers says that um she includes what she says in class in her exams and quizzes in order to push them to take notes (Ok, to pay attention) Yeah, so I think I this happens with these guys, <mark>they will become more motivated and again assessment, we should be stricter.</mark> Marks should be raised because sometimes, some of the <mark>study skills should be like intuitive and they are not doing them out of laziness, not out of ignorance.</mark> They aren't that ignorant of study skills, otherwise we won't see them here. So, it means they were even better students at school, than here.	Immersion of SRLs into the students courses will be effective

Cognitive skills and metacognitive skills are lacking

Demonstrate and explain and model.

Lack of motivation in being a teacher (i.e. task value/ students investment).

Assessment should be strict as students are relaxed and ignore some intuitive study skills out of laziness. |
| *I: Yeah and do you see them asking for help, usually from you or from their classmates? Do they seek help at all?* | |
| L: Yeah, um, yeah whenever they need any clarification, they would ask. Sometimes in the grammatical activities there are some new words, so they raise the. They ask Ms what does this means or they | Students ask for teachers help for clarification and peers for assistance (i.e. peers which |

ask for permission to access their dictionaries. They get help a lot from their partners, I can see that. It is like a very common strategy used by them. They refer to this partner. If that partner is useless, they would refer to the partner behind them, so they would use it a lot. I would say that is helpful (Ok), because if they see that their partner is doing better than them, this sometimes pushes them to work harder. It is similar to that one, so yes in terms of seeking help they do so.	can motivate them to work, being competitive)
I: Alright, do they know how to evaluate their performance? Are there any activities in the course which helps them learn how to evaluate or self-assess?	
L:Um the ==quizzes should do so, but again they are not taking it seriously,== like one time I gave them a quiz which um assess their knowledge of grammar usage rather than grammar use, so I decided to give them a quiz where they see like or they have metacognitive or they see how this happen, for example I would list lots um of instances about models and here the meaning, the different meanings, they need to match in order for them to see um the um to be more aware of grammar and how it works (Ok) and they really scored poorly. The highest mark was 18/20 and it was by E13 (aha). Most of the boys scored less than 10 and they didn't take it seriously. They reacted with laughter with jokes towards it um um although it evaluates their knowledge of grammar not their use of grammar like how grammar works in English. (Yeah, they think about the dynamics of grammar itself.) Yes how it is used rather than its use itself. (And did you mark it yourself or they marked it on their own?) No, I marked for them. I submitted the other day. ==We had feedback on each answer, but again they didn't take it that seriously.== Only a few of them you can see the regret on their faces, the rest *she laughs* (It is all fine as they say. It is all fine.) Yeah sometimes I think it is also, over confidence the system is helping them a lot like they know that passing with 40 and passing with 100 is the same at the end they are all passing and I think they are not	Quizzes can develop self-evaluation but students are not investing in them (i.e. careless, surface learning, joking about it)

Investing in task/ task value/ self-reaction/ self-worth

Only few students used teacher feedback as a model and to compare standards |

that mature, mature enough to see that passing with 100 means a lot to them (aha). No, they don't perceive it this way yet, yeah. They might be more aware in the coming years not in the foundation. (That's what they keep saying 'we are going to put more effort. <mark>We don't need it now in the major, when we start the major</mark>') Yes, in the ELT courses. (I hope it will happen) Yeah, me too.	Mostly students adopt surface approach to learning and tend to postpones and procrastinate
I: Do they use your feedback T8, do you see that they make use of your feedback? Like when you give them this is right, this is wrong, do they try to apply for the next activity or reuse?)	
L: Again, not really ^_^. No again, that attention is missing, like you keep telling them again and again, but the intake is very low from their side, unfortunately (yeah).	Students' use of feedback is restricted by their lack of attention
I: Ok, um you said one of the reaction was them laughing, yeah because it is not that important, because there aren't marks assigned, any other strong reaction when they, had it ever happen that expected something like a higher mark and they found a low mark and they come to you asking 'why did you give me this or that?'	
L: um They don't, because my approach is giving them the answer key while they all have their papers, so they can see their mistakes. Yeah with some of them they can really show, as I told you, regret, the very serious ones and they are handful only. With the rest, they don't show interest. They don't show any kind of regret. It is all the same with them. (aha) I discuss the feedback while they have the papers for it to be more effective and for them to see their mistakes clearly and you know the rules, we have to keep the sheets with us, so they should return the sheets to us. (yeah) I supplement it by grammar in use to give them more practice of the rule. (Ok) Yeah.	Some students show regret for not investing on the tasks, while others show no reaction at all or disinterest
I: And how would you or what is your understanding of self-regulation?	

L: Um it is I would say very similar to learner autonomy as far as I understand it. (yeah) And that they regulate their own studies. They decide on the pace of their studying/their learning, the how of their learning, they fit it to their own learning style, learning preferences um. They take like a whole responsibility of their learning process um, but I am not sure whether or not it will work with our students, because it requires a very high level of commitment, a high level of responsibility, a high level of maturity, so I am not sure whether it will work with our students.	Self-regulation means being autonomous, regulating ones study according to their own pace while taking responsibility and committing to their work i.e. Maturity, which our students lack
I: Then what do you recommend, which strategies should we train them on to at least to have that level of maturity to carry on learning, at least, succeed in the next years?	
L: Yeah, were their awareness raised about self-regulation, did raise it to them before? (We tried a bit. But these groups are mixed. We tried with T1's group last year, modelling them.) My group is T1's. (No you have half of the group) Aha (Yeah, C17, C18, C3 and some of the other students are from the other group which is the control group.) Aha, I do not, again repeat the question. (What strategies would you recommend? I know it is a long interview ^_^ and you are already tired?) No, No it is ok, but I have just finished my class. What strategy (Would you recommend to us to train these students on?) Um um (Which you see as the most urgent ones?) yeah (For them to succeed at college?) I think whatever strategy; it will not work unless they have motivation. (Ok) if the motivation is absent, we will really struggle, and no strategy will work with students. I don't want to be a pessimist, but this is what I can se. I think that self-regulated learning is really an effective one, but as I told you I don't think it will fit our context, um what strategies I think regular monitoring of the students and regular assessment, the most effective for now (alright) for our Omani students especially to be like standing on their heads for them to work, because they are not that keen students um and if you leave it for them they would	Motivation is a precondition for any strategy to work with the students, so I doubt it will be effective in our context Regular Monitoring of students and regular assessment is more effective now Students respond to Directive, over structured approach

never do it. Just like you give them a reading, you don't monitor it, they will not read (I am with you. I know that um), but if you give something to them, you monitor their work, whether online or through meetings with and if you keep everything assessed, this is I think the effective strategy with our students. (Ok)	
I: Ok, you know T8 about T1 not T1's, T10's workshop last week (aha), Have you attended that one (Yeah) why do you think that many teachers didn't even show up for the workshop?	
L: Lack of responsibility from their side like these teachers have never shown up in any workshop (really) and some of them haven't even attended any departmental meeting from the beginning of the semester unfortunately, because of lack of responsibility, lack of their professionalism from their side and lack of monitoring and censorship from the official side, so both where missing, so this what made them not attend. (And what do you think about the workshop itself?) It was really effective, but I think it would be more effective if it was divided into two days (students and teachers?) yes also divided among the different stakeholders: students and teachers. Also, having it in one day for two hours, it was like overwhelming for us, too intensive. If it was divided into two days, it would be more effective, but she did really do a great job and I hope what she is doing, it will be followed. It won't be just like ink on paper, left on the shelves. Um she did a great job, but I was like contemplating on how applicable it would be, you know (Aha), because it demand really a lot of infrastructure at the college and it is more demanding in terms of the teachers' qualifications and students qualifications and if we are to apply it, like adhere to it, stick to it like completely, then we need to look also, our input from school. I don't think they are going to survive it (They won't?) like coming with that low proficiency and accepting the ELT students, especially boys with C, I don't think that they will be able to finish their foundation with those requirements listed. They are very very ambitious, like I would say it is too ambitious. (It does take time as she says and you need to	Some colleagues Lack professionalism and responsibility, and there is lack of Monitoring and censorship in our institution, therefore many don't care about professional development

Resources and students and teachers ability may hinder full implementation and application of self-regulation

Low expectations of students and colleagues |

follow it from semester to the other. It is not just for one semester.)
Yeah (But you mentioned infrastructure, what do you mean by
infrastructure, like what?) Like the ==teaching materials, the textbooks==
and although the ones we are using they are not bad, but they are
not really that helpful. (Ok). I mean we may need like more intensive
textbooks, ==the library should take a more active role, and it is almost==
==absent,== unfortunately to the extent that you would find the stuff like
free, most of the time. (Yeah) it should be part of the learning and
part of the education, like it would be really great to have
competitions like the best reader or the reader who borrowed the
highest number of books among the foundation and they should be
assigned like really high or great prizes to push the students to go to
the library. When you go to the library, you rarely find students and
also the resources there. ==We need more resources especially for the==
==foundation I mean==. Having only a few stories is not enough, so we
need more resources. (Yeah) electronic resources as well, we need
work a lot on this area for Roxie's proposal to be applied perfect.

Appendix S   **Coding Trail**

Codes from interviews	Themes	Meta-themes
Teaching writing contextualised via drilling and practice, modelling and guidelines (T1, P1) I do all kinds of secret stuff in my class to encourage and engage students (T6, P2). Frequent practice helped students gain confidence and made speaking a habit (T5, P2). We need raise students' awareness of learning objectives, self-evaluation skills and setting goals (T5, P2). Teacher expectation of their jobs matter (T5, P2). Sometimes we cannot help students manage their emotions (T5, P2). I worked to improve students' confidence (T5, P2) I use personal anecdotes to motivate students (T5, P2). Students are performers of tasks due to time constraints (T1, P1) Students may practice self and peer-assessment occasionally (T1, P1) Students may confuse teacher as a facilitator as losing power and stop taking it seriously and neglect instruction as they came from teacher-centred learning background (T4, P1). I have conflicting roles of trying to be a facilitator and meeting college requirements of preparing students for exams and meeting deadlines (T4, P1).	Contextualised teaching & modelling, Teaching strategies Practice and drilling Teacher role in teaching and assessment Teacher role in motivating students Students' role in assessment Teaching role & power	Teaching approach Beliefs and values

Making adjustments to the course put us out of sync with the other colleges and therefore my line managers are in trouble (T6, P2).	Teacher role in a centralised system	(perceptions, roles, expectations, views of students)
I do not want to be in trouble, so I am doing what I am asked to do (T6, P2).	Job security	
Higher line managers are giving the message that we do not want improvements and you are not allowed to make improvement (T6, P2).		
Teachers are expected to execute the job not to contribute to it or make it better. (T6, P2).	Teacher role & institutional expectations	
Students learn via modelling/ by observation (T1, P1).		
Students Lack metacognitive thinking (T5, P2).	Views of students learning	
Students overestimated their level of achievement (T5, P2).	View or learners' profiles and strategies	
Students are inactive, resist engaging with learning activities and performance-oriented caring for marks only (T5, P2).		
Students can be too dependent and cannot work simultaneously on their own (T1, p 1).		
Students have false assumptions and expectations about the foundation year (T5, P2).		
Students lack accurate self-evaluation skills (T5, P2).		
Students are passive consumers of assessment (T4, P1).	Passive students	
Allowing them freedom might divert them from requirements (T1, p 1).		
Students should be responsible attending classes, participating, doing homework and developing their language (T3, P1).		
Good students pay attention and carefully observe the teacher (T6, P2).	Ideal image of students	

These are good students, have regular attendance, motivated and wanted to learn (T2, P1). Many students are not metacognitive and not motivated (T6, P2). Students has no role in the assessment process because we are not allowed to change the design and programme at a college level. (T6, P2). Students' difficulties centre on lack of motivation and lack of short-term goals (T6, P2). Students need to feed their interest in the major (T8, P2). Scaring students with marks and failing the foundation works for this culture and context (T1, p 1). Raising students' motivation may be counter effective as students become overconfident (T1, p 1 Students get motivated by their rapport with their teachers (T1, p 1). Carrot or the stick strategy to encourage students to complete assignments (T2, P1). Students aim for teacher satisfaction and approval (T5, P2). Continues, varied and authentic assessment that targets skills learnt not just knowledge (T5, P2).	Performance-oriented students Motivation and confidence Motivating and teacher-student rapport	Motivation and goal orientation
Students' attitude towards assessment depends on its mode and objectives (T5, P2). Contextualise assessment by including Students' experience and link current assessment to upcoming semester-long goals (T1, P1). Frequent and continuous assessment of equal marks keep students interested and motivated to perform (T2, P1).	Assessment mode and distribution Various and distributed assessment Objectives and criteria Contextualised assessment	Assessment design

Students are not aware of the objectives or they do not believe in them (T5, P2).	Course objectives	
The Course lacks clear objectives to communicate to the students (T5, P2).		
Transfer of knowledge from short memory to the long memory is not happening, as they are not making the effort (T7, P2).	Students' lack effort	
Students know that they are entitled to pass the course as if they passed the exam, they are not stressed academically (T6, P2).	Lack of challenge	
Attendance is the most important thing for the current programme regardless if students are completely passive and disengaged (T6, P2).	Minimum requirement to pass	
Only one or true ae just trying to pass (T2, P1).		
Students lack need for cognition and are happy with surface learning (T7, P2).		
Students do the minimal when there are no marks involved and perform tasks on the surface (T7, P2)	Lack need for cognition	Need for cognition and challenge
Students rely on teacher's availability and support whenever they need (T7, P2).		
They do not want to make effort, due to the system and peer pressure (T7, P2).	Teacher over scaffold	
Students are performance-oriented aiming for the minimal (T7, P2).		
Students use minimal time for planning in speaking. They have no patience for careful planning (T5, P2).		
Students are not taking assessment and the course seriously (T5, P2).		
Students do not want to think or exert effort (T8, P2).		
Students tends towards procrastination and doing the minimal requirement in assessment (T8, P2).	Procrastination	
Mostly students adopt surface approach to learning and tend to postpone and procrastinate (T8, P2).		
Students' use of feedback is restricted by their lack of attention (T8, P2).	Surface learning and inattention	

Having both gender in class can help regulate emotions culture-wise. Relaxed atmosphere positive reinforcement can help too (T4, P1).	Culture, gender and manging emotions	
Cultural and institutional barriers limiting effective learning (T5, P2).		
Students do not read: a cultural phenomenon (T8, P2).		
Students are inciting each other i.e. show laziness and carelessness (T8, P2).	Peer pressure	
Early transition of school to college needs careful attention, accessibility of language and context might be a problem (T5, P2).		Contextual factors
College and teachers should help students' through the transition stage (T3, P1).	Transition from school to college	
Foundation year is a transition stage literally from being school students to higher education and emotionally from being protected by family to start being adults (T8, P2).		
Raising students' awareness of self-regulation is important (T5, P2).	Need self-regulation	
Regular academic advising may help, instead of leaving it to ineffective networking represented in former passive students (T5, P2).	Need good quality of networking	
Students need to get their act together faster and follow prompts better (T2, P1).	Poor time-management & attendance	
Some students are struggling with time-management and attending classes regularly. (T3, P1).		
Students planning is poor as it is associated with their poor critical thinking skills, which need time to inculcate (T1, p 1).	Poor self-evaluation skills	
Students' evaluation skills are poor (T1, p 1).		

They lack strategies to develop as learners (T3, P1).		
Students lack accurate self-evaluation skills (T5, P2).	Lack effective learning strategies	
Students lack self-efficacy in their ability (T7, P2).		
Students need to reflect on the process of evaluating and providing feedback to peers (T7, P2).		
Students are not trained on effective study skills (T7, P2).		
Some teachers avoid professional development workshops for disinterest, lack of awareness of their importance or of quality standards (T7, P2).	Need for metacognitive awareness	
Students lack skills and self-observation strategies (T8, P2).		
Students should be aware of who they are, their strengths and weaknesses (T8, P2).		Training and professional development
Immersion of SRLs into the students' courses will be effective (T8, P2).		
Being shy may hinder some students' engagement in class (T3, P1).	Personality and performance	
Managing students' emotions depends on students' willingness to learn, i.e. talk to shy students' individually and ignore disinterested students (T1, P1)	Students aptitude for learning	
Few students are stubborn and refuse to follow instructions because of their character and they need time to develop (T3, P1).	Learners characters and learning intake	
Some students' educational background has not prepared them to be at college as they lack study skills and self-regulation strategies (T6, P2).	Learning histories	
Students should believe in the assessment and trust it even if they are not satisfied with it (T8, P2).		
Students should engage with the assessment i.e. Responsibility, Responsive and engaged (T8, P2).		

Attendance and marks make a difference to force students' engagement (T8, P2). Students lack language accuracy and active engagement and contribution to class (T8, P2). Students are not actively engaged in the class and they lack study skills (T7, P2). Quizzes can develop self-evaluation, but students are not investing in them (T8, P2).	Buying into assessment Active engagement with assessment Attendance as engagement Participation in class Investing in assessment	Individual differences and learning histories Active engagement (attendance and participation)

Appendix T   **Statistical analysis and findings**

T.1   **Pre-test: students' perceptions of SRLS**

Table 1: Independent-samples t-test of students' **pre-test** perceptions of their SRLS in Sep 2017

Pre-test		Group	N	M (SD)	t	df	Sig (1-tailed)
Phase	Overall SRLS score	Control	12	16.30 (1.66)	.19	23	.43
		Experimental	13	16.44 (1.95)			
Forethought	Task-analysis	Control	14	5.23 (.77)	-.45	33	.33
		Experimental	21	5.09 (.91)			
	Self-motivation	Control	16	4.64 (.59)	-.12	35	.46
		Experimental	21	4.62 (.45)			
Performance	Self-control	Control	14	5.29 (.83)	-.15	29	.45
		Experimental	17	5.25 (.80)			
	Self-observation	Control	15	.45 (.11)	.08	33	.47
		Experimental	20	.45 (.13)			
Self-reflection	Self-judgement	Control	16	.39 (.13)	.92	36	.18
		Experimental	22	.35 (.11)			
	Self-reaction	Control	16	.51 (.08)	-.32	36	.38
		Experimental	22	.50 (.07)			

N= number of sample, M= mean, SD= standard deviation, t= t-test value, df= degree of freedom, sig ≤ 0.05, ($\eta^2 = t^2/ t^2 + (N1+N2 -2)$)

T.2 Post-test: students' perceptions

Table 1: Independent-samples t-test of between group writing performances

Post-test	Group	N	M (SD)	t	df	sig
Mid-term test	Control	20	8.84 (1)	-.93	43	.18
	Experimental	25	8.58 (.89)			
Final test	Control	19	12.64 (1.56)	.66	44	.26
	Experimental	25	13.16 (3.14)			
WritingAut50	Control	20	34.95 (5.79)	-1.14	42	.13
	Experimental	25	32.13 (9.50)			
	Control	20	15.50 (5.28)	.06	35	.48
Post-test Writing	Experimental	17	15.59 (3.87)			

N= number of sample, M= mean, SD= standard deviation, t= t-test value, df= degree of freedom, sig ≤ 0.05, (r = t²/ t²+ (N1+N2 -2)

T.3   Delayed post-test: students' perceptions

Table 1: Paired samples t- Test of the control and experimental group **immediate and delayed post-test** perceptions of SRLS in Spring 2018

Group	post & post-post test	N	M (SD)	t	Df	Sig. (η^2)
Control	SRLS	9	1.64 (2.51)	1.95	8	.05 (.32)
	Task-analysis	18	.02 (1.30)	.08	17	.47
	Self-motivation	14	.60 (.76)	2.93	13	.01 (.48)
	Self-control	14	.85 (.95)	3.33	13	.01 (48)
	Self-observation	17	-.08 (.16)	-1.96	16	.04 (.19)
	Self-judgment	17	-.05 (.14)	-1.59	16	.07
	Self-reaction	18	-.02 (.11)	-1.08	17	.15
Experimental	SRLS	9	-.24 (.81)	-.88	8	.21
	Task-analysis	21	-.12 (.78)	-.70	20	.25
	Self-motivation	15	.10 (.52)	.77	14	.23
	Self-control	14	.12 (.61)	.76	13	.23
	Self-observation	18	-.06 (.14)	-1.63	17	.06
	Self-judgment	20	.06 (.20)	1.34	19	.10
	Self-reaction	20	.01 (.17)	.25	19	.41

N= number of sample, M= mean, SD= standard deviation, t= t-test value, df= degree of freedom, sig ≤ 0.05, (η^2 = t²/ t²+ (N-1)

Table 2: Paired samples t- Test of the control and experimental group **pre and post post-test** perceptions of SRLS in Spring 2018

Group	pre & post-post test	N	M (SD)	t	df	Sig. (η^2)
	SRLS	12	.94(1.27)	2.55	11	**.02 (.37)**
	Task-analysis	14	.13 (.51)	.96	13	.18
	Self-motivation	16	.46 (.65)	2.86	15	**.01 (.35)**
Control	Self-control	14	.75 (1.18)	2.39	13	**.02 (.31)**
	Self-observation	15	-.02 (.14)	-.52	14	**.31**
	Self-judgment	16	3.15 (12.91)	.98	15	.18
	Self-reaction	16	.00(.12)	.14	15	.44
	SRLS	10	-.22(1.78)	-.39	9	.35
	Task-analysis	18	-.25 (.80)	-1.35	17	.10
	Self-motivation	18	.31 (.44)	.31	17	.38
Experimental	Self-control	15	.22(.58)	1.47	14	.08
	Self-observation	17	-.04(.13)	-1.39	16	.09
	Self-judgment	18	1.32 (5.62)	1	17	.17
	Self-reaction	19	-.03(.10)	-1.52	18	.07

N= number of sample, M= mean, SD= standard deviation, t= t-test value, df= degree of freedom, sig ≤ 0.05, (η^2 = t²/ t²+ (N-1)

Table 3: Students' writing scores in Spring 2018.

Post-post test	Group	N	M (SD)	T	df	Sig.(η2)
Mid-term test	Control	20	7.40 (.83)	1.81	40	.04 (.08)
	Experimental	22	7.92 (1)			
Final test	Control	19	11.92 (1.59)	1.71	39	.05 (.07)
	Experimental	22	12.75 (1.50)			
Writing2	Control	20	28.75 (7.04)	1.55	40	.07
	Experimental	22	31.69 (5.17)			

N= number of sample, M= mean, SD= standard deviation, t= t-test value, df= degree of freedom, sig ≤ 0.05, (η^2= t²/ t²+ (N1+N2 -2)

Appendix U   Summary of Students' reflections (Phase 1)

U.1   Forethought strategies

Forethought phase strategies	Strategy and Definition	Quote	Important themes
Task analysis	***Performance-oriented goals*** *(ego-driven, normative, ability goals)* (Ames, 1992; Nicholls, 1984, cited in Burnette, 2013). Individuals aim to demonstrate their ability (i.e. grades) in relation to others (Leondari & Gialamas, 2002; Thompson & Musket, 2005, cited in Burnette, 2013).	"I want to get high marks and I don't want to lose marks, because I want to complete [my study] in the college and finally I want to graduate" C13 "To outperform [his] classmates and to prove [his] competence among classmates, teachers and family members" (E16).	Goal setting **Goal-orientation** General distal long-term goals Task-specific proximal short-term goals
	Learning-oriented goals *(task or mastery goals)* (Ames, 1992; Middleton & Midgley, 1997, cited in Burnette, 2013*)* Individuals aim to Master a skill and gain internal satisfaction from acquiring knowledge (Maurer, Mitchell, & Barbeite, 2002; Robins & Pals, 2002; Dupeyrat & Marine´, 2005, cited in Burnette, 2013; Dewek, 1986, cited in Evans et al., 2003),	"I think writing is the most important skill in learning English, if I need to develop my language. I think writing is the first thing I should study hard" (C19). "Marks are not that important, what matters is that you graduate with experience. Marks are not that important" (C2)	

	Long-term/general/distal goals Future aims and long-term aspirations	"I must complete them [tasks]. That is the reason I am here and later on I will be a teacher and the effort I make today is for them [future students], and if I behave irresponsibly, this will be reflected on my students later on. At the end, each teacher aims to [help] graduate a responsible generation" C17	**Students' expectations** about their role at college and **future responsibility**
	Short-term/ task-specific/proximal goals Goals that are oriented towards task completion and learning and linked to longer term priorities (Zimmerman, 2008, cited in Hawe & Dixon, 2017).	"To gain experience and background and ideas to help my write better E26 To feel good and raise your spirit. To have experience and have an idea about the upcoming future" C1	Self-development Self-satisfaction
	Strategic planning Analysing a task characteristic and activating prior knowledge that will help them reach a learning or achievement goal (Winne 1996, 2001, cited in Dent & Koeka, 2016). Minimal-time tendency	"I try to remember all the events and try to organise the ideas step by step to write well and get a good mark." C13 "First, I planned, concept map, in my notebook and then I started. Concept map means writing the topic of the essay at the middle and then add the main ideas I am going to discuss and then I summarise, write about it in the essay." C17 "I drew two pictures. It is easier than writing as writing takes time." C7	Meta-memory **Minimal time/effort tendency** Simultaneous planning **Copying strategies**
Motivational beliefs	**Task value**: why is the task/learning important for the students? a means to an end/ functional English/ travelling Satisfying family wishes/ desires, getting family approval	"I like this major because I like English a lot since I was in high school, because I want to travel abroad. I like to practice English with other people in another country" C13 "I promised my family that I will work hard in the college and when I graduate, I will work as an English teacher and I want my family to be proud of me". E25 "It was my mother's wish, because I was good in English, so she suggested I learn English and become a teacher. In fact, I wanted to be a pilot, but English teacher is also good." E17	Externally oriented task values **Social and family recognition/cultural values** **Self-image** **Self-concept** Learning and future employment

Self-efficacy	"My feeling is I can do anything. I have the ability for everything. Therefore, I start	**Self-efficacy, personal**
Individuals' beliefs about their capability to perform	the task directly and don't stop to think about my ability." C19	**agency, Persistence**
designated tasks'' (Bandura 1997; Usher and	"I feel it is easy and I can write more in it." E18	**Background experience,**
Pajares 2008, cited in Bembenutty, 2015)	"I lived and experienced it" C6	**perceived task demand**
		Prior knowledge
Goal-orientation	"I am ambitious about getting an MA degree and maybe lecturing at college." E23	Learning/mastery or
As discussed in goal setting, performance or	"The reason I choose English is the job market as I can apply for different jobs, like	performance goal-orientation
learning oriented goals	a teacher, tourist guide, or translator, so I decided to carry on." E22	Future employment
Distal, long-term goals	"Marks do motivate me. I feel and see that this is going to benefit my learning of	Financial security
	English." E23	

U.2   Performance strategies

Performance phase strategies	Strategy and Definition	Quote	Important Themes
Self-control	**Planning/** *Simultaneous planning or consulting prepared written plans*	"I write based on what I included in the plan" E21 "First, I talk about each student, what's his feeling in first week. Second, I plan. I write about my feeling in first week in the college. Final plan, I write what I am learning in first week" C19	**Overlapped phases of SRLS** Planning Mental imagery
	Organisation: *strategies to maintain focus and a guide for goal attainment* *Structure and content/ Chronological order of event/narrative genre*	"First summary in the first three lines, overview of the main points and then explain the points in detail in the body and finally the conclusion like opinion and stuff" C1 "First I wrote about the topic in general like there is a good and bad day in the life of each of us. Then, I wrote about Salalah and then I organised my thoughts from the beginning like planning for Salalah, starting the journey, events in Salalah until I came back. In addition to the event, I wrote about how it is beautiful and what is there." (E23)	Organisation **Copying strategies** **Teacher approach** **Task nature and task demand**
	Following teacher's instruction/copying strategies	"I did what the teacher taught us; find a problem, plan and write the events step by step." E20 "Teacher taught us how to write and I followed directions like introduction, body and conclusion. I chose a story to write." E26 "There should always be a model, ok this is what we are going to write and I involve the whole class to actually see how it goes. We write as an individual writer and yet they are involved in the whole thing". (T1)	Copying strategies Modelling, providing a template Questions creativity and ownership of learning
	Conversational style *(informal style)* **Reading strategies** *(i.e. understanding a text and extracting ideas)*	"My way of writing a story is to make it like a conversation. This is my way especially in English." C17	

	Imagery and memory recall: *activating memory and using imagery to remain focused and control performance*	"First, I imagined writing the essay and write even unnecessary things to achieve the word counts and paragraphs needed. This is what I followed." C6 "First, I try to remember the events that happened during that week and try to put them in the past tense, organise my ideas and then write them." C3	Self-control and self-monitor
	Help-seeking *Seeking support or a response from peers, teachers etc. including resources management*	"My phone to translate difficult words and then try to understand and if I can't, I seek help from somebody at the dorm like advance students in year 3 or 4 and ask them to explain it for me" C11 "I consult dictionary, my mother or friends. I rarely ask teachers." E4 "I search in the internet and get some information and if I don't understand that I ask my sister." E18 "my classmates, because it is easier to talk to them and to ask them, teachers are a bit complicated" E16 "No, not the teacher, I am not a sociable person, I need time to get to know and talk to people." E22 "Sometimes, I am shy to ask the teacher, so I ask my classmate and if I don't understand I ask the teacher." C2 "My speaking is not that good yet and I am not able to communicate with the teachers." E23	Technology resources Peers and relative Teachers **Accessibility** **Self-efficacy** **Comfort zone** **Personality traits** **Language barrier**
	No awareness of strategies	I don't know Nothing	
Self-observation	**Intuition / feeling of knowing**	"I write what I feel is likely to be the right answer and also induce it [right answer] from the class talk and discussion with the teacher which expression or preposition is suitable, which is better than during school where most teachers explains in Arabic." C2 "I think and write the word that is grammatically good." E11	**Educated guess/feeling of knowing?** **Prior knowledge**

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Trial and error	"I write the synonym or change the word. Yeah, I do not have many problems just words and speaking because I cannot think in English." E22	Trial and error and practice to experiment with the language
	"If spelling is difficult, I try to find another word with similar meaning and easier spelling for me," C20	Amount of language attainment to monitor performance and progress
	"I pronounce, divided it into parts and write it as I hear it and double check." E19	
	"I keep practicing till I know the word." E25	

U.3   Self-reflection strategies

Self-reflection phase strategies	Strategy and Definition	Quote	Important themes
Self-judgement	***Self-evaluation*** Using criteria to judge one's own performance	T1 agreed, "they are not really very good at self-correcting or correcting each other"	**Lack of self-assessment** practice/ course objectives
	Marks/teacher evaluation/assessment/feedback *Seek teacher evaluation and feedback as the main indicator of one's performance*	"[teacher] is the best one who knows that [answer]," E2 "… I know the teacher is not going to give me less or more than what I deserve" C19 "I evaluate myself based on my exam results and my performance during mid-term, activities and final exam." E19	External regulation Reliance and trust on teachers **Beliefs about teachers' and students' roles** External cues
	Individuals spoken or written performance *Related to feeling of knowing and observing one's own performance and progress*	I know when my English improve every day and I can write a lot, speak a lot, get new grammar and new grammatical verbs, and study a lot about the vocabulary." C13 "Depends on my performance and studying habits. If [I am studying] hard, then I am good. Marks indicate my progress too." E10	Language gain Strategies use **Studying habits as indicator of performance**
	Peers or a relative feedback *Depending on peers as an important source of evaluation*	"I used to talk with my sister in English and continued to do so now and she says I have improved a lot, which means I have benefited from the foundation year." E15	**Peer-assessment** **Peer-feedback** Students engagement in assessment
	Affect/self-satisfaction, disappointment *Depending on emotions as an indicator of good or inadequate performance*	"According to my feelings, I sometimes utter sentences or talk with friends in the dormitory." C2	Emotions, intuition **Feeling of knowing** Internal cues/ standards of success

	Causal attribution	"I review what I have done and try to find out why I got a low mark. Was it because I was not well-prepared?" E15	Accurate criteria for evaluation **Time on preparation**
	Positive *Relating performance outcomes to strategy use rather than to ability*	"I talk to myself and see what my mistakes are and try to study well and I don't think about the exam like you have another exam and you need to do well in the exam." E17	**Self-talk, self-reflection** Attention focusing, self-control
		"I think in the last essay, I focused too much on grammar, so I think my style was weak, because I did not focus on the topic so much. I think I will lose some marks on the topic." E13	**Time-management** **Realistic expectation**
	Negative *Relating success or failure to others, to circumstances, time or to low ability*	"friends encourage me to go out and have some fun instead, and the homework becomes unimportant" C20	**Peers influence**
Self-reaction	*Self-satisfaction* Evaluate how well the task was completed and whether standards were met (Bembenutty et al., 2015)	"I feel sad, but nothing to do and I study hard and hope to get a high mark in next exam." E18	Emotional and behavioural reaction to feedback
		"It depends on the mistakes. If the teacher has done a mistake, I discuss it, but if the mark reflects my mistakes, I do not discuss it with the teacher." C1	Momentary affect
	Adaptive *Use feedback from self-evaluation to reflect on strategies, adapt and improve performance*	"First, I read to skim and scan. Then, I try to correct it [mistake] and I do not ask anyone, because I want to learn my mistakes and improve them. When the teacher said to me that is wrong, I do not feel upset, because I try to fix it. I write it in my notebook." E17	Assess performance Attempts at improvement **Management of emotions** Note taking/ self-monitor
	Defensive *Negative reaction to performance outcomes and feedback i.e. avoiding performance or blaming others.*	"Few cases in my group: they are stubborn, and they don't listen to what I ask them to do." T3	**Resisting feedback** **Teacher approach** **Personality traits**

Appendix V   Summary of Students' Reflections (Phase 2)

V.1   Forethought strategies

Forethought phase strategies	Strategy and Definition	Quote	Important themes
Task analysis	***Task-oriented and criteria-directed goals*** Specific goals directed towards achieving a task vs	""I planned after I knew the requirements. My first aim was to complete the report, so I tried a lot. I stayed in the library and researched the topic and I found three websites and a book, so I used them in the report". C17 The aim was to follow the steps to write and submit the report like first draft to the final. This is the aim I concentrated on C2	Goal setting Goal-orientation Task-specific proximal short-term goals
	General goals Future aims and long-term aspirations	"develop my ability in speaking, reading, grammar and vocabulary" C9 "I have set one goal this semester which is passing this semester as this is the last semester for me in the foundation" E2	General distal long-term goals **Aiming for the minimal** **Lack of need for**
	Learning ***vs*** ***Performance goals***	"I wanted to learn a good number of vocab, so that when I start the major."C3 "I just wanted pass" C20 "My goal this semester is to learn a good thing and I want to be the best one in the class" E18	**cognition** Lack of motivation **Low expectation** of the course objectives,

No goals	"No, I did not, because the first semester was easy and not difficult and when I started the second semester things changed" C7	**overestimation of one's ability, Lack of accurate self-judgement**	
	"I think I became a bit arrogant that I have the language, so I thought I don't need to put more effort and that I will learn via time" E8		
	"No not this semester ^_^ (NO). Next semester". E13	**procrastination**	
Strategic planning	"No in my brain, just I think what I am going to write and just write it" E14	Meta-memory	
Minimal-time tendency	"Plan the structure of the essay" C9	**Minimal time/effort tendency, Self-efficacy, Task demands**	
	"I am the only one who does not plan." C18		
Goal-orientation	"To have a good qualification after 5 years, that motivates me to work hard and when I have a good qualification, I will have a good job and good salary of course." E18	Learning/mastery or performance goal-orientation	
Learning vs performance goals			
Realistic goals	"What motivates me is marks. In the past, they [teachers at school] used to give rewards." C7	Future employment	
	"I want to be the most competent, compete with them." E8	Financial security	
	"To gain language, learn words and grammar rules or whatever helps me learn English as I want to learn English." E20	Long-term vs short-term goals, self-development	
Task value:	"my family's opinion, have a perspective on the future, what would society think of me and the benefits I gain from doing or achieving it and think about the disadvantages if any, but I focus on the benefits more." E8	**Social and family recognition**	
Family and community approval			
	"If I failed for example, I would have a negative effect on the community and my family's opinion of me would change. However, if I put more effort, studied hard and work to improve myself, would improve my language and I become a better learner and at the level of my classmates, and graduate with them which serves as a positive motivation for me." E2	Self-image Self-concept Learning and future employment	
Self-image & social image			

The leftmost column contains the rotated label: **Motivational beliefs**

| Self-efficacy | "I always doubt my ability, especially English, because I feel it is not one of my strengths, so I will try to change my specialisation next year to Maths, because I am excellent in Maths, but not very good in English." C2 | **Self-efficacy, worry/stress doubt, challenge, perceived task demand** |

V.2   Performance strategies

Performance phase strategies	Strategy and Definition	Quote	Important Themes
Self-control	*Reading strategies/ skim, scan & inference (i.e. understanding a text and extracting ideas)*	"Some questions do not require careful reading if it is about specific details because you can scan it, some other need careful reading, between the lines reading and inference." C17 "Inference, to induce information from the chart and write it in the text." E22	Scan, skim and infer ideas to understand and self-monitor task understanding and achievement Self-control and self-monitor Highlight main ideas
	Note taking and verbal repetition: *strategies to maintain focus and a guide for goal attainment*	"I write points only not the full presentation and I explain them during the presentation. Like I have a presentation in two days. I have already prepared the points and linked them to the main idea and then in the class I think of the opening sentences and how to ask questions…In study, I repeat, verbal repetition and try to link to other ideas to remember it, but it takes a lot of time and needs focus." C17	Time management self-explanation and self-talk Understand criteria Verbal repetition and creating links, attention focusing revision and studying strategies **Copying strategies from teachers, teaching approach understand criteria**
	Structure and content Following instruction:	"First the introduction; we should describe the features, then say what this chart or graph talk about, next you start describe step by step." E25 "First, I did just like we were told by the Ms. to use the question as a thesis statement, restate the summary, then wrote the general idea and the highest and lowest percentage and then I started writing in details." E13	**Peer assessment and feedback Group study, Support group, Accessibility**
	Peer-support	"They are the best way and best people to evaluate me because we are of the same level or maybe better than me, so I use them as evaluators." E13	Being selective

		"We study together before every exam, every exercise we discuss together and explain to each other." E9	
	Resources management *Manging physical resources i.e.* **technology, learning materials** *and equipment i.e. books and* *tools or via online resources* **human resources**	"I use the labs to complete my tasks and projects especially those for the IT course" C3 "I access YouTube and watch how language is used to ask and answer questions, sentences or phrases used." E23 "I request their (teachers) help a lot especially for feedback and correction. As for my classmates, we live together in the same accommodation, so we get together." C3 "Talking to others like my friends and ask them questions and use words that can be useful for me." C2 "There is not a suitable place that can help you study." E22	**Managing resources** for better completion of tasks Evaluation of the quality and **effectiveness of the different resources** Use to practice and improve performance
	time and place management	"If I have a break, I make use of the time to do homework or work on projects." E22	
Self-observation	**Emotional reaction/preferences** **Feeling of knowing**	"I like stand in class and speak about my presentation." E9 "I felt like my performance was not as good as the previous tasks" E13	Emotional reaction like comfort, preferences assist observation of used strategies
	Video-recording	"I used a programme to record my voice/ my presentation and hear it later. I used this strategy since the first semester." C7	Tools to detect mistakes and

Note-taking	"I write points only not the full presentation." C17	**Self-recording** performance or progress by writing **notes** in points as a reminder and for evaluation of coherence
self-checking	"Before the exam I try to make some questions from what I study and try to solve them." E14	Writing questions **self-check** and self-judge one's preparedness for the exam

V.3   Self-reflection strategies

Self-reflection phase strategies	Strategy and Definition	Quote	Important themes
Self-judgement	**Self-evaluation** Using criteria to judge one's own performance	Students practice self-evaluating their performance against a set of criteria sometimes. T5	**Lack of self-assessment practice/ course objectives**
	Marks/teacher evaluation/assessment/feedback *Seek teacher evaluation and feedback as the main indicator of one's performance*	"The assessed and classroom activities or training, like last time we were given a mock for IELTS and I got I think 3 and I think in comparison to the others who got one, mine is ok." C17 "I depend on the marks and on the teachers." C18 "My marks on the tests and my marks on the duallingua program." C7 "Sometimes I use the marks if they were um low or they were lower from what I expect, I try to increase my effort." E14 "I depend on my marks. I do not evaluate myself from my activity in the college." E25	**External feedback** from teacher compare marks with peers Marks indicate performance and guide future plans and actions Self-evaluate via teachers marks not performance Teacher feedback only **Attribute outcomes to effort**
	Individuals spoken or written performance *Related to feeling of knowing and observing one's own performance and progress*	"I have improved I can pronouns words even difficult words better than before and I can initiate a conversation with my friends that I can benefit from." C2 "I used to repeat words over and over like 'and' I used to also write simple beginners' words, but now I learnt new words like 'furthermore, also'. Before I wrote less, but now I can write more." C20 "I perform quicker now in exams and I am more familiar with the exams and performing tasks now." C6	Language gain and performance Strategies use Practice and experience **Familiar with exact procedures and criteria, time management**
	Peers feedback *Depending on peers as an important source of evaluation*	"Teachers' are they are more honest. Sometimes classmates flatter me." E13 "If one of my classmates is good and his language is good or is at an advance stage, I can seek his help and ask feedback in whatever I need as he has the expertise to some extent if in year 3 or 4." E2	Peer-assessment and feedback/, inaccurate **effective network,** Students engagement in assessment, level of peer

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Affect/self-satisfaction, disappointment *Depending on emotions as an indicator of good or inadequate performance*	"I felt like my performance was not as good as the previous tasks." E13 "Based on marks first and on how I feel about my performance, did I do well or not so well?" E19 "When I speak, I feel comfortable because I speak English in one day." E9	Emotions, intuition **Feeling of knowing** Internal cues/ standards of success, satisfaction
Causal attribution ***Positive*** *Relating performance outcomes to strategy use rather than to ability* ***Negative*** *Relating success or failure to others, to circumstances, time or to low ability*	"I feel regret and *think about the reasons and question my decisions* and I might *change the plan*, even if I had to stay away from friends, because this is my future, and no one will change except myself." E8 "I spend time and study hard, but it doesn't pay off and *I thought maybe I am studying in an incorrect way. May strategies could be wrong.*" C17 "We are not stupid; *we are just not making an effort*, which is why we are not getting high marks." C18 "I become angry and upset. It would be either my fault or the teacher's mistake. I mean either it was unfair, or it was my own mistake ^_^." E13	positive attribution of results, decision tacking, change of plan and strategies Self-talk, self-reflection Choice of strategies Attention focusing, self-control Awareness of causes Negative emotional reactions, attribute to self or teacher
Affect	"I will be sad and depressed (Ok, ^_^) and I would try to improve my performance." C7 "When I compare my performance to others, I feel bad and I don't feel that I benefit from such comparison. It doesn't motivate me to study more, but actually disappoints me." E22	Emotional and behavioural reaction to feedback Momentary affect Passive acceptance Demotivated by comparisons

(Left margin, rotated: **Self-reaction**)

Adaptive *Use feedback from self-evaluation to reflect on strategies, adapt and improve performance*	"Of course, I learn from my mistakes from the first task, *I try to fix them and study more."* E14. "Sort of become disappointed as I have expected more, then *I would reflect and revise my mistake.*" E2 "I try to find out why. I try to understand why I got that mark and look at my mistakes and of course I would get upset at the beginning and try not to make the same mistakes again." E23	Assess performance, reflections Attempts at improvement Management of emotions Revision Understand courses
Defensive *Negative reaction to performance outcomes and feedback i.e. avoiding performance or blaming others.*	"*It is ok as long as I pass. I got used to neglect it.* I mean I passed and that's it." C20 "That's my mark, *what can I do?*" C6	Personality traits, habits Acceptance, disregard Ignore, helplessness

Appendix W   Summary of teachers' reflections

EAT Assessment aspect	Quotes or findings	Related themes
Equity — Nature and frequency of assessment	"our assessment for this writing class; the writing itself is diverse enough that it makes them interested, and frequent enough: every two weeks or so, two weeks and a half is frequent enough to keep them motivated to perform." T2 "Probably a weekly assessment would encourage students to work harder first and also it would probably encourage them to have a sense of how their development is going throughout the semester." T3 "For listening they have midterm and final and I don't think this is how we should assess them only." T5 We should [have assessment] at intermitted periods... The benefit of that is terminating the stress from the students. They will get familiar with it; it will be like a habit." T8 "Note taking for example is missing, and in dealing with that group, I felt a need to have punctuality and regular attendance, honestly, as part of the assessment." T8 "These students are really assessed in a very constant base." T7	Continuous and regular assessment students' motivation **sense of achievement and self-assessment skill** **Confusion and excessive cognitive load** Mastery of skills **Alignment between assessment elements** Continuous and regular assessment students' motivation sense of achievement and self-assessment skill, lower stress, habit formation skills and strategies for independent learning Confusion and excessive cognitive load Mastery of skills
Quality/ standards of good work	"[Students] always need someone to guide them through this and they are shown that, shown this evaluation to them in the class and if they are ever shown the certain guidelines and how to evaluate themselves, they can do it." T1 "[I] give them clear parameters if possible." T2 "we just explain it and I show it to them, when are you going to get five full marks and when are you going to get three and when are you going to get one and it is done before submitting their work" T7 "I would never pass a task without telling them why we are doing that." T7 "explain criteria and share it with students." T4	**Teaching approach** **Method of delivery** **Accessibility and transparency of criteria** Students awareness Teaching approach Method of delivery Accessibility and transparency of criteria Students awareness

Equal opportunities to feedback and Timely feedback	"They get as soon as possible I try mark their performance and give them feedback and talk to them" T2 "I give them their marks and I will reflect to them why they got lost marks or why they got higher marks" T1 "I put them or set them in groups, I set them according to their level sometimes and explain to them that they are good in these areas and they are bad in these areas" T3 "They [students] always laugh. They sometimes say that your feedback is longer than the feedback itself," T7 "I gave him feedback on first draft, I gave him feedback on the second draft, and when he saw the result, he did not make changes on his second draft. He was not happy, and he promised that he is going to do some changes, so I gave him a chance for the purpose that he is going to learn the lesson and that he is going to improve." T7 "We had feedback on each answer, but again they did not take it that seriously." T8	Frequent feedback, **Teacher as supplier of feedback, Constructive** Verbal and written, In groups, i.e. similar academic achievement level, or individual Accessible feedback, **personality traits** or **language barrier** Beliefs about students' learning and roles Frequent feedback and accessibility as a inhibitor of feedback intake/ accessibility Over structured approach, students as passive learners
Resources	It is not paying attention or ignoring or even not understanding the teacher language, maybe sometimes." T7 "all the resources are within the activities and the vocabulary that is part of the activities. I am not sure that they know a lot about how they can access information outside the class" T2 "They have to have all the materials they need. We have the modules, the in-house materials" T1 "they will not be aware by themselves, but they need the guidance of the teacher in this case" T3 "There is no specific places where they can go and practice listening. There is no specific places where they can go and practice speaking. There is no those clubs like I think we have them, especially the LRC should have those places and should have some of its employees who can speak English just guide them with those resources, but unfortunately we don't have it." T5 "whenever they are struggling with something and they ask, and they ask who are we supposed to approach, I will direct them, but besides talking about sources of knowledge I've never talked about other sources of help really." T7 "Students need a self-accessed, fully-resources and 24 opened self-learning centre."T4	Accessibility- language barrier Class and assessment-related resources Need for guidance on using resources outside the classroom Lack of resources- infrastructure does not support SRLS Getting help mainly from teacher

Agency	Self-assessment and feedback	"They can assess themselves is through practice but not on actual assessed task" T1 "It is just that there is no lead way in our time to involve them in this evaluation and it is not being one of the objectives in the course being able to evaluate themselves." T1 "They are still very subjective when they evaluate themselves." T3 "I noticed that at some point, some of the students read the listening script, and then they try to answer from that, and for them it is like we need to answer the question." T5 "Sometimes I ask them to record their speaking, judge it and give it marks and then they will do it." T5	**Practice self-evaluation sparingly** Assessment design and **course objectives** Centralised assessment, **teachers' role** and resourcefulness, **Need for training** Practice self-evaluation sparingly Assessment design and course objectives Centralised assessment, teachers' role and resourcefulness, Need for training
	Peer assessment and feedback	"each student evaluates another student's paper, and this probably helps them to have a sense of how the teacher is evaluating them" T3 "there are times when you can put them in groups as assessment" T1 "I ask them to, as I told you, in groups to present and then they will give feedback to each other, so they are trained to evaluate in terms of speaking." T5 "They will be performing the task and they will be evaluating each other's work and they will be even marking each other's work. Yes, and justifying that evaluation. For example, if it is a group work." T7	Practice peer-feedback Rare
	Students' roles	"[students] believe that their role is only studying and coming to the exam," T3 "There is very little assessment participation from the students." T1 "Their role is usually they have 30 minute or 40 minutes task and there is a short-term goal like 30 or 40 minutes and nothing longer than that." T6 "By taking-part in class, participation, note-taking, again that note-taking. This skill is extincting now in the classroom; now, you rarely find students who take notes and you keep reminding them, but you still find only a handful of them are taking notes... They should take charge of their own whole learning process." T8 "The whole role should be all theirs. They should be there. They should be talking. They should be negotiating. They should be discussing. They have the content." T7	Performance of the task **Teachers' beliefs, learning histories** Teachers' beliefs and expectations of students' roles, learning histories Active engagement in the classroom Observed strategies of learning Assumptions
	Teachers' roles	"My role I guess is to just try to push them to write as much as possible, and give them as many activities, where they are writing. They are making their own writing and they are writing from what interest them if possible." T2 "Encouraging students to be confident in the class," T3	Students' adopt copying strategies **Scaffolding** students' learning, Modelling **Build students' character** Constructivist view Students' adopt copying strategies

		"We as teachers we should feed our students with motivation. We should constantly motivate our students to learn in general and to learn the English language which is their major" (T8). "I want to create responsible students, punctual students, and regular students in their attendance." T8	Over scaffolding students' learning, spoon feeding, Modelling, Build students' character Constructivist view, teacher beliefs, personality Teaching approach, histories, load
Transparency	Transparent processes Objectives and requirements	"We do not have clear objectives for each of the courses." T5 "I secretly for the last two years in my class do lots of all secret things to make the class better but as soon as I tell you they will be banned." T6	**Students' awareness** **Time** Method of delivery i.e. modelling, telling, discussing
	Relevance and Task Value	"You know this is important for when you have exams to be a teacher" and reminded students … It will be good for you as a parent, to be able to pass this down to your kids." T2 "All the tasks depend on the last report that they are going to [complete], the last writing task that they are going to make, so to encourage them is to tell them that all these tasks are helpful for the last one." T1 "I changed most of the materials to be in the shape of the exam and to me that makes relevant to them." T6 "I always remind them of these two things and that the other one is the key to their success in the ELT studying and in the IELTS." T8 "If we could have some topics that they can study, for example diabetes, diabetes is an issue that affect them. Most Omani know somebody with diabetes." T6	**Task value** Relational value of the task to long-term and short-term goals Method of delivery i.e. modelling, telling, discussing having interesting topics: task value, relational value Task value Relational value of the task to long-term and short-term goals in attention, distraction
	Roles and expectations	Gap in students and teachers' beliefs about their roles and expectations from each other and their everyday practice.	Beliefs and values Teacher approach Expectations Transition and training