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The Impact of a Pedagogic Intervention on Learner Engagement in Saudi EFL Grammar Classes: a Focus on Flipped and Interactive pedagogy

by

Khalid Abdullah Albahouth

Thesis for the degree of Doctor of Philosophy

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Abstract

Faculty of Arts and Humanities

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Research has emphasised that engagement is essential for effective learning (Christenson et al., 2012; Fredricks et al., 2016), and learners tend to learn better when they are more engaged in the learning process (Burke & Fedorek, 2017). Nonetheless, the engagement concept, in comparison to its related constructs such as motivation, has received little attention (Reschly & Christenson, 2012; Sinatra et al., 2015). However, within ten years there has been a growing interest in studying learner engagement especially at the university level. According to Fredricks (2004), engagement is a multidimensional construct that encompasses behavioural (action), emotional (feeling), and cognitive (thinking) dimensions. Scholars claim that student engagement is not only multidimensional but also changeable and responsive and can be enhanced through deliberate intervention (Eccles, 2016; Shernoff, 2013; Hiver et al., 2021).

This mixed-methods study therefore began with the flipped teaching approach as a pedagogical intervention in grammar classes, to investigate its effect on learner engagement. However, it extended beyond only a flipped teaching context by including additional collaborative work and interactive tasks. This study also used the Flow Theory, introduced by Csikszentmihalyi in the 1970s, as a theoretical framework for the intervention design. Flow Theory is characterised by a balance of challenges and abilities, an individual's interest (enjoyment), self-control, and concentration in learning. Forty-Six beginner L1 Arabic English learners studying grammar for one semester at a public university in Saudi Arabia were divided into two groups: the intervention group received an interactive learning environment that included a flipped content approach, while the control group received a traditional teaching approach. The data collection for the study took place during the last six weeks of the term, while in the first six weeks of the term, learners had normal teaching, and the intervention group was introduced to the pedagogical intervention approach to get used to it before the study began. The researcher was also the teacher and gatekeeper for both groups in the study.

In this study, a combination of quantitative (questionnaires, pretests, and posttests) and qualitative (interviews, observations, and voice messages) measures were employed to

investigate learner engagement. The quantitative data were analysed through descriptive statistics, Repeated Measures ANOVA tests, and t-tests. The qualitative data were analysed using a thematic analysis approach. The questionnaires revealed that the intervention group learners demonstrated a significant improvement on learner engagement ($F(1,38) = 22.4$, $p < .001$) compared to the control group. However, the posttest scores indicated that there were no significant differences in performance between the two groups.

The qualitative findings indicate that learners in the intervention classes were found to be more engaged in their grammar lessons across all three dimensions of engagement (behavioural, emotional, and cognitive engagement). In addition, the findings showed that the pedagogical intervention enhanced the Flow state among learners, which subsequently affected their engagement. The findings also identified other factors that might influence learner engagement, irrespective of the intervention teaching method. These factors were individual differences (e.g., motivation, learning styles, and personalities) and the different experiences in the role of the teacher.

The findings of the present study thus make different contributions; these are contributions to knowledge, theory, and methodology. There are also empirical and pedagogical implications arising from the research findings. Finally, the thesis addresses the limitations of the study and offers recommendations for future research.

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Research Thesis: Declaration of Authorship

Print name: Khalid Albahouth

Title of thesis: Investigating Saudi English EFL Learner Engagement in a Flipped Learning Context Using Flow Theory

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.

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Definitions and Abbreviations

EFL English as a Foreign Language

ZPD Zone of Proximal Development

Chapter 1 Introduction

This mixed-methods study aimed to investigate and gain a comprehensive understanding of learner engagement during the implementation of a pedagogical intervention including a flipped content approach. The study also incorporated Flow Theory (developed by Csikszentmihalyi in the 1970s) as the theoretical framework during the design phase of the intervention. The focus of using Flow Theory was to examine how the intervention induced the experience of Flow among learners and subsequently affected their engagement in classes. This chapter offers an explanation for the rationale behind the investigation undertaken in this study, specifically concerning the significance of exploring the engagement concept, the implementation of the pedagogical intervention, and the utilisation of Flow Theory as the theoretical framework. The chapter therefore describes the context of the study by providing information about where the study took place, including the literature on teaching English in the L1 Arabic Saudi context, the challenges faced by Saudi English learners, and the imperative of employing innovative pedagogical approaches to enhance learner engagement in order to facilitate more effective English language learning. Finally, the chapter concludes by presenting the research questions underpinning the current study, along with its main objectives. It then outlines the structure and organisation of the thesis.

1.1 The significance of the study

Engagement has been positively linked to many desirable learning outcomes, such as learning performance and persistence, success, interest, and higher achievements (Christenson et al., 2012; Fredricks, Reschly, & Christenson, 2019; Wang & Holcombe, 2010). Research has also emphasised the significance of learner engagement in the learning process and classified it as a key contributor to learning (Fredricks et al., 2019); thus, learners learn best when they become more engaged in the learning process (Burke & Fedorek, 2017). Conversely, disengagement has been associated with a wide range of issues, including dissatisfaction, boredom, withdrawal or dropout from schools and universities, and a sense of alienation, all of which are unlikely to lead to meaningful learning (Christenson, Reschly, & Wylie, 2012; Fredricks et al., 2004; Fredricks, Reschly, & Christenson, 2019; Mahatmya et al., 2012; Wang & Fredricks, 2014). Despite its popularity, Reschly and Christenson (2012) emphasised that engagement had been relatively investigated up until the last 10 to 20 years compared to related constructs such as motivation. Hence, exploring the construct of engagement has become one of the most popular research topics in contemporary education and language learning contexts (Sinatra et al., 2015); thus,

more research is required to gain a comprehensive understanding of the concept of engagement in the English as a Foreign Language (EFL) context (Li & Li, 2022).

Even though the construct of engagement has become a focus in research, it remains a concept of uncertainty and definitional confusion, leading to ambiguous understandings of its meanings (Mercer, 2019; Reschly, & Christenson, 2019). However, this makes it worthy of exploration in depth considering its complexity (Mercer, 2019). The present study endeavours to align with Fredricks' (2004) definition of engagement as a multidimensional construct including behavioural (actions), emotional (feelings), and cognitive (thinking) dimensions.

Yet, surprisingly, engagement in language learning contexts has received little empirical attention from researchers (Hiver et al., 2021; Li & Li, 2022). Even though there have been a few studies related to engagement in language learning, some attributed the engagement to the evidence of interactions, participation in the class, and language outcomes such as language use, given its focus mainly on the behavioural dimension (Bond, 2020; Philp & Duchesne, 2016). For example, Aubrey (2017) takes into account that the frequency of turn-taking through interactions is an indicator of learners being more engaged. Notably, learners who participate more actively in discussions may suggest an increase in their engagement in classes; unfortunately, such verbal expression alone may not serve as decisive evidence of their complete engagement. Compared with the investigation of the behavioural dimension of engagement, it is more challenging to explore engagement through all its dimensions, as the behavioural component can be directly observed, such as in a learner's participation, while the rest of the components (cognition and emotion) are indirectly observable. However, including all aspects for investigation is necessary for a clear understanding of engagement in language learning classrooms (Christenson, Reschly, & Wylie, 2012; Eccles & Wang, 2012; Eccles, 2016; Fredricks et al., 2004; Fredricks, Reschly, & Christenson, 2019; Li & Li, 2022; Mercer, 2019).

According to Shernoff (2013) and Eccles (2016), engagement is responsive and can be enhanced through a deliberate intervention. Therefore, this study intends to use the flipped learning approach (FLA) as a pedagogic intervention to examine its impact on learner engagement. Benati and Schwieter (2019) define pedagogical intervention as an approach to teaching pursued to enhance teacher practice and student learning. Flipped learning is known as an instructional approach in which learners review the content materials outside the class, which is made more feasible with technology, and then come to class not to be lectured but to work with peers in a collaborative, meaningful learning environment with the teacher's assistance (O'Flaherty & Phillips, 2015; Vitta & Al-Hoorie, 2020). In this study, the pedagogical intervention had more than only flipped classes which included different tasks and activities from what control group classes

had during their classes, however both groups had same grammar units. Compared to approaches like problem-based learning (PBL) which focus on improving student's deep learning through equipping them with problem-solving skills, flipped classroom approach was chosen as it is more student-centred and encourages active learning (Chris et al., 2018; de Jong et al., 2022). Chris et al. (2018) further argued that flipped learning permits delivery of content in advance and triggers higher order learning from the students compared to PBL. As a result, flipped learning was chosen over alternatives like PBL as it is known to facilitate student engagement and critical thinking through fostering higher-order learning during interaction (de Jong, 2018).

Despite the fact that the flipped learning approach (FLA) has gained acceptance in different EFL contexts, its primary focus was to investigate learners' satisfaction and its effectiveness in facilitating learning (e.g., Bond, 2020; Lee & Wallace, 2018; Yang, Yin, & Wang, 2018; Webb & Doman, 2019). However, it received limited investigation regarding its impact on learner engagement, even though there was a belief that flipped classrooms could increase the understanding of learner engagement (Hiver et al., 2021). In a grammar learning context, engagement as made possible through flipped learning is needed for successful language learning in which students are actively involved. The L2 students develop language by showing deliberate attention, active participation, and effort which agrees with the flipped learning pedagogy (Hiver et al., 2020).

Most studies that aimed to examine learner engagement within the context of flipped learning did not rely on established theories (Bond, 2020). Therefore, this study bridged this gap and utilised the Flow Theory (Csikszentmihalyi, 1975) as a theoretical framework. Based on the theory, learners when in flow are intensely involved in learning with a high degree of concentration; there should be a perceived balance between challenges and skills; they should feel interested and have a sense of control (Csikszentmihalyi, 1970). The four characteristics of the theory that can influence student engagement are challenging activity that demands skills, concentrating on the task at hand, merging awareness and action, and clear feedback and goals (Whitson & Consoli, 2009). The theory was chosen because it states that learners should be empowered with increase in skills when given challenging tasks, for them to stay engaged or in flow. Testing the theory in a flipped classroom setting as such is very valuable to promote student engagement and learning.

Therefore, this mixed-methods study aimed to investigate and gain a comprehensive understanding of learner engagement during the implementation of a pedagogical intervention: flipped teaching. The focus was on investigating future English language majors at the university level in Saudi Arabia. The study also incorporated Flow Theory (developed by Csikszentmihalyi in the 1970s), as the theoretical framework to guide the design of the flipped learning approach (see

Chapter 4 for further details). The primary focus of using Flow theory was to examine how the intervention induced the experience of Flow among learners and subsequently affected their engagement in classes.

1.2 The context of the study

This study was carried out at a public university located in the central region of Saudi Arabia. The university encompasses over 20 faculties and hosts a population of approximately 12,000 students. The present study was conducted in the Department of English Language and Literature in two foundational grammar classes. In the early 1930s, the English language was included in the Saudi educational system and became a core subject to teach in both private and public schools across the country. Therefore, the English language holds significant value within the Saudi population (Al-Shabbi, 1989; Baghdadi, 1985). Despite the increase in years spent studying English at schools and universities, there is still an unsatisfactory level of language competence among Saudi learners (Alrabai, 2016; Alqahtani, 2018; Fareh, 2010; Khalil, 2010; Rabab, 2005). This has resulted in fewer chances for Saudi learners to gain suitable employment due to their inadequate proficiency in the English language (Mahboob & Elyas, 2014). In contrast, Saudi learners who studied abroad in western education contexts have more opportunities to get their desired jobs, as they can prove their language competence (Bawazeer, 2015).

Learning English in the Saudi context continues to be met with many challenges and obstacles, such as the dominance of teacher-centred learning, traditional teaching methods, and a lack of motivation and engagement when learning English as an additional language. Some Saudi learners think that English is a difficult subject and impossible to learn, and this reflects negatively on their attitudes, engagement, and motivation when learning English. Consequently, learners only want to learn English in order to pass their exams (Al-Seghayer, 2014). Furthermore, teachers become more critical about their learners' errors rather than encouraging their learning, thus resulting in an absence of participation during class time (Alrashidi and Phan, 2015). Also, the reliance on teachers and textbooks as the only sources of knowledge is commonly found in the Saudi context (Alrabai, 2014). Teacher-centred learning environments make students rely on memorising information from textbooks rather than being creative and thinking critically. For example, learners are usually asked to memorise English vocabulary, memorise short phrases and conversations, and explicitly focus on grammar rules (Alkubaidi, 2014).

Some English textbooks have also opened a huge debate on deficiencies in teaching and learning. A greater emphasis has been placed on forms, reading, and vocabulary in the textbooks, with a failure to focus on language practice (Alhaisoni & Rahman, 2013; Alseghayer, 2014) and a lack of

helpful learning objectives (Alhmadi, 2014). In light of the Ministry of Education's plans aimed at improving the English curriculum in 2018, substantial improvements have been implemented in both schools and universities. According to Alzahrani (2017), the revisions were geared towards aligning the English language learning to Vision 2030 that desires an ambitious people and thriving economy all which depend on language learning for all people. Some of the key revisions intended included making language learning free for all people at college level and learning in the context of native western cultures (Alzahrani, 2017). However, teacher-centred learning is still common in the Saudi context at both school and university levels. Learners tend to copy what their teacher says, play an insignificant role in class as passive learners, and rarely speak any words of English (Alrashid, Phan, 2015). According to Alhamadi (2014), in her study of the difficulties of English speaking in Saudi Arabia, she claimed that teacher-centred learning was the main barrier for improving lower speaking proficiency among Saudi learners. Teachers left little space for learners to speak and express their thoughts; other barriers included the lack of adequate vocabulary, anxiety, and a lack of self-esteem that resulted in demotivation and disengagement in learning English.

Saudi English teachers have encountered insufficiencies in their training programmes regarding the integration of technology into their teaching practices (Al-Mohanna, 2017; Alzahrani, 2020). Recent research focusing on Saudi English teachers, conducted by Alzahrani (2020), highlighted that English teachers were dissatisfied with the pre-service training sessions, revealing a deficiency in the availability of suitable training sessions and qualified trainers. Therefore, teachers rely heavily on textbooks rather than using technology as an assistant tool of learning (Alseghayer, 2014; Hiver & Al-Hoorie, 2017, 2021); thus, many English classes lack language learning software and e-learning resources (Alrashidi & Phan, 2015).

Many schools and universities still use traditional methods in their teaching of English (Abduh & Alquozi, 2020). As a result, introducing alternative pedagogical approaches emphasizing communicative competence encounters challenges within the Saudi English as a Foreign Language (EFL) context (Althaqafi, 2018). Althaqafi (2018) further suggests the need for comprehensive inquiry into the constrains that potentially impede the acceptance of using new teaching methods. According to Elyas and Picard (2010), English classes in Saudi Arabia are typical examples of traditional teaching methods, which are based on a teacher conveying knowledge to learners and learners translating the knowledge into their first language. For example, the audio-lingual method and the grammar-translation method are the most common traditional methods used in the Saudi context (Khan, 2011). Within these methods of teaching, teachers dominate the classroom talk and thereby provide less space for L2 learners to interact in English, thus, learners seem to be passive and inattentive (Storch & Aldosery, 2013). Teachers in traditional methods use

explicit instructions and place emphasis on memorising English forms, which makes learners less competent in communication skills as the entire focus falls on grammatical accuracy in written language (Ahmad, 2014). In traditional classrooms, learners become very dependent on their teachers; for example, when introducing a reading passage, the teacher reads aloud, and learners follow their teacher to the end and individually translate words into Arabic (Alhawsawi, 2013). As a result, Saudi English learners are somewhat unable to use English properly in real-life situations because they are taught differently from how they would be taught in classrooms in Western countries (Bawazeer, 2015). Inability of the training programmes to integrate technology in teaching has increased the use of traditional methods of language teaching (Alzahrani, 2020). An emphasis has been put on policymakers holding some sessions on teacher training for applying technology to their teaching in order to minimise the use of traditional teaching methods (Alharbi, 2016; Hiver & Al-Hoorie, 2017; Alzahrani, 2020).

Many studies have reported that Saudi EFL learners lack the motivation to learn English and are unlikely to be engaged in English classes (Al-Khairy, 2013; Alrabai, 2014b; Fareh, 2010; Khan, 2011). Aljohani (2009) asserted that Saudi English learners seem unmotivated and disengaged, which results in hindering their development in learning English. Alrabia (2011, 2014) mentioned the most common reasons that made Saudi English learners appear disengaged and lack learning motivation, namely: a) the teacher-centred learning environments; b) learners' low self-confidence; c) anxiety; d) a lack of autonomy; and e) inappropriate teaching methods.

According to the above studies, the pedagogic teaching methods and the teacher's role play a crucial impact in learners' engagement. In the instructional setting, teachers frequently offer limited opportunities for student engagement, often presenting lessons within contexts that lack practical relevance, thereby inhibiting the facilitation of participation and constraining support for student-generated ideas. It is reported that due to teacher-centred classes, learners feel bored in English classrooms and pay less attention and this results in disengagement in classrooms (Alkubaidi, 2014; Fareh, 2010). Additionally, the overcorrection of their students' errors and the lack of support for their learning attempts affect learners' engagement to learn English. During his observation in English classrooms in Saudi Arabia, Khan (2011) stated that most English teachers rarely follow up on their learners' work to contribute to their consistent learning development, which might also decrease their engagement and motivation to learn. In order to increase the engagement for Saudi learners in English language learning, it is necessary to adopt effective teaching methodologies (Hiver & Al-Hoorie, 2021).

The experience of language learning changed significantly in Saudi Arabia during COVID-19 when learning shifted to a virtual or online environment. Mahyoob's (2020) study involving 184 English

language learners from Taibah University in Saudi Arabia concluded that switching online during COVID-19 limited student language learning progress and caused dissatisfaction due to communication challenges. On the contrary, Alghamdi (2020), a study involving EFL teachers, observed that mobile-assisted language learning for elementary schools in Saudi was positively associated with language learning, but teachers faced a challenge in the content design for learning. Similarly, Hezam and Mokbel Mahyoub (2022) observed that technologies like Blackboard used to learn English at the university were valued positively by university students during COVID-19, but the students had challenges adjusting to online learning. Al-Nofaie (2020) obtained mixed results in investigating language learning using Blackboard, given that students indicated better language learning when exposed to an asynchronous environment with greater flexibility, than a synchronous one. Although a shift to online language learning was perceived positively, based on the studies, it created challenges for students and teachers associated with the mode of delivery, communication, and achieving learning expectations.

A recent study conducted by Al-Bogami and Elyas (2020) used iPads and mobile devices as an intervention to enhance learner engagement among Saudi learners in secondary schools. The findings demonstrated a positive impact on learner engagement when compared to traditional teaching methods. Algarni (2023) also examined learning engagement (LE) with language learning strategies (LLSs) and their effects on language learning achievement. The quantitative findings showed that there was a positive correlation between the LE, LLSs, and the performance of learners. Learners were more behaviourally engaged, followed by cognitive and emotional engagement. This highlights the significance of implementing teaching interventions for Saudi learners in order to improve their engagement in English learning classes. Therefore, this study implemented intervention pedagogical teaching to examine the learners' engagement for L1 Arabic EFL learners at Saudi university to see if the pedagogical intervention impacts their engagement and induces their Flow state during grammar classes. A detailed description of the study context, including the participants, the teacher, and the design of the teaching intervention (refer to Chapter 4 for further details). The current study was conducted in a grammar class; the researcher was also the teacher for both the intervention and the control groups.

1.3 Research questions

The research questions for this study were formulated as follows:

RQ1. *Does the use of the pedagogic intervention in grammar classes lead to differences in engagement and performance in Saudi EFL learners?*

RQ2. *How does the pedagogic intervention influence engagement in grammar classes in Saudi EFL learners?*

RQ3. *How does the intervention induce the state of Flow of Saudi EFL learners which then affected their engagement?*

RQ4. *What other factors, in addition to the intervention in grammar teaching, influence engagement in Saudi EFL learners in a Saudi University?*

The primary aim of this research is to investigate the impact of employing the pedagogic intervention in grammar classes on engagement and performance in Saudi English as a Foreign Language (EFL) learners. The intervention was specifically that of a flipped learning context. The study seeks to answer whether the use of this pedagogical intervention results in evident differences in both engagement and performance. Additionally, the research aims to understand how this teaching intervention, which was more than just flipped classrooms, influences engagement specifically within the context of grammar classes in Saudi EFL learners. Furthermore, the study explores the potential connection between the intervention and the state of Flow experienced by Saudi English EFL learners, examining how this state influences their overall engagement. Lastly, the research investigates factors beyond the pedagogical intervention in grammar teaching that contribute to engagement in Saudi EFL learners at a Saudi university. By exploring these questions, the study aims to provide valuable insights into effective teaching strategies and factors influencing learner engagement in the specific context of grammar classes for Saudi English EFL learners.

1.4 The organisation of the thesis

This thesis comprises seven chapters. In the first chapter, the introduction is presented, including the context of the study, the significance of the study, the research questions, and the research objectives. Chapter Two discusses the related existing literature associated with concept of learner engagement in language learning contexts. This includes the identification of its significance, the confusion surrounding its definition, the explanation of the Flow theory serving as the theoretical framework of the study, and the comprehensive exposition of the teaching intervention.

Chapter Three then presents the methodological approach and its application in the present study, with an underpinning of its significance in the study. A thorough explanation is given of each tool used in the current investigation, including the most appropriate methods for approaching reliability and validity. Chapter Four gives a detailed description of the pedagogic

intervention used in the study by providing a literature review of the grammar teaching literature in foreign language contexts and specifically in a Saudi context since this study was conducted in two foundational grammar classes. It then moves on to introduce a detailed description of the instructional and practical design and its connection to Flow Theory.

Chapters Five and Six present the study's findings. Chapter Five explores the quantitative findings that revealed the significance of the intervention approach including a flipping content model for the improvement of learner engagement. This chapter also discusses its main findings in relation to existing literature and addresses research question one. On the other hand, Chapter Six focuses on the qualitative findings obtained by investigating learner engagement through different tools for triangulation within the context of employing the teaching intervention. This chapter discusses its main findings in relation to existing literature and how these findings contribute to answering the remaining research questions of the study.

Finally, Chapter Seven concludes with the key findings of the study and how they help answer the research questions. Additionally, it provides an outline of the different contributions, such as, a contribution to knowledge in the field, the contribution to an increased understanding of Flow Theory, the contribution to methodology, and the empirical and pedagogical contributions. The chapter finally outlines the limitations of the current study and makes recommendations for future research.

Chapter 2 Literature review

This chapter reviews the literature associated with the main areas of interest in this study. The primary purpose of this mixed-methods study is to understand the changes in learner engagement as a result of the use of a pedagogic intervention in language teaching. Thus, this study aims to examine whether the flipped teaching approach as a pedagogic intervention makes a difference in learner engagement. The study also aims to embed the Flow Theory (developed by Csikszentmihalyi, 1975, 1990) as the theoretical framework for the design phase of the intervention teaching approach and to understand learner engagement better.

This literature review begins by providing a comprehensive overview of the scholarly perspectives about the definition of the engagement concept, its association with language learning, and other factors that potentially impact its appearance. Subsequently, it presents the theoretical framework that has been used in this study along with a number of empirical studies that utilise the Flow theory within the context of foreign language learning to understand learner engagement. Finally, this chapter concludes with a comprehensive overview of the definition of the intervention teaching method, 'flipped teaching approach'. Additionally, it includes some of the empirical studies that have used this approach within the context of foreign language learning to examine learner engagement and acknowledges the limitations of previous studies in order to avoid and bridge these gaps within the current study.

2.1 The importance and definition of engagement

Engagement has been viewed as a key factor in learning due to its potential to address problems such as low achievement, withdrawing from schools and institutions, low interest and disaffection among students (Christenson, Reschly, & Wylie, 2012; Fredricks et al., 2004; Fredricks, Reschly, & Christenson, 2019; Wang & Fredricks, 2014). A growing body of research links student engagement to learning success, higher grades, the increase of academic achievement, and promoting learning whilst decreasing dropout and attrition rates (Fredricks et al. 2004; Fredricks et al., 2016; Wang & Holcombe, 2010). An early seminal theory that influenced the research on student engagement and aimed to conceptualise and measure student engagement was the Participation-Identification model (Finn, 1989). This model tried to understand how behaviour and emotion constructs together can predict learning success (completion) or, in reverse, learning breakdown (dropout). According to this model, engagement encompasses two essential components: *participation* which has been recognised as any behavioural actions, and *identification* which relates to a state of feelings and belonging (emotions). Finn's theory has

influenced many studies in relation to learner engagement (Jimerson et al., 2000). Therefore, the engagement concept has become significant not only for education but also has been investigated from a psychological and sociological perspective.

Astin's student involvement theory further addresses the participation component of engagement, which associates engagement with the level of involvement (student behaviour and motivation) that students at higher education institutions display (Astin, 1999). Astin (1999) defines student involvement as the quality and quantity of psychological and physical energy learners invest in gaining college experience. The theory argues that student engagement is attained by looking at it using three lenses: inputs, environment, and outcomes. Inputs are considered aspects like student background, demographics, and varied experiences that determine student involvement level (Astin, 1999). The environment is the second parameter, which relates to all experiences that a learner is exposed to while in college, and outcomes relate to attributes and values possessed by learners after graduating. Astin proposes five assumptions about involvement that determine student engagement (Astin, 1999). First, physical and psychological energy should be invested to realise involvement and engagement. Second, involvement is considered ongoing, and the effort differs from learner to learner. Thirdly, quantitative and qualitative aspects may be involved in engagement. The fourth assumption is that what learners obtain, and their engagement levels depends on the extent they were qualitatively and quantitatively involved in their effort. The last assumption is that academic performance is associated with student involvement (Astin, 1999). Engagement can be perceived to result when students put more into their learning and development based on this theory.

Vincent Tinto argued through the Retention Theory, formulated in 1987, that student engagement is achieved when learners persist to graduation through their involvement in the informal (faculty/staff interactions) and formal activities (academic performance) of their learning institutions (Smith & Tinto, 2022). Based on Retention Theory, student attrition and disengagement are caused by factors like the inability of students to adjust to a learning environment, academic difficulties, and feelings of isolation. The first year of transitioning into college is deemed critical as it can either increase or decrease the risk for engagement. Smith and Tinto (2022) advocate that students can be engaged in their learning and development experience during the first year by orienting them to campus resources, advocating service opportunities for them to learn, and increasing their involvement in organisations and clubs. Astin and Vincent's theories agree that engagement is attained when students are socially and academically integrated into their colleges to obtain the required experience (Smith & Tinto, 2022; Astin, 1999).

Biggs (1999) and Biggs and Tang (2007) deviate from the earlier theorists in that they consider student engagement from an academic perspective, which is attained through deep and active learning on the part of a student as opposed to passive or surface learning. Moreover, the theorist argued that the teaching method matters in the student's academic engagement apart from learner orientation. Biggs (1999) argued that there are two kinds of learners: those who are actively engaged or academic and those who are non-academic or who learn intending to get a job. According to Biggs, student engagement is increased, and the achievement between academic and non-academic learners is reduced by applying active learning options like problem-based learning as opposed to passive approaches like standard lectures (Biggs, 1999). Biggs and Tang (2007) state that active learning leads students to engage in higher-order cognitive activities like explaining, relating, applying, and theorising knowledge.

More recently, and more precisely, over the past two decades, a noticeable move occurred to define the concept of engagement. For example, the most influential pioneering work of the definition and measurement of engagement was developed by Fredricks et al. (2004). Despite inconsistencies in the definition and measurement of this concept in research (Appleton et al., 2008), Fredricks and colleagues (2004) argue that engagement is a multidimensional construct that includes behaviour, emotion, and cognition (indicators of engagement) (see the figure 2.1 below). In the literature, *behavioural engagement* refers to the act of learning involvement such as attendance, following the rules in school and class, participation, persistence, and efforts made towards learning. *Emotional engagement* indicates students' positive reactions to school, class, teachers, or peers, belonging to school, enjoyment of learning, and interest. Finally, *cognitive engagement* refers to the use of deep learning strategies, being thoughtful, self-regulated, or the exerted effort necessary to comprehend difficult or complex ideas (Appleton et al., 2008; Fredricks et al., 2004; Mahatmya et al., 2012; Reschly & Christenson, 2012; Wang et al., 2019).

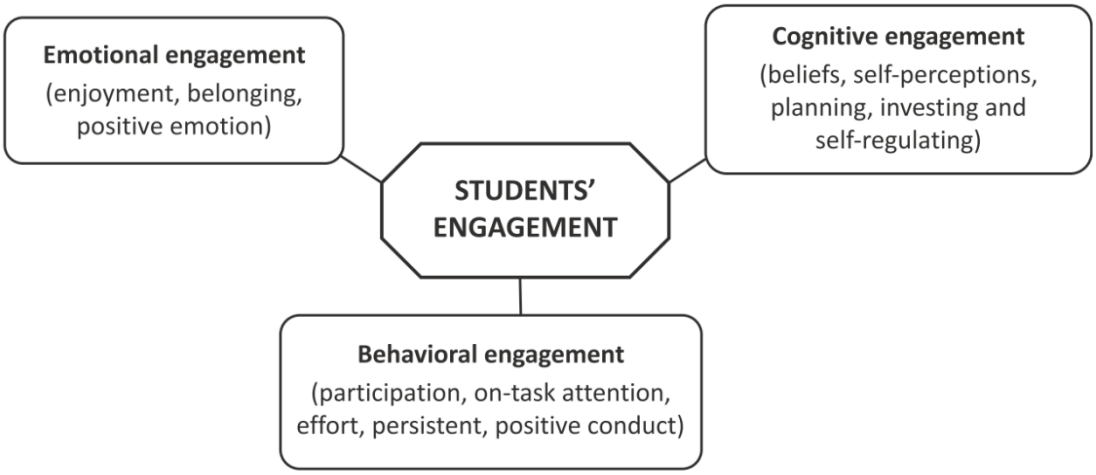


Figure 2-1 Student engagement dimensions (adopted from Frederick ,2004)

This distinction between the three constructs has been drawn from the state of doing, feeling, and thinking, respectively (Eccles, 2016). Fredricks and colleagues (2004) and others, such as Appleton and his colleagues in 2006 and 2008, criticised previous literature defining engagement, as it is limited to only one or two constructs (e.g., behaviour and emotion). Instead, in their view, engagement is an interrelated meta-construct, and it is not an isolated process. Despite the belief that engagement has interrelated dimensions, a study by Wang and Peck (2013) contradicted this perspective by identifying a group of students who do not experience any emotional engagement and were found to be highly behaviourally and cognitively engaged. However, the findings of Wang and Peck suggest that all three dimensions of engagement are actively linked to each other.

Even though there is a general agreement among scholars in the literature about the three dimensions of engagement – behaviour, emotion, and cognition – there is still some confusion for some researchers when they come to operationalise and measure these dimensions (Fredricks, Reschly, & Christenson, 2019). For example, some measures included *effort* as an indicator of behavioural engagement, because they think that effort relates to the commitment of doing a task, while others included *effort* as an indicator of cognitive engagement by describing it as the status of students being in deep thinking through their involvement in a task during learning (Fredricks & McColskey, 2012).

Coates (2006), unlike Fredricks and colleagues (2004), defines student engagement as a broad phenomenon that covers students' experiences outside and within a classroom. Similarly, Krause (2007) conceptualises student engagement as the time, energy, and resources spent by students inside and outside campus, which happens within the classroom, out of the class, on-campus, and

off-campus. Coates employs five benchmarks to describe engagement, which are (1) active and collaborative learning; (2) level of academic challenge; (3) student-faculty interactions; (4) supportive campus environment; and (5) enriching educational experiences (Coates, 2006, p. 55). However, it is argued that some of the benchmarks of engagement overlap despite being separated. For instance, a supportive campus environment could encourage positive faculty and student interactions and fulfilling educational experiences. As explained below, an awareness of what each of the five benchmarks represents is important to understanding the conceptualization of student engagement.

Active and collaborative learning as a benchmark is defined as student participation in key social and intellectual activities associated with their learning (Coates, 2006). The benchmark stands for active learning, where students construct or develop new knowledge, and collaborative learning, which means sharing their experiences with others. The second benchmark on the level of academic challenge relates to student engagement when interacting with academically challenging activities that lead them to push beyond their learning boundaries and support obtained from the teaching staff (Coates, 2006). The next bench on student-faculty interactions is about establishing contact between learners, academic support, and teaching staff within and beyond their institution (Coates, 2006). The interactions can be either formal or informal and provide mentoring services and new knowledge acquisition for the students as part of the engagement. The fourth benchmark on enriching educational experiences is explained as the various experiences that students have in the university, especially those that occur outside the class, which shape their learning, like tolerance to diverse cultures and participation in volunteer activities. The last benchmark on supportive campus environment is about the extent to which learning institutions offer engaging opportunities for students or increase their likelihood of being engaged.

The definition of engagement by Coates (2006) resonates more with the work of Chickering and Gamson (1987), which focused on the seven principles that denote good practice in higher education. The seven principles are encouraging student-faculty contact, active learning, cooperation among students, offering prompt feedback, effective task time management, high expectations, and diverse ways and talents of learning (Chickering & Gamson, 1987). The principles were developed through decades of research and practical evaluation.

The definition of engagement by Fredricks et al. (2004) is the most preferred and used in this analysis because it delineates different engagement parameters into emotion includes social engagement, cognition, and behaviour. Although perceived as general, it categorises and integrates all other views on engagement by earlier theorists and those that followed.

2.2 Learner engagement in language learning

The engagement concept has become a focus of inquiry in the EFL classrooms (Hiver et al., 2020). The importance of it is linked to the notion of language learning since some indicators of engagement, such as making efforts and being actively involved in tasks, align with the characteristics of successful language learning. This is because learning a language requires efforts from learners that should be made over a long period of time (Mercer & Dornyei, 2020). Additionally, learning language can be more effective when learners are immersed in more communicative and interactive learning environments, which means that their engagement can ensure their persistence and active involvement in learning. The definition of learner engagement in language learning, is defined as a multidimensional construct that includes behaviour, emotion, and cognition (Fredrick et al., 2004).

Earlier in second language research in the 1950s, the analysis of data focused on the cognitive lens of language learning with less attention to other dimensions (Swain, 2013). However, a shift occurred in the 1970s and 1980s with more focus directed to affective and holistic learning of language (Swain, 2013). Similarly, Swain (2013) re-analysed the dialogic data (originally in Swain & Lapkin, 1995), but this time she paid attention to the data from the sociocultural perspectives and collaborative interactions lenses and concluded that considering emotion dimension was crucial in language learning. The analysis concluded that social and cultural factors were important in language learning and influenced emotion and motivation among learners (Swain, 2013). Earlier research in language learning laid the foundation for understanding engagement in EFL with different studies committed to understanding affect, interest, motivation, autonomy and material development, as will be discussed below. The intention was to achieve humanistic language teaching, which sought to balance the emotional and cognitive or intellectual aspects of language learning or viewing learners as people first (Swain, 2013).

Tomlinson (2011c) defines materials as anything that is leveraged to facilitate language learning that can be visual, paper-based or audio, including grammar books, flashcards, videos, websites, and games. In particular, a course book was known to act as a map for language learning, revealing to learners and teachers what will be covered in a lesson, and which can also demonstrate what was covered by looking back (Tomlinson, 2003). Hence, through the course book, language learners become less reliant on the teacher, which aligns with the engagement concept of constructive alignment discussed in section 2.1 (Biggs, 1999). However, Tomlinson (2008c) observed that course books are limited as materials as they fail to allow language learners to acquire and develop language by focusing on listing linguistic items and not being culturally appropriate. The implication is that most learners remain neutral as the textbook focuses on the

cognitive side instead of affection, depriving language learners of being emotionally engaged (Tomlinson, 2003). Text, tasks, and even whole units have been adapted to increase learner engagement in language learning (Tomlinson, 2011c). Similarly, Timmis (2015) advocates for humanising coursebook dialogues by extending them to real life, enabling learners to feel, think, and do, as opposed to being passive learners.

Affect use in language learning and its role is also well-understood among scholars, contributing to student engagement. Timmis (2015) considers the effect of an emotional reaction to a given situation. Positive emotions like being motivated, having interest, and joy are associated with an increased capacity of learners to learn language easily compared to negative emotions like frustration (Tomlinson, 2003). Positive emotions are achieved when materials used in language learning make students feel at ease, stimulate their interest or bring enjoyment, and when relevant and culturally appropriate to learners (Timmis, 2015). According to Tomlinson (2010), communicative competence is more likely to be developed in language learners with positive affect than those without.

Interest is another important aspect considered in language learning, which when aroused, makes learners gain most by being attentive and curious (Tomlinson, 2011a). Interest in language learning increases when an individual places personal value on it, desires to know, and has a positive affect (Tomlinson, 2011c). Similarly, Timmis (2015) advocates that learning of a language needs to engage the interest of learners for them to place value on it, based on the materials used and tasks allocated. Materials that push learners beyond their current proficiency by offering challenging, yet achievable tasks are known to increase student interest and engagement (Tomlinson, 2011a). Mishan (2016) argued that student interest and engagement increase when learners use high mental skills in language learning that require making relationships, analysing, and evaluating information. The element of interest captures autonomy and motivation in student language learning and engagement. Student engagement is increased when learning materials build on students' experiences, allowing them to choose communicative competence based on their culture and driving them towards higher levels of achievable challenges (Mishan, 2016; Tomlinson, 2011c; Timmis, 2015).

Svalberg (2009, 2018) dedicated his work to defining the *Engagement with Language* model (EWL), maintaining the definition of engagement with language with the three dimensions discussed above (affect, cognition, and behaviour), with the addition of one other dimension, called social engagement. Svalberg maintains that behavioural engagement in language learning refers to excellence in participation, time, involvement in tasks, and being active in class; emotional engagement refers to positive attitudes towards others, enjoyment, interest, and

enthusiasm while disengagement is defined as boredom, anxiety, confusion, and frustration; and cognitive engagement is linked to paying focused attention, reflecting on their success and failure in doing tasks, and problem solving. Finally, social engagement refers to any communication or cooperation among learners in language tasks. Svalberg's identification of language learner engagement similar to what Christenson and colleagues (2012) identified learner engagement from a psychological standpoint. The current study included the social dimension of engagement as a not separate dimension but emerged in emotional engagement construct as both are overlapping to understanding learner engagement and to avoid analysis repletion. The current study combined the social construct of engagement not as a separate dimension but as an integral part of the emotional engagement construct. This approach recognises the overlap between the two dimensions, aiming to enhance our comprehension of learner engagement and prevent repetition analyses.

Mercer and Dornyei (2020) argue that the concept of engagement in language learning is sensitive to other factors inside or outside the classroom like learner's cultural background and relationships within the classroom. Similarly, Li and Li (2022) added that teacher and peer relationships, the social and cultural background, the teacher's role in class, and learner personalities and attitudes are factors that may affect learner engagement as well. These differences or variables create a complex dynamic system that can impact learner engagement in language classrooms, either positively or negatively.

2.3 Other factors Learner engagement

2.3.1 Individual differences

2.3.1.1 Motivation

Unsurprisingly, motivation is another construct that might overlap with the engagement construct or even intertwine with its dimensions. Thus, this belief perhaps shapes the perception that motivation and engagement are related, but separate constructs (Ainley, 2012; Christenson, Reschly, & Wylie, 2012; Fredricks et al., 2019; Martin, 2007). Indeed, motivation only determines the direction of behaviour or the choice of why an individual decides to do something, or it describes the psychological features that might influence engagement, whereas engagement describes the way of thinking, doing, and feeling in learning situations (Eccles & Wang, 2012, Eccles, 2016). In other words, behavioural engagement is "the outward or external manifestation of motivation" (Wang et al., 2019, p. 593). For example, Wang (2019) described "*interest*" differently for each construct. In motivation, *interest* is a main motivational process, while in

engagement it is classified as an indicator of emotional engagement, which describes the experience of *interest* in context, such as enjoyment or having positive relationships with others. Even though motivation is necessary for learners, there is no guarantee that motivated learners will be engaged in learning (Appleton et al., 2006, 2008; Reschly, 2010). Simply put, motivation is not sufficient for engagement. However, in the present study, motivation and other individual differences were found to be associated with learner engagement. Some learners, particularly in the control group, were motivated to learn grammar and were also engaged in the learning process (for more detail, see Chapter 5 of learners' examples).

2.3.1.2 Learning styles and learners' personalities

Learning styles in language learning have been defined differently by scholars over time. According to Oxford (1990, p.359), learning styles are general approaches like visual or auditory, analytic or global, which students utilise to acquire a new language. Brown (2000) defines a learning style as enduring and consistent individual intellectual functioning characteristics used in language learning. Reid (1995), also a leading scholar in the field, considers learning styles to be unconsciously used internal characteristics by an individual to receive and process new information. Learning styles are important for successful language learning (Reid, 1995). According to Reid (1995), learning styles are classified as habitual, natural, individual, and preferred methods learners use to understand and remember information. Concerning Saudi English EFL learners, learners employ a range of implicit, unnoticed, or subconsciously preferred learning styles. In particular, some lean towards specific styles like visual and interactive approaches, while others are more inclined towards individualised learning methods (Al-Seghayer, 2021).

Payaprom and Payaprom (2020) argued that learning styles can be classified into four main categories: personality, information processing, socio-interaction, and instructional preferences. Personality models are concerned mostly with an individual's personality, such as introversion and extroversion (Payaprom & Payaprom, 2020). Extroversion and introversion personalities are widely examined in language learning contexts, and a learner can be judged by own personality, whether extroverted or introverted (Wakamoto, 2000). Interestingly, each learner may have both personality traits; however, the degree between the two is different from person to person, so it can be stated that personality traits are not stable (Oxford, 1990). It has been found that there is a relationship between extroversion and introversion in language learning strategies. Extrovert learners were found to use more social strategies through their learning process, such as cooperation with others or asking questions for clarifications. On the other hand, introverted learners prefer to work alone and are not involved in social contact (Oxford, 1990).

On the other hand, information-processing models try to understand how students learn and think, and they stress the ability of learners to process and use the information received (Payaprom & Payaprom, 2020). Huitt (2003) asserts that a learning environment that enhances the ability of students to retain more information and have a sharp memory can be developed by teachers when they understand information-processing models. Socio-interaction models concentrate on relationships between classmates and teachers that affect student learning. Bhavin (2013) states that the model permits students to work as peer facilitators and learners in groups. The instructional preferences model is known to characterise or differentiate students based on their desire to receive information in language learning (Payaprom & Payaprom, 2020). The VARK model by Fleming and Mills (1992) is a notable example of an instructional preferences model that has been widely used. VARK model stands for ''visual, auditory, read/write, and Kinesthetic (Payaprom & Payaprom, 2020, p.61).'' Based on the model, visual learners are recognised as those who learn through seeing and visualizing; auditory learners through listening, hearing, and speaking; read and write learners through text; and kinaesthetic learners through doing things (Payaprom & Payaprom, 2020).

On the contrary, some scholars have argued against the existence of a learning style and confusion created by the approach to learning language. Pashler et al. (2008) state that a learning style is impractical as it limits word and vocabulary acquisition in language learning because the brain requires multiple sensory information to learn. Paulhus and Vazire (2007) and Vazire and Solomon (2015) also argue that assessments used to evaluate learning styles are unreliable and not evidence-based as they lack practical empirical testing. Moreover, evidence-based research has demonstrated that students learn language best through a combination of learning styles, which makes some scholars dispute the existence of a single learning style (Romanelli et al., 2009).

Thus, the engagement of learners can vary depending on their individual learning styles and their motivation. For instance, some learners may exhibit autonomous behaviour in the classroom, where they guide their interests, values, and goals towards classroom activities, while others may tend towards social participation and environmental encouragements (Reeve, 2012). Svalberg (2018) also assures that learning styles such as personality type is an effective factor in influencing learner engagement in language acquisition.

2.3.2 Teacher attributes and Learner Engagement

Teacher assistance and support play a significant role in promoting student engagement in the learning process (Lietaert et al., 2015). The teacher's support for autonomy is a starting point; it

can build rapport with learners, by understanding their needs, interests, and preferences. This helps learners feel more engaged in their learning and develop a sense of control over their learning process (Csikszentmihalyi et al, 2017; Reeve, 2013,). For example, teachers can be more flexible with online tasks by not giving a deadline, which allows them to be more self-directed learners, and by giving them choices for the kind of tasks they want to complete (Alamri et al., 2020). This can contribute to their emotional engagement by allowing them to enjoy their lessons and better communicate with their teacher and peers, which enhances their emotional engagement (Reeve, 2013). In addition, learner autonomy can give learners more freedom to choose their own learning process and goals, which contributes to their cognitive engagement (Alamri et al., 2020).

Teachers can also encourage learners to be involved in the learning process by providing them with emotional support (Chiu, 2021; Li & Li, 2022), for example, by encouraging them to interact and communicate with peers in a friendly learning environment. Therefore, students who have a good relationship with the teacher can be part of the class participation (behavioural engagement), feel positively about lesson tasks (emotional engagement), and be able to overcome task challenges (cognitive engagement). Finally, teacher support can also be provided through offering clear information and positive feedback on tasks and using technology as a scaffold for learning (Chiu & Hew, 2018). From this, learners can feel competent and challenged during their learning (cognitive engagement), which increases their participation in activities (behavioural engagement). In the context of flipped learning, teachers become facilitators inside the classroom and provide individualised learner support (Chiu & Hew, 2018). In addition, teachers prepare the pre-class and in-class instructional materials to attract learner interest, which then reflects in their engagement in class tasks (Li & Li, 2022).

2.4 Flow Theory

According to Whitson and Consoli (2009), Flow Theory was formulated by Csikszentmihalyi in 1990 to give insight into student learning by combining knowledge of motivation, cognition, and emotion. Flow Theory originated from positive psychology as a discipline that focused on people's abilities and strengths as opposed to mental illness in psychology (Whitson & Consoli, 2009). Unlike behaviouralists who believed human beings were environmental victims, positive psychologists like Maslow and Rogers believed that people were internally controlled and motivated to attain their maximum potential (Csikszentmihalyi, 1975; Whitson & Consoli, 2009). A deepened understanding of emotional health and self-determination were key among concepts that inspired the development of Flow Theory to explain student learning as something learners would have control over. Shernoff et al. (2003) argue that Csikszentmihalyi developed Flow

Theory by studying positive feelings of happiness as a branch of personal psychology and based on his personal experiences. Initially, the theorist sought to obtain qualitative data by studying artists, but quantitative data was sought afterwards using rock climbers, chess players, dancers, and athletes (Whitson & Consoli, 2009). Therefore, the theory was developed based on the participants' self-reports like challenge enjoyment, concentration, and interest on tasks, among other factors.

In Flow state, learners are intensely involved in learning with a high degree of concentration, there should be a perceived balance between challenges and skills, feel interested and have a sense of control (Csikszentmihalyi, 1975). Flow can occur at any time even if someone does not know about it or does not intend to experience it. The more instructors are knowledgeable about Flow concept, the greater the opportunity of facilitating learners to experience Flow (Csikszentmihalyi, Latter, & Duranso, 2017). Csikszentmihalyi (1975), the founder of Flow theory, identified seven characteristics that are typical of someone in a state of flow. However, it is the first four characteristics that relate to student engagement, which are: a) a perceived balance of challenges and skills; b) intense concentration or attention; c) a sense of control; and d) interest (Egbert, 2003).

2.4.1 Balance of skills and challenges

The challenge-skill balance condition is a crucial prerequisite for Flow to occur (Csikszentmihalyi, 1990). Csikszentmihalyi (1997) stressed that "persons should be in Flow when they perceive both the challenges in a given situation and their skills to be high" (p.118 as cited in Aubrey, 2017). In other words, when balance is achieved between the challenges and skills, the individual is more likely to experience Flow state (Nakamura & Csikszentmihalyi, 2002). Therefore, individuals can enjoy the tasks (enter the Flow) when they feel that their abilities match the task difficulty. Regarding activities or tasks that require individuals to have higher skills to match the tasks, not necessarily physical movements. For instance, playing sports requires more physical skills, while in games like chess it requires mainly intellectual (Csikszentmihalyi, 1994). In regard to learning contexts, skills are intellectual, and the challenges differ based on the goals of the tasks.

The level of optimal balance between the skills or challenges can occur in a flexible way. This means that the degree of skills or challenges changes over time, resulting in unstable feelings in Flow or an exit from the Flow (Nakamura & Csikszentmihalyi, 2002) (see figure 2-2 below).

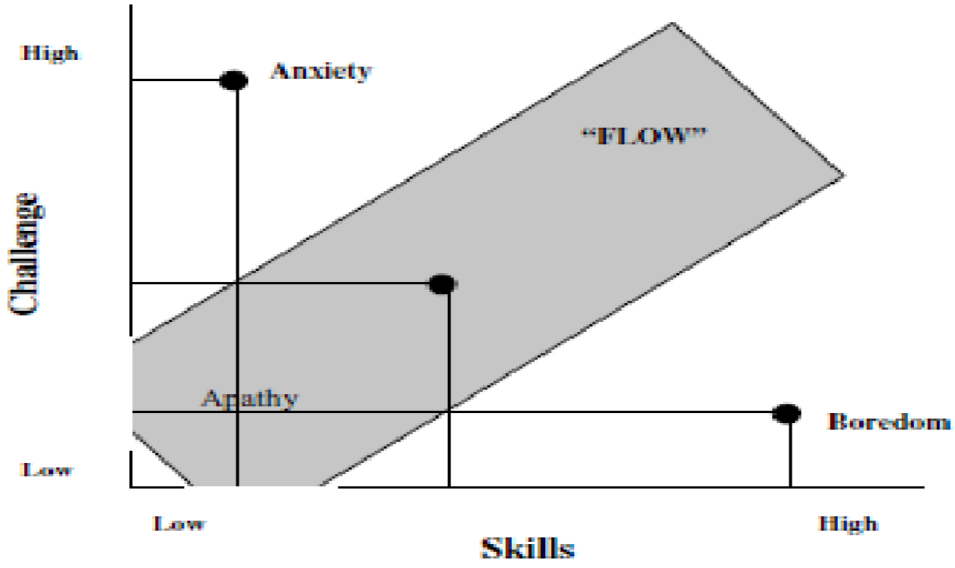


Figure 2-2 Representation of the challenge and skills balance. Adopted from " Beyond Boredom and Anxiety" (p.49) by Csikszentmihalyi. 1975, San Francisco: Jossey Bass Publishers.

As shown in the figure above, having a breakdown between challenges and skills results in anti-Flow. The anti-Flow represents a state of being disengaged, lack of concentration, and a sense of frustration, anxiety, or boredom. It is the state in which learners feel disconnected from the task, resulting in lacked motivation, decreased performance, and overall negative experiences. For example, if learners are assigned tasks that require higher skills beyond their level, they tend to feel anxiety, whereas if they are assigned tasks that are too far below their skill level, they tend to feel bored (Csikszentmihalyi, 1975). Therefore, if a learner experiences a state of anxiety, he can re-enter the Flow by reducing the challenges or enhancing his skills. However, when both the skills and challenges are much too low, they represent apathy rather than Flow. That means not all the balance represents the Flow state, and the Flow state requires the balance to be higher at a certain level (Nakamura & Csikszentmihalyi, 2002). In learning classrooms, activities and tasks should be designed on the basis of the balance between the two, so if one has a challenge, a consideration of learners' skills should be evaluated to match that challenge to make them experience Flow, potentially leading to heightened cognitive engagement for learners (Aubrey, 2017). Otherwise, the tasks may become meaningless for them.

Based on qualitative studies carried out in a language learning context, balancing skills and challenges in learning effectively improves student learning. In a study conducted by Czimmermann and Piniel (2016), a college in Hungary was used in which 85 learners indicated their flow experiences in various tasks through a 15-item survey. It was observed that learners

indicated they were bored when they felt a task was easy and anxious when they lacked the skills to perform the task, which aligns with flow theory (Czimmermann & Piniel, 2016). Hence, an engaging task should neither overwhelm learners nor should it be so easy to make them bored. Similarly, Egbert (2003) also noted in his study of 13 Spain high school students that balancing challenges with skills effectively enhanced language learning and flow state.

2.4.2 Concentration/focused attention

Concentration or attention is another important condition of the existence of Flow. This helps in reducing distractions or irrelevant thoughts (Csikszentmihalyi, 1997). The more you focus or pay attention to tasks, the more you get rid of unnecessary things that inhabit the mind and cause anti-Flow (Csikszentmihalyi, 1990). According to Csikszentmihalyi (1994), individuals who reported that they focused on their activities intensely were forgetting to think of anything either in the past or in the future. Csikszentmihalyi emphasises that features on activities or tasks may encourage individuals to keep concentration, so task designers should consider the interesting features that would ensure focus on the tasks and prevent the learners from being exposed to distraction. Shenroff (2016) report that individuals are cognitively and behaviourally engaged in a task in which they are focusing on what they are doing without breaking concentration.

Past research demonstrates that using flow theory in language learning increases focused attention and the ability to learn language. Liu et al. (2016) observed from their study conducted in 19 weeks for students to create digital stories through reading, that their engagement levels changed over time, as well as focused attention. Attention reduced between weeks 1 to 3 and 6 to 15 when learners had to create digital stories (Liu et al., 2016). However, re-engagement and focused attention increased when learners compared the quality of the stories created by their peers and were challenged to be in a state of flow (Liu et al., 2016). The study noted that flow increased where learners were creating new stories and reduced where task repetition was involved (Liu et al., 2016). Amini et al. (2016) have also observed that focused attention in language learning and vocabulary development increases when students are interested in the topic of concern, as indicated by tests undertaken and seem to increase with challenging tasks.

2.4.3 Sense of control

A feeling of autonomy for learners is claimed to enhance the experience of Flow state (Nakamura & Csikszentmihalyi, 2014; Whalen, 1997). Interestingly, the sense of control mostly occurs once the challenges and skills are balanced, which determines that Flow conditions are interrelated (Engeser et al., 2021). Thus, the degree of flexibility of having freedom of control during working

on tasks has been argued to facilitate Flow among learners (Egbert, 2003). When learners feel like they are able to make choices about topics, tasks, or procedures for tasks, they may have a better chance of experiencing a sense of control. Lambert and colleagues (2017), for example, have shown that learners who have the ability to choose or create their own tasks or topics tend to demonstrate greater behavioural, cognitive, and emotional engagement. Having a sense of control helps not only make a choice on what and how to perform a task but also reduces the fear of failing at it (Abbot, 2000).

A study by Kirchhoff (2013) involving a 15-week reading program for Japanese ESL learners concluded that the flow state was enhanced most when learners had control over a selection of books, they would use in accomplishing their tasks. Zuniga (2023) supports the view that control in reading is enhanced when texts are appropriate to the student's level of learning and large portions of self-selected text are used. Similarly, Cho (2018) observed in studying 141 English learners that a flow state was better enhanced using written tasks than oral or speaking tasks. It was concluded in the study that written tasks with more explicit objectives opposed to oral tasks, gave learners a greater sense of control, which increased learning flow state and engagement in line with the theory (Cho, 2018). On the contrary, Payant and Zuniga (2022) have noted that using oral tasks tends to increase the state of flow as opposed to written tasks because of their collaborative nature and mutual scaffolding to tackle related problems. Hence, diverse views are held with more control being associated with the state of flow for language learners.

2.4.4 Interest

Interest refers to the enjoyment of doing something and the satisfaction of the experience. In Flow, the chance of someone entering the state of Flow increases when the person sees the value of a task and feels that it is meaningful and important (Csikszentmihalyi, 1997). Hidi and Renninger (2006; as cited in Aubrey, 2017) put emphasis on the fact that "interest includes both affective and cognitive components as separate but interacting systems" (p. 112). That means that an individual becomes more cognitively engaged in a task as the person has the ambition and curiosity to know more about the task, which results in deep thinking for solving the problem. However, this is not isolated from that person’s emotional engagement, as it impacts his attitudes towards the task, his readiness to do the task, and his sense of enjoyment.

The concept of interest in language learning has been tested and found to be positively correlated with enhancing a flow state. Liu et al. (2016) observed that learners were in a state of flow in creating new digital stories in language learning instead of repeating tasks, which increased their interest in knowledge acquisition. Similar results were obtained by Zuniga and Payant (2021), who

assessed intermediate L2 French learners and observed that procedural repetition where new content was incorporated made the learners develop interest and be in a flow state instead of repeating the same content.

The approach of self-reporting to collect data on the state of flow is problematic, as the range of tasks tested in language learning differs, and it fails to account for other features that may influence it (Zuniga, 2023). It is recommended that the tasks studied are varied, and the experience sampling method (ESM) is one such approach that helps achieve the goal and study participants under varying circumstances.

2.5 Flow theory and learner engagement

To look at engagement in a more contextualised way, rather than from a broad sense, Flow Theory is one among different theories that is used, for example, as a theoretical framework for learner engagement measurements in classrooms (Eccles, 2016; Egbert, 2003; Shernoff et al., 2016). Other theories that were most commonly used in learner engagement measurement were Self-Determination Theory (SDT). For instance, a recent study was conducted by Chiu (2021), in which the author designed digital support in blended learning classes that aimed to address the three elements of the SDT (autonomy, relatedness, and competence) contributing to learner engagement development. Digital support was found to be a strong factor in improving learner engagement in blended learning by satisfying their needs. Other studies used Flow theory on learner engagement will be discussed below.

During Flow, individuals are intensely involved in learning with a high degree of concentration, interest, and enjoyment that leads to "higher levels of performance" (Csikszentmihalyi, 1990, p. 74) and that would contribute to optimal learning 'engagement' (Csikszentmihalyi, 1994, 1997). In the second language learning context, Philp and Duchesne (2016) describe Flow as the "ultimate task performance" (p.59). Thus, Flow Theory is considered to be a useful theoretical framework to understand learner engagement, as it features the inclusion of the three components of engagement – behaviour, emotion, and cognition (Shernoff et al., 2016). From this perspective, Flow is described as a state of complete engagement, in which individuals are cognitively, behaviourally, and emotionally involved in learning and perceive nothing else other than being involved in that learning.

A seminal study in second language learning that used Flow as its theoretical framework to measure student engagement was conducted by Egbert (2003). She aimed to investigate whether Flow experience exists in the second language learning context. Her participants were 13 secondary school learners, who performed seven different tasks in a Spanish class over an eight-

week period. The tasks were designed to focus on different skills such as reading, email exchange, discussion, and online chats. Based on surveys, classroom observations, and interviews, Egbert (2003) concluded that it seems clear that Flow exists in the learning language context and the four dimensions of Flow appeared when learners experienced Flow in the classroom. Findings indicated that a survey is more likely to observe opportunities of Flow experiences on the four dimensions (skill-challenge balance, focus, interest, and sense of control). However, interviews and observations were significant for giving more detail of how Flow occurred. For example, in the interview, learners had been asked questions such as "you responded that you felt very focused during this task. Can you explain?" (p. 510). The role of interviewing as an instrument to measure Flow experience appeared to be even more important than the survey, as it gives more insights into how they engaged in tasks. Egbert's study has influenced many studies in student engagement in foreign and second language contexts used Flow Theory (e.g. Amini & Amini, 2017; Aubrey, 2016; Czimmermann & Piniel, 2016; Francisco, 2011). Despite this influence, results found in some studies were contradictory. For example, a study by Kimura (2008), interviewed two Japanese learners who experienced a voluntary English listening class over two semesters. Based on the interview data, learners felt engaged over the course and perceived development in their listening skills; however, Flow dimensions were not apparent in their experience. They felt mostly unable to control their attention, lost their concentration in many cases, were anxious and bored, which are signs of Flow-inhibition. However, Kimura himself admitted that listening is not always enjoyable and fruitful for L2 learners and that might be a reason why Flow state disappeared for learners in his study.

Additionally, Czimmermann and Piniel (2016) investigated the concept of Flow to better understand student engagement, in a study where advanced Hungarian learners completed a narrative task. In their quantitative study, the questionnaire had an extra feature intending to capture the anti-Flow alongside Flow state experiences. The Flow questionnaire was designed to measure Egbert's (2003) four dimensions of Flow, while the anti-Flow questionnaire specifically captured boredom, apathy, and anxiety. Their findings revealed that the number of interlocutors did not impact learners' Flow states and even never affected their engagement in tasks. Importantly, they emphasised that achieving the optimal balance between task challenges and learners' skills is more crucial than the number of learners doing the tasks as variables in enhancing Flow state. Another study carried out by Aubrey (2017) attempted to apply a content analysis of diary entries as a new qualitative method to measure the four dimensions of Flow (adapted from Egbert, 2003). The guided diaries comprising five questions were completed by learners after each task. Based on these diaries, themes were identified and classified into Flow-

enhancing or Flow-inhibiting. The findings suggest that Flow is interrelated and changeable over time, so tasks should be guided to enhance Flow experiences.

There are other studies that have used Flow theory to understand engagement in different aspects of language learning, for example, in task-based instruction (Cox & Montgomery, 2019), vocabulary learning (Amini & Amini, 2017), translation (Guan, 2013), and computer-based language learning (Franciosi, 2011). From the abovementioned studies, it seems that there is a relationship between Flow theory and student engagement in many different language learning aspects and, in particular, in foreign language contexts. Engagement and flow state resemble in that they are motivated by internally rewards tasks based on the passions of an individual and entail making progress from task to another (Guan, 2013; Amini & Amini, 2017). Further, engagement and state of flow are increased when tasks are matched with student skill level (Cox & Montgomery, 2019). However, unlike flow theory that involves simultaneous operation of factors internal in a person, student engagement differs in that it is shaped by contextual factors like teacher and instructional modalities (Shernoff et al., 2003). The present study utilised Flow Theory as the theoretical framework that assists in designing the intervention teaching with the aim of enhancing Flow state among learners and subsequently examined to see if it affects learner engagement (see the Chapter 4 on how the Flow Theory was included in the flipped learning design and Chapter 5 of its evidence with engagement for learners).

2.6 The flipped learning approach and student engagement

It is undeniable that traditional teaching models are currently being used in many schools and institutions of higher education in the context of the study (Khan, 2011; Storch & Aldosery, 2013). Relating to this teaching strategy, students have fewer opportunities to be actively engaged in learning, since time matters for teachers to deliver lessons (Lega et al., 2000). To mitigate the limitations of using traditional teaching models, there has been a call for reforming methodologies of teaching, and this results in a new trend towards student-centred learning (Della, 2015). A student-centred method calls for and supports a diversity of learning styles (Lega et al., 2000) and moves the responsibility towards their learning from teachers to students (Ahmed, 2016; Hamdan et al., 2013). The shift to student-centred learning has coincided with the rapid movement of technology that encourages inventing new methodologies of teaching with technology assistance (O'Flaherty, & Phillips, 2015; Vitta & Al-Hoorie, 2020). Therefore, technology is not only inducing the invention of new teaching pedagogies; it also facilitates learners' motivation and engagement in language classrooms (Hiver et al., 2021). The emergence of computers and the Internet has entered a new era of language learning improvement, such as utilising social networking sites to practise the language, learning language skills through mobile

phone applications, and engaging in virtual learning sessions conducted by lectures living in different places in the world (Chang & Hung, 2019). As an example, one of those innovative teaching methodologies is called the flipped teaching approach. The flipped teaching approach uses technology to move lectures outside the classroom and dedicates class time to discussing concepts at a deeper level (Bergmann & Sams, 2012). Unfortunately, in language learning classes there have been few empirical studies investigating learners' engagement when using flipped teaching approach (Al-Hoorie et al., 2021; Li & Li, 2022).

2.6.1 What are flipped classrooms?

It has been argued that flipped classrooms have been in existence for several years, as students have to do preparatory work before they attend classes to study and discuss concepts at a deeper level with teachers and peers (Novak, 2011; Strayer, 2012). Some argue that flipped classrooms and blended learning classrooms are indistinguishable, as they share the common characteristic of employing dual instructional methods: one involving online phase and the other taking place in face-to-face classrooms (Lage and Platt, 2000). However, a flipped classroom is basically defined by Bergmann & Sams, (2012) as "what is traditionally done in class is now done at home, and that which is traditionally done as homework is now completed in class" (p.13). In other words, the flipped classroom takes what was previously class content (lecture) to outside the classroom space and replaces it with what was previously homework (activities and tasks) to classrooms.

The Flipped Learning Network (2014), on the other hand, define flipped classroom as an instructional method where teachers can create videos or use pre-existing videos from other sources for students to watch prior to class time, allowing them to implement a communicative active learning environment that ensure learners can apply knowledge in effective way. Thus, the present study used this as a definition of what a flipped learning approach is as an intervention in this study by using pre-existing videos and warping up activities online before the class, which frees up the class in a meaningful learning group environment with the role of teacher as facilitator and assistant in guiding the class work. In a typical flipped classroom, students are directed to watch videos or do readings (e.g., articles, textbooks, etc.) before they come to class, and this frees up class time with teacher assistance for collaborative learning that involves problem-solving and critical thinking activities (Bergmann & Sams, 2012; O'Flaherty, & Phillips, 2015 Tucker, 2012). Reflecting this change in approach has seen a rise in the use of the flipped learning model. Studies showed an increase of satisfaction among students participating in flipped learning models (Butts, 2014; Mason, Shuman, & Cook, 2013; Yang, & Yin, 2018). Consequently, flipped learning models showed an increase in student academic performance and an improvement in learning outcomes, as indicated by improved examination grades compared to

non-flipped classrooms (Mason, Shuman, & Cook, 2013; Ferreri, & O'Connor, 2013). Also, there was a notable increase in attendance with flipped learning contexts, compared to non-flipped learning (McLaughlin et al., 2013).

2.6.2 Flipped classrooms and student engagement.

Very few flipped learning studies have shed light on student engagement in L2 contexts (Basel, 2015; Lee & Wallace, 2018). In recent years, learner engagement with flipped learning has been investigated in some empirical studies. However, very few studies that examined the construct considered learner engagement a multidimensional construct (Li & Li, 2022). The studies that examined the concept of engagement in all its dimensions in flipped learning classrooms were limited. One such study, Lee and Wallace (2018) examined student engagement in a flipped learning context. The participants were 79 Korean learners enrolled in a basic English course at college. Of the participants, 39 received communicative language teaching instruction, whereas 40 were enrolled in a flipped classroom. This study utilised a mixed-methods research design by using classroom observations, responses to three surveys, and achievements in three major tasks. The findings showed that learners who participated in the flipped learning classroom were more engaged compared to those in the non-flipped learning classroom. Learners in the flipped classroom were found to be asking more questions through the learning process, conducting more discussions and evaluations, they appeared to be more invested in learning, and they expressed enjoyment through their learning. From these findings, we can suggest that learners were more cognitively and emotionally engaged in the flipped learning approach. However, this study did not attempt to define the concept of engagement clearly and also did not rely on established theories of engagement when measuring the learners' engagement. Another study was conducted by Amiryousefi (2019) who examined the impact of the flipped learning approach on learner engagement for 69 Iranian university students. He compared the flipped and traditional listening and speaking classrooms and found that flipped instructions increased learner engagement compared to traditional instructions. Amiryousefi found that learners had more confidence and interest, were more positive towards teachers and peers, were able to communicate, and invested more time in learning English.

Unlike the studies of Lee and Wallace (2018) and Amiryousefi (2019), which both relied more on quantitative methods, Tran and Nguyen (2020) examined student engagement in an English course for a tourism course at the university in Vietnam. They mainly adopted questionnaires, semi-structured interviews, and observations to understand how students engage with the flipped learning classrooms. Their findings showed that learners were strongly engaged in all three constructs of engagement. Regarding behavioural engagement, the learners made efforts to

watch videos, complete online activities, and were involved in interactive communicative tasks with great concentration. In emotional engagement, they experience flexibility in reviewing online materials, as they could review them at any convenient time, felt confident and satisfied with their performance in class as they had already prepared before the class, and enjoyed tasks. Finally, in terms of cognitive engagement, they were more strategic in their learning by using the Zalo platform app (a Vietnamese messaging app) to communicate and discuss concepts in more detail, and they were also observed to be asking many questions. However, some learners reported that their low proficiency level impacted their understanding of online videos; others complained that their newly acquired experience affected their ability to accommodate the new teaching style; and it was hard for them to change their learning styles as they still preferred their teacher-centred learning approach. Finally, one student expressed his dissatisfaction with learning online as it became more distracting for him. The authors emphasise that individual differences in learners have an impact on their engagement during the English course. It can be concluded from the above studies that the flipped learning method encourages stronger behavioural, emotional, and cognitive engagement than traditional teaching classrooms.

A recent study that examined learner engagement in the flipped learning context was conducted by Li and Li (2022). This study investigated the behavioural, emotional, cognitive, and social engagement of 69 English Chinese university students who enrolled in two groups: 35 students in the flipped classroom and the remaining 34 learners enrolled in the control group, studying listening and speaking class. The findings showed that learners in the flipped learning classrooms scored higher means on the posttest engagement questionnaires in behavioural, cognitive, and social engagement than in the non-flipped classroom. However, no significance was found in emotional engagement between the two groups. The semi-structured interview revealed some factors behind the increase in learner engagement in flipped learning. The positive factors were learning context, teacher role and presence, content design, and learner presence, while the negative factors were the increased workload for learners, video quality and length, and technical challenges. The authors gave some recommendations for teachers to support their learners to overcome difficulties they encountered throughout the flipped learning instructions. Therefore, the current study tried to address the limitations of previous research by incorporating technology into flipped classroom instruction. One method of support was a training workshop conducted to familiarise learners with the use of online materials in Blackboard, and a six-week period was implemented to allow participants to become comfortable with this innovative approach prior to the beginning of the study. By taking these measures, the study sought to bridge the gap in accommodating learners' technology use in flipped learning.

Thus, this study intends to use the flipped teaching method as the intervention in teaching in the foreign language classroom, to understand engagement better. In spite of a number of studies having attempted to measure student engagement by utilising the flipped teaching approach in foreign language contexts, limitations of defining the concept of engagement as a multidimensional construct appeared in them. Also, any theoretical framework in these studies was missing. Given these limitations, this study will use Flow theory (Csikszentmihalyi, 1975, 1990) as a theoretical framework to understand learner engagement.

2.7 Sociocultural Theory (ZPD and Scaffolding)

The main aim of language classes is for learning to take place and teachers make changes to pedagogy to facilitate and improve learning. Constructivists consider learning more complex, interactive, and social activities (Prawat, 1992). Based on the sociocultural theory developed by Vygotsky, 1978, knowledge is constructed by individuals through their interactions with each other within a society. Therefore, students in learning can construct and improve their understanding of knowledge by interacting with each other in a meaningful context. Vygotskian's view has put emphasis on the premise that all learning is connected to social and cultural situations. Importantly with regarding to his work on thought and language, Vygotsky claim that learners develop their learning through social interactions and not only through teaching them words. Instead, learning is a process between thought and language. As a result, learning development occurs in two phases; Firstly, when the learner interacts with one another (interpsychological); and secondly, through the learner's internalisation, which happens inside the learner (intrapsychological) which developed from the outsider speech and reflected positively into the learner's behaviour. As this would improve learners' knowledge of language and thought and make leaners to properly communicate with others (Fosnot, 1996), language teachers should consider this seriously and work to involve their learners in open conversations through their learning (Pritchard & Woollard, 2010). Thus, learning for social constructivism should be guided as an inquiry between the teacher and students to create a higher level of thinking and not isolating knowledge from social activity. While not intended to be a substitute of engagement theory, the sociocultural theory is used in this case as it aligns with the pedagogy flipped learning approach used in this study. In the intervention teaching in this study, the flipped learning approach provides more opportunities for learners to engage in open discussions with teachers and peers, which reflects significantly on their development of knowledge and improves their thoughts (O'Flaherty & Phillips, 2015).

Another significant theory that Vygotsky developed in 1978 was the "Zone of Proximal Development" (ZPD). The idea of this theory is the movement beyond the next level of cognitive

and learning development through assistance from an expert person. Therefore, with the ZPD, learners can receive support or guidance from their teachers and peers in a moderate challenge that is beyond their current level but not so much that it may cause frustration. This study's framework is based on Flow Theory (Csikszentmihalyi, 1975), which emphasises the importance of balancing challenges and skills for individuals, which is closely related to the idea of ZPD theory, in which learners can improve their skills and knowledge once receiving guidance from their teachers and peers. Thus, learning in ZPD theory is achieved through assistance that is provided from peers, teacher feedback, and "scaffolding" (Vygotsky, 1978). The scaffolding concept refers to any support or help provided to learners during their learning in order to facilitate their learning (Wood et al., 1976). The ZPD asserts the role of teachers as facilitators and scaffolders of learning (Pritchard & Woollard, 2010). However, assistance in the ZPD and scaffoldings is not restricted to only teachers; peers can provide assistance to each other while they are learning in classrooms (Brophy, 2002). Therefore, the ZPD encourages teachers to create a learning environment that assures collaboration between learners to provide assistance to each other.

Vygotsky emphasises the importance of language and thought in learning as evidence of the development of cognitive functioning. Wertsch (1991) expanded the idea of Vygotsky's ZPD theory and argued that not all mediations or assistance are limited to the verbal but rather can be further expanded by the use of alternative mediators such as technology. Therefore, teachers are encouraged to apply innovative pedagogical teaching methods that ensure the use of technology to provide assistance to their learners. For instance, encouraging learners to do the pre-class online materials outside the classrooms in flipped learning can help learners to have a base knowledge of the lesson topics (technology assistance in the ZPD), which reflects more opportunities for social interactions to expand their understanding of knowledge by helping one another, which corresponds with the learning zone. As mentioned earlier, the expert does not need to be a teacher and can be a peer or an electronic tool, such as in flipped learning, that can support their learning process prior to the classroom or a classmate who knows more about the topic or tasks (Li & Li, 2022). Therefore, In the context of the flipped learning approach, learners engage in increased collaboration and participate in social interactions that align with the sociocultural theory in language learning.

2.8 Approaches to Teaching Grammar

According to Cortez and Genisan (2021), the three main approaches to teaching grammar are the deductive, inductive, and eclectic approaches. The deductive approach is defined as rule-driven

learning, where grammar is taught by starting with rules before moving to examples (Latifah, 2023). Cortez and Genisan (2021) further state the approach entails developing the structural competence of grammar before its communicative ability. Anani (2017) defines an inductive approach to teaching grammar as a rule-developing approach where learners are led to understand grammar rules without any prior explanation. In the words of Cortez and Genisan (2021), the communicative ability develops first before acquiring the structural competence of grammar for the learners. Lastly, the eclectic approach to teaching grammar combines the two approaches' best values, recognising that explaining grammar concepts is as important as using language to communicate (Cortez & Genisan, 2021). It is necessary to understand each approach in detail and its characteristics for teachers to effectively employ them in teaching grammar because their suitability varies based on circumstances.

The deductive approach to teaching grammar is considered the scholarly one that was employed in teaching Greek and Latin by beginning with rules and then shifting to examples (Cortez & Genisan, 2021). The approach works by a teacher drawing learners' attention to an example either in the textbook or on the board and its underlying rules that are explained to learners; the students then are left to apply and practice the rule in writing and orally (Anani, 2017). Latifah (2023) further asserts that monitoring areas of conflict between the target language and the learners' mother tongue are some of the key considerations in using a deductive approach to teach grammar. Cortez and Genisan (2021) also state that the deductive approach is based on cognition, where rules are weighed before writing or speaking with little concern for the value of the message communicated. Umida et al. (2020) observed that a deductive approach takes an explicit or traditional way of teaching grammar where teachers act as disseminators of knowledge and students as recipients of knowledge who learn basic skills through repeated practice. It is perceived that assessment based on the approach is based on declarative testing of knowledge with a particular correct answer for each question (Umida et al., 2020).

Moreover, Abdullah and Shah (2015) state that a deductive approach to teaching grammar is currently also called the overt approach, where students are taught the grammar rules as they are. It is advocated that the overt approach entails a teacher dividing a speech into parts and systematically introducing the pattern, rules, and generalisation of grammar with the intention that learners will obtain a complete picture of language in the end (Abdullah & Shah, 2014). Fischer (2015) asserts that oral rather than written feedback is provided to learners using an overt approach because teachers make the assessment criteria very clear. Cortez and Genisan (2021) observed that some learners have reported difficulties studying grammar using the deductive or overt approach and an inability to communicate effectively.

An inductive approach to teaching grammar happens when learners are led to understand grammar rules without receiving any explanation before (Anani, 2017). A teacher focuses on shifting from examples to rules and learning through experience, or induction is preferred (Cortez & Genisan, 2021). Teachers who apply the method believe the first step is to teach meaning to learners instead of structure and that grammar rules will develop in learners as they get exposure to significant appropriate examples (Anani, 2017). Cortez and Genisan (2021) state an inductive approach entails an educator providing a model question which learners can use to generate related questions and understand grammar rules. Umida et al. (2020) assert that the inductive approach is also called the constructivist approach, as it encourages students to learn interactively and develop knowledge based on what they already know. The method advocates that learners should develop their knowledge through dialogue with the teacher, that assessments are varied, and that the interests of every learner are valued (Latifah, 2023).

Furthermore, inductive grammar teaching uses a covert approach, also called communicative language teaching, where students are taught about the language structure without concern for grammatical rules (Cortez & Genisan, 2021). Similarly, Abdullah and Shah (2015) advocate that communicative learning and activities are prioritised in an inductive learning experience as opposed to grammar rules, which encourage many languages to be used and satisfy learners' curiosity.

The eclectic approach is the third approach to teaching grammar, combining the best aspects of inductive and deductive learning (Cortez & Genisan, 2021). Anani (2017) supports the approach by stating that consistent grammar concept explanation is necessary occasionally, although the language is primarily used for communicative purposes. The approach avoids formal teaching of grammar rules with the view that students will develop them over time (Cortez & Genisan, 2021). Latifah (2023) considers the eclectic approach the most effective when teaching grammar, as it appeals to the preferences and learning needs of different students. Throughout the current study, a deductive approach was used for teaching grammar in the control group, while in the intervention group, mostly an inductive approach was employed. This involved pre-class visual presentations (videos) and communicative interactions in classroom learning. In the Saudi context, where this study took place, is mostly used deductive approaches to teach grammar for both schools and universities (Alarbai, 2016; Assalahi, 2013).

2.9 Technology and English Learning

Technology integration in classrooms has been associated with increased ability to learn English for many learners, increasing their communicative and writing ability. In particular, technologies

like websites and videos on YouTube are known to expose second language learners to native speakers who shape their communicative abilities and provide constant reference materials for their learning. Shahrol et al. (2023) and Mobinizad (2018) also assert that mobile technology has been used widely recently for learning English because of its ability to create engaging learning based on interactive applications. The wide adoption of mobile technology is associated with making English learning more student-centred, innovative, and meaningful (Shahrol et al., 2023). The application of technology in English learning has some drawbacks and many benefits. Among the drawbacks is the concern that technology replaces the role of a teacher in enhancing student learning and limits students' ability to think critically due to increased exposure to highly synthesised learning materials (Shyamlee et al., 2012; Mobinizad, 2018).

On the contrary, Shyamlee et al. (2012) observed that technology use can be highly beneficial for students in learning English language and grammar as it increases students' interest and communicative abilities. Furthermore, the use of multimedia English language learning due to technology is associated with increased interaction between students and teachers that encourages ongoing learning and flexibility for learning based on student needs (Shyamlee et al., 2012; Shahrol et al., 2023). Similarly, Van et al. (2021) found that technology integration at the university level increased English learning skills in the four domains of listening, speaking, writing, and reading. Based on the study, listening skills were the most enhanced, and speaking and reading skills were strengthened, with little improvement noted in the writing skills among the learners (Van et al., 2021).

Cutter (2015) observed that technology use in English language learning helped enhance instruction differentiation and was valuable in meeting different student needs. The same study noted that technology helped students construct content meaning and develop literacy and language learning skills (Cutter, 2015). Further, Cutter (2015) noted that the idea of a flipped classroom where learners are led to interact with materials before classroom meetings, with more time being dedicated in class to meet student needs and clarify confusion, has been aided by technological resources like videos where learners are directed to learn at their pace. Similarly, Zehler et al. (2019) discovered that technology use increased students' mastery of academic content by making it more engaging, developing their language and literacy skills, and providing support for visual and auditory learners.

Altavilla (2020) observed that technology use in English learning requires some conditions to be effective and facilitate student learning. The three critical conditions identified were that technology should be accessible for use, foster authentic social interaction, and avoid inbuilt biases (Altavilla, 2020). Haleem et al. (2022) also argue that technology should play the role of co-

creator, assessor, and mentor for effective language learning to take place. Learner's motivation to learn English is considered to increase with the use of computer-assisted language learning and mobile-assisted language learning due to its ability to engage learners and involve them in a learning community (Wei, 2022). Based on the studies, technology, if used effectively, enhances English language learning.

2.10 Chapter conclusion

Despite the extensive time of English language learning for Saudi learners, both in schools and universities, they still encounter persistent challenges. These challenges include the prevalence of teacher-centered learning approaches and traditional teaching methods (Alrabai, 2016; Alqahtani, 2018; Fareh, 2010; Khalil, 2010; Rabab, 2005; Storch & Aldosery, 2013). Consequently, this has adversely affected learner engagement and resulted in a noticeable lack of motivation to learn English (Aljohani, 2009; Alrabia, 2011, 2014; Fareh, 2010; Khan, 2011).

Undoubtedly, engagement plays an important role in the process of learning and works as a predictive factor for successful learning outcomes (Christenson, Reschly, & Wylie, 2012; Fredricks et al., 2004; Fredricks, Reschly, & Christenson, 2019; Wang & Fredricks, 2014). Nevertheless, it is noteworthy that the concept of engagement has received less attention in research compared to other constructs such as motivation (Christenson, Reschly, & Wylie, 2012). Consequently, the literature has observed the emergence of a misconception regarding the definition of engagement, beginning with Finn's (1989) early conceptualization of engagement as participation. Other scholars have used this as a beginning to clarify the misconception of the concept, including the pioneering work of Fredricks in 2004, have expanded the understanding of engagement by defining it as a multidimensional concept encompassing behaviour, emotion, and cognition which the present study used in defining the engagement concept.

Engagement is linked to the notion of second language learning since some indicators of engagement, such as making efforts, making learning strategies, and being actively involved in tasks, align with the fundamental characteristics of second language learning. This is because learning a language requires efforts from learners that should be made over a long period of time (Mercer & Dornyei, 2020). Among English learners, individual differences have been identified as a significant factor that influences learner engagement. These differences include various aspects, such as learners' motivation to learn English (Ainley, 2012), their personality traits (Reeve, 2012; Shernoff, 2013), inequalities in English proficiency levels (Storch, 2003), and the role of teachers as facilitators in the classrooms (Alamri et al., 2020).

This chapter also discussed Flow Theory as this study utilised it as the theoretical framework and guide for the design of the intervention. Attention was paid to the four conditions of Flow, namely, the balance between challenges and skills, attention and concentration, a sense of control, and interest. During Flow, individuals are intensely involved in learning with a high degree of concentration, interest, and enjoyment that leads to "higher levels of performance" (Csikszentmihalyi, 1990, p. 74) and that would contribute to optimal learning 'engagement' (Csikszentmihalyi, 1994, 1997; Egbert, 2003). Consequently, Flow is described as a state of complete engagement, in which individuals are cognitively, behaviourally, and emotionally involved in learning and perceive nothing else other than being involved in that learning (Aubrey, 2017; Egbert, 2003).

The English as a foreign language context has long been characterized by the prevalence of teacher-centred learning approaches. However, the need for pedagogical reform has given rise to a shift towards student-centred learning methodologies (Della, 2015). This shift has been accompanied by the rapid advancement of technology, which has not only facilitated the development of innovative teaching approaches but has also played a role in fostering learner motivation and engagement within language classrooms (O'Flaherty & Phillips, 2015; Vitta & Al-Hoorie, 2020). One example of an innovative pedagogical teaching method that has emerged in response to these developments is the flipped teaching approach. The flipped teaching approach uses technology to move lectures outside the classroom and dedicates class time to discussing concepts at a deeper level (Bergmann & Sams, 2012).

A limited number of flipped learning studies have examined student engagement in L2 contexts (Basel, 2015). Despite recent empirical studies have been examined learner engagement within flipped classrooms (e.g., Amiryousefi, 2019; Lee & Wallace, 2018; Li & Li, 2022; and Tran & Nguyen, 2020: please refer to 2.7.2 for more info about studies), some limitations have been observed in these studies. These limitations include the misconception of defining the concept of engagement as a multidimensional construct, a lack of comprehensive theoretical frameworks to support the engagement investigation, and the absence of support to assist learners in overcoming technological challenges. Given these limitations, the present study considered them carefully and worked to acknowledge and address these concerns. Thus, the present study aimed to examine learner engagement as a multidimensional construct using a flipped learning approach as a pedagogical intervention. It also used Flow Theory as a theoretical framework to guide the design of the flipped classrooms and to better understand learner engagement. The following chapter will examine the methodology employed in the present study as well as the data collection and analysis methods utilised.

Chapter 3 Methodology

This research project is a classroom-based mixed methods study used both qualitative and quantitative research methods. This mixed-methods study aimed to investigate and gain a comprehensive understanding of learner engagement through the implementation of an interactive pedagogic intervention including a flipped content approach in grammar classes. The study also incorporated the Flow Theory (developed by Csikszentmihalyi, 1975, 1990), as the theoretical framework during the design phase of the teaching intervention teaching, aiming to gain a deeper understanding of learner engagement dynamics.

3.1 Why a Mixed Methods Approach

A mixed methods research design is a pragmatic approach to research (Creswell & Poth, 2018) that focuses on (1) the understanding of the research problem, which can yield more valid sources of data and findings because of its triangulations (Saunders et al., 2011), (2) the purposes of the study (Christ, 2010), and (3) the applicability and feasibility of strategies used in the particular circumstances of the investigation (Creswell, 2003; 2018). The growing body of literature on what is now known as a "mixed methods" design has responded to numerous calls for combining quantitative and qualitative methods. (Teddlie & Tashakkori, 2009). For instance, a quantitative tool is used to measure certain features, and qualitative tools are used to expand and explain others (Teddlie & Tashakkori, 2009). Therefore, the use of a mixed methods design is appropriate for designing intervention studies, as Christ (2014) has pointed out that using a mixed methods design "allows the expansion of knowledge about the intervention" (p. 78).

Tashakkori and Creswell (2007) defined mixed methods research as "research in which the investigator collects and analyses data, integrates the findings, and draws inferences using both qualitative and quantitative approaches or methods in a single study or programme of inquiry" (as cited in Christ, 2014, p. 77). In other words, a mixed methods design refers to the combination of qualitative and quantitative methods within a single study in one or more parts of a study (Hanson et al,. 2003). The aims for combining methods might range from providing ways to answer research questions that could not be answered by a single approach, such as in this study, where the research question on how the intervention impacts learner engagement and induces their state of Flow cannot be answered from only the questionnaires (Angouri, 2010). These procedures can be accomplished by (1) triangulating or expanding the findings of one method using another, which the present study used when it employed more measurement tools such as observations, interviews, voice messages, questionnaires, and performance tests, or (2) applying

the results of one method to further develop the other (Greene, Caracelli, & Graham, 1989). In order to determine how a mixed-methods design will function, it is important to consider the following: whether the methods are implemented simultaneously or sequentially (the quantitative method preceding or following the qualitative or vice versa), how each method is prioritised, and how the methods are integrated.

However, the findings of the present study are combined and merged by the end of the analysis. Beginning with collecting the quantitative data (questionnaires and pre- and post-intervention tests) together with the qualitative data (voice messages, interviews, and observations). Subsequently, each type of data underwent an individual analysis. The quantitative data underwent Statistical Analysis to determine significant associations, and the qualitative data were subjected to thematic analysis to identify themes of learner engagement, and they were both merged to answer research questions (see figure below).

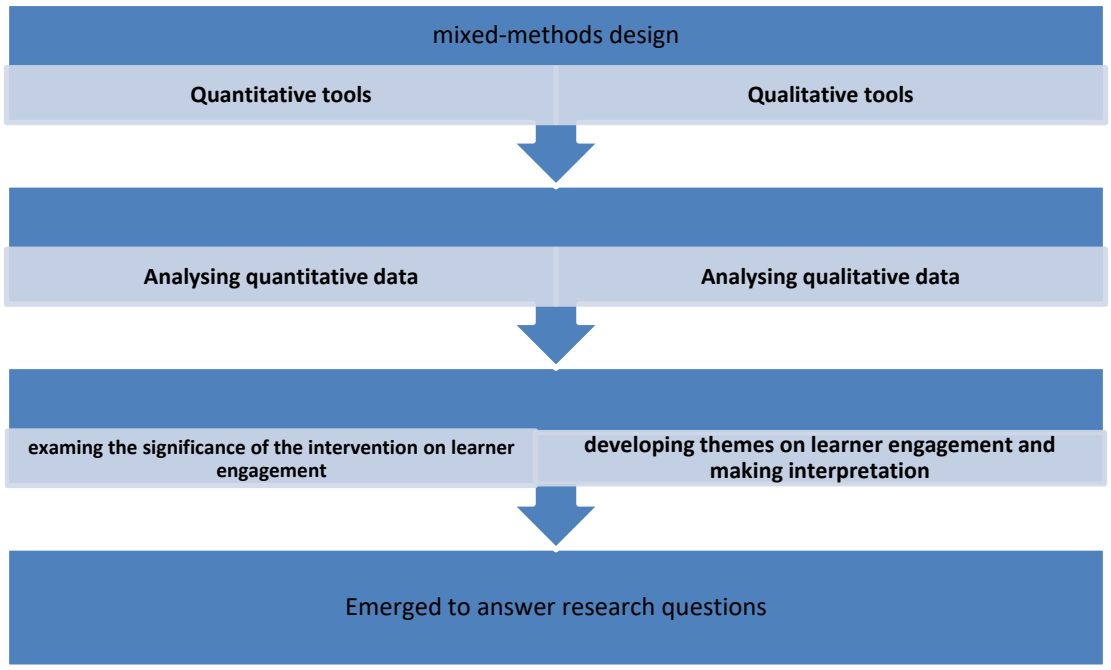


Figure 3-1 Mixed method design

Incorporating quantitative and qualitative research is a fundamental factor in mixed-methods decision-making. Primarily, a quantitative system is employed to identify differences between variables or significant differences, such as those in the questionnaires used in the present study, and it is also essential to identify performance change in intervention design research, such as when the present study utilised the pretests and the posttests to identify if there were differences in their performance, which might have had an impact on their engagement in grammar lessons (Riazi & Candlin, 2014). In contrast, the primary objective of the qualitative approach is to get an in-depth understanding of the research problem by constructing a complicated set of data,

analysing words to approach meaningful themes, and reporting participant-specific information (Creswell & Poth, 2018). Given the difficulty of measuring students' engagement, Fredricks and others (2016) have emphasised the need to combine quantitative and qualitative approaches. Consequently, integrating the two methods may "maximise the strengths and minimise the weaknesses of each" (Riazi & Candlin, 2014, p. 138).

According to Brown (2014), mixed methods research should be used in Teaching English to Speakers of Other Languages (TESOL) when there is an assurance that superior outcomes will be obtained compared to quantitative or qualitative studies alone. The intention of employing mixed methods research in TESOL and applied linguistics is to develop defensible and valuable research outcomes (McKinley & Rose, 2020). Brown (2014) points out that mixed methods research is differentiated from multimethod (combines qualitative and quantitative aspects) research by its seven critical features, which include;

- Strategic combination of qualitative and quantitative methods to obtain complementary strengths of each.
- Generation of questions and answering them.
- Resource-oriented and social needs.
- Borrows quantitative and qualitative research features where appropriate.
- Sequential or simultaneous integration of quantitative and quantitative viewpoints, forms of analysis and data collection and interpretation methods.
- Mixed methods research is only used when superior outcomes are obtainable compared to qualitative or quantitative studies.
- The goal of mixed methods research is to have defensible and valuable results.

Mixed methods research seeks to overcome the weaknesses of qualitative and quantitative studies when used in isolation. For instance, qualitative research is associated with weaknesses like the use of a small sample that makes it difficult to generalize compared to quantitative research based on statistical data (McKinley & Rose, 2020; Brown, 2014). On the other hand, quantitative data also has a weakness as it occurs in an artificial environment and is not exploratory, which makes it difficult to interpret data in a natural setting compared to qualitative research (Brown, 2014). Hence, by integrating the two the strengths are leveraged, and weaknesses avoided. Afshar and Ranjbar (2023) argue that strong researchers in TESOL are those who use mixed methods in a way that they cross-validate and reinforce each other.

McKinley and Rose (2020) point out that mixed methods research is valuable when leveraged from a human dimension as it entails innovative approaches to tackle everyday challenges. There is a growing shift from researching people using a mixed methods approach towards focusing more on researching with or for the people. Promoting an inclusive inquiry where participants in a study are involved in designing, undertaking, and using research outcomes and their values respected is considered effective in TESOL (McKinley & Rose, 2020). Afshar and Ranjbar (2023) state that mixed methods research is a growing area of interest in the TESOL field that entails context and what works in certain localities.

Unfortunately, despite the benefits of mixed research, several studies have noted that the approach is either confused with multimethod or selectively applied in doing research. For instance, a study by Hashemi and Babaii (2013) noted in searching seven databases that only 75% of 273 articles were mixed methods research despite being recognised as mixed methods. Further scrutiny revealed that most studies used concurrent designs typical of the multimethod approach instead of sequential designs associated with mixed methods research (Hashemi & Babaii, 2013). Similarly, Riazi and Candlin (2014) observed in examining 40 language articles that only 18 or 45% used mixed methods research and further assessment showed that they were mainly quantitative designs with the addition of qualitative data. It was also noted the studies were not principled as mixed methods were only confined to the data collection phase and that qualitative and quantitative approaches were not effectively integrated throughout the studies.

Previous studies in the literature that investigated student engagement in language classrooms mostly employed a quantitative approach and were beneficial in detecting engagement for learners (e.g., Amiryousefi, 2019; Aubrey, 2017; Czimmermann & Piniel, 2016; Lee & Wallace, 2018). However, using a qualitative method design may provide more information and clarity about the objective measures obtained from the quantitative technique (Angouri, 2010). Adopting a qualitative technique might provide the researcher with greater room to not just describe findings but also understand the research problem by interpreting the findings. Using both approaches in the present study helped provide a more accurate and comprehensive interpretation of its findings.

3.2 Data collection procedures and analysis

3.2.1 Timing of the Study

The current study was undertaken immediately after COVID-19 restrictions were lifted in the first semester of the academic year 2022 at a public university in Saudi Arabia and involved the

Department of English Languages and Literature Classes for Beginners. During COVID-19, all classes shifted online due to the need to uphold health standards and well-being, which produced mixed experiences (Erarslan, 2021; Dizon & Thanyawatpokin, 2021). All the participants of the current study physically attended classes at the university but were not all introduced to the Blackboard platform used for online learning. Therefore, the control group participated in a F2F environment. In contrast, the intervention group was exposed to an online learning environment via Blackboard, where they viewed digital content before meeting physically.

The study was conducted during the last 6-week period of a semester, with the intervention group starting the intervention teaching at the beginning of the academic term to familiarise themselves with the new approach. The intervention included incorporating a flipped learning approach to grammar instruction. This involved students reviewing interactive learning materials before classroom sessions and utilising additional resources and various tasks to enhance their comprehension.

Apart from the flipped learning approach, the levels of interactivity and groupwork usage were uniformly permitted for both the intervention and control groups. The participants in both groups were exposed to similar grammar content. However, in the intervention group, learners encountered different types of tasks and activities that were designed for more interactive learning. Notably the flipped learning approach implemented in this study not only replicated identical content presented in the control group but involved various different activities created by the teacher, such as online activities. To clarify, the difference between the two groups went beyond the flipped approach.

3.2.2 Participants

The participants are adult L1 Arabic Saudi English EFL learners who have enrolled in an English programme at a public university in Saudi Arabia. All the participants are male (n = 46), and each of the intervention and control groups had 23 participants. They were aged between 18 to 21 years old in their first year and shared a L1 Arabic language. The participants were enrolled at the Department of English Languages and Literature for Beginners at the university, where they were expected to complete eight levels of study. In particular, they were expected to complete levels 1 and 2 in their first year (beginning level), levels 3 and 4 in the second year (intermediate level), levels 5 and 6 in the third year (upper intermediate), and level 7 and 8 in the fourth year (advanced level). Before their enrolment in the program, learners were given a placement test, which, if they pass, is expected to determine if they will pursue an intensive English program. Based on this, they enrolled in a three-month intensive English program before proceeding with

English studies at the university. Students who pass or get A2 and above are automatically registered in the English language program. However, when students fail, they are transferred to a different department and their English proficiency level is tested further.

The Common European Framework of Reference for Languages (CEFR) provides a valuable framework for grading an individual's language proficiency level. CEFR mainly divides language proficiency into six levels, which are A1, A2, B1, B2, C1, and C2 (Ahmad Afip et al., 2019). The three levels are further divided into three categories: basic users (A1 and A2), independent users (B1 and B2), and Proficient users (C1 and C2). Based on CEFR, the participants were at a basic user level with limited previous experience in language use. According to CEFR, the basic user level of proficiency is defined and characterized by individuals with a basic grasp of English, which they can use to introduce themselves and interact through short or isolated phrases (Ahmad Afip et al., 2019). Furthermore, they require others to speak clearly and slowly for effective interaction and engagement using familiar expressions (Ahmad Afip et al., 2019). Thus, the design for the intervention materials were considered to match their proficiency levels and avoid potential disruptions.

In addition, Learners in the two groups were asked for extra information about their language experiences, such as the years spent on learning English, previous English programme involvement, studying English in speaking countries, and so on, to minimise the individual's variables that might affect the sources of data. None of the participants studied English in a country where English is the primary spoken language, and all of them have spent the same number of years studying English in Saudi Arabia. However, the groups differed, given that in the control group, learners were taught using a traditional approach in an almost exclusively offline environment without prior interaction with digital learning materials. On the contrary, the intervention group used online and offline platforms to learn English with prior access to digital learning materials. Moreover, language proficiency means of the participants in the control group were also determined as slightly higher than the intervention group, which helped determine its effectiveness.

All learners have registered for the English programme with the aim of completing a four-year academic calendar, earning a Bachelor's degree in English Language, and becoming eligible for their prospective careers. The program was necessary to equip learners with skills to become proficient in writing, reading, listening, and speaking fluently in preparation for their careers. The learning outcome intended by the course at the basic level equips learners to recognise grammar structures associated with comprehension at the beginning level. Another learning outcome was

empowering learners to develop listening, speaking, and reading skills at the beginning level of comprehension.

3.2.3 Teacher background, training, and role

The originally intended instructor for the study was unfortunately unable to conduct the teaching sessions as planned, primarily due to the university's decision to close many classes as a response to the COVID-19 pandemic. This meant that if the study ran at the same university, there would be one grammar class, which did not suit the research design of this study. This unexpected circumstance considerably constrained the available options for conducting this study at this particular university. Consequently, to ensure a more substantial and diverse participant sample, an alternative university was selected for the study. This transition to a different university enabled a larger number of participants in different groups. However, the primary grammar instructor rejected teaching using a flipped learning approach and agreed to teach in his normal way. As a result, I undertook the role of the instructor in both classes as the main instructor to avoid any potential variables in the study of having two different teachers. This planned shift was undertaken in light of the unexpected challenges posed by the pandemic and in order to achieve the research objectives effectively.

I have more than a decade of experience teaching English at secondary schools and at the university level. I have taught many modules related to Second Language Acquisition and language skills. I taught grammar I, II, and III for all learners in the English department. Throughout my teaching career, I have actively integrated technology into my pedagogical practises to enhance learning outcomes and ensure an active learning environment. Through my teaching, I used different approaches, such as the flipped learning approach, aiming to create dynamic and engaging learning environments for my students.

As a researcher, instructor, and gatekeeper, I avoided using bias and making assumptions based on experience when engaging with students, as it would lead to incomplete or inconclusive results. I understood that a close relationship with my students would have jeopardised their behaviour outcomes. I worked to monitor them in advance on their learning to determine if any change was noticed. In most cases, I involved peers to evaluate my work and sought expert advice from mentors to conduct the study competently. Moreover, by being honest and explaining the study's intention to the participants, they willingly took part and gave valuable information that is critical in decision-making. By using diverse approaches to collect data, consistency was achieved using observation, student voice messages, interviews, and questionnaires. The participants were

treated respectfully in the intervention and control groups, and their safety was upheld before, during, and after the study.

3.2.4 Ethical issues

Regarding the ethical guidelines issued by the university ethics committee, this research has strictly followed the guidelines to ensure the privacy and confidentiality of participants throughout the research process. I clearly explained the aim and the nature of the study to the participants, before the study commences. Consent was obtained from the participants before the study began. The participants were informed that their participation or non-participation will not jeopardise their grades, nor affect their current or future relationship with the faculty at their university. The participants were provided with copies of the Participant Information Sheet (see appendix B and C below) and Consent Form (see appendix D below) that were explained in-person but sent and signed online via Google forms one week before the study started. Also, they were encouraged to take them home to think and reconsider their participation by the researcher and teacher. For confidentiality, participants were given pseudonyms, and all information they provide was used to fulfil the aims of the research. The participants were informed that they have the right to withdraw from the study at any time.

3.3 Data collection methods

Quantitative data for the study was collected using pretest and post-test performance assessments and questionnaires, as discussed below. On the other hand, qualitative data was obtained from the control and intervention groups using classroom observations, voice messages, and semi-structured interviews. All of the responses were obtained in Arabic and translated into English with the help of an expert in English, except for the pretest and post-test assessment that was administered in English. The methods used in data collection are explored below in detail concerning their limitations, strengths, and complementary attributes.

3.3.1 Pretest and post-test Performance Tests

Suzuki and Koizumi (2020) argue that pretest and post-test performance tests are important in L2 to determine student proficiency, learning, and improvement. The participants for both groups had taken the pretests a week before the study took place to identify their level of proficiency and compare it with their end-test performance at the end of the study to determine if their performance improved, which may link later to their engagement improvement. The grammar knowledge and competency of the learners were as such determined using a pretest performance

test that revealed no significant differences in proficiency levels for the control and intervention groups. A total of 16 multiple-choice questions were used to undertake the pretest and post-test assessment integrated into a section of the final exam, using the content covered during data collections. Spears and Wilson (2010) observed that multiple choice questions in pretest assessment help understand the knowledge proficiency of the students and allow consistency in gathering information about student learning and teaching improvement. It is important to note that the questions used in the final exam from the pretest were altered and changed in meaning while retaining the same grammar rules to test the competence of the learners in the control and intervention groups.

A critical focus in assessing proficiency change and learning levels was comparing a section of questions in the pretest framed and used in the final exam regarding performance. Different measures like the Repeated Measures ANOVA test were used in SPSS and paired sample t-tests to determine if there were significant differences between the control and intervention groups described above. The outcomes are covered in detail in sections 5.1.3 and 5.1.4, which explain the differences obtained and the implications for the study. The pre/post-performance tests are valuable indicators of the progress made by students in their learning over a given timeframe (Spears & Wilson, 2010).

3.3.2 Questionnaires

Questionnaires are defined as "any written instruments that present respondents with a series of questions or statements to which they are to react either by writing out their answers or selecting them among existing answers" (Brown, 2001, p. 6). This study used a closed-item question as the goal was to quantify and analyse answers. Open-ended questions are not included in the questionnaire because the study used other instruments such as observations, interviews, and voice messages as other methods of data collection. A questionnaire is mostly used to elicit comparable information (Mackey & Gass, 2015), which will be useful for answering research question one (RQ1) of this study, which is determining if there is a significant difference between the two groups regarding their engagement in grammar lessons. The design of the questionnaire comprises 12 statements targeted to measure the behavioural, emotional, and cognitive dimensions of student engagement (adopted from Hiver et al., 2021; Wang et al., 2016) (see Appendix A below for the questionnaire). The behavioural engagement was measured using four items, which were: "In the class today, I stayed focused even when it was difficult to understand." "I participated in all the activities during the class today," "During the class today, I kept trying my best even when it was hard," and "In the class today, I continued working until I completed my work."

The statements of emotional engagement were "I look forward to the next class (changed to because of the class today, I would attend similar other grammar classes even if they were not required," "I enjoyed learning new things (changed to 'the class today was interesting and enjoyable," "I felt good in the class today," and "In the class today, I wanted to understand what I was learning."

Finally, the cognitive engagement was measured with the following items: "In the class today, I went through my work (changed to I worked) carefully to make sure it was done right." "In the class today, I thought about different ways to solve problems in my work." "In the class today, I tried to connect new learning to the things that I already learned before," and "In the class today, I tried to understand my mistakes when I got something wrong."

The participants responded to each item on a five-point Likert-scale format, and each point had a numerical value (1 = strongly disagree, 2 = disagree, 3 = neither, 4 =agree, and 5 = strongly agree). A five-point Likert scale was preferred for use in this case instead of a four-point scale because it is known to produce better quality data and permits higher levels of internal consistency. That means missing data is captured, and participants are allowed to remain neutral in their response, which is not factored in a four-point Likert scale (Østerås et al., 2008). Although a five-point Likert scale is criticised for influencing respondents to draw towards a neutral position or focus on extreme ends which may not be objective, it was chosen for its consistency and ability to make choices that reflect respondents thinking in being neutral rather than fitting in either side (Østerås et al., 2008). The same limitation is obtained using a six-point Likert scale, making quantitative data analysis very difficult. Similarly, Revilla et al. (2014) observed that a Likert scale exceeding five points contributes to a lower response rate due to participants failing to identify themselves correctly, and unreliable results are obtained due to frustration in choosing among many responses. Therefore, the scale was adopted to avoid getting low-quality data and achieve higher internal consistency.

Learners in both groups completed the questionnaires immediately after each class by scanning the QR code on the board using their phones. The Wi-Fi service was provided in all the classes, so those who could not use their own internet could use the Wi-Fi. Each group responded to the questionnaires six times during the study. The goal of using questionnaires was for the statistical analysis to determine the differences in engagement between the control and intervention groups. However, the perceived limitation of using a questionnaire is its inability to capture the complete picture of the changes in student engagement or answer other research questions comprehensively (Mackey & Gass, 2015). One limitation is that not all the questions were designed to measure the changes in engagement that students experienced. Additionally, their

responses would not reflect their true feelings about the experience, which may lead to inaccurate data. Therefore, this study was not limited to this tool and considered other methods of measuring student engagement.

3.3.2.1 Validity and reliability

For the validity and reliability of the questionnaire, I asked my supervisor to look over the items of the questionnaire before data collection began to get her approval. Two of my PhD colleagues were also asked to make sure that the words and language were clear. Thus, some changes and amendments were considered based on my supervisor's and my colleagues' feedback. For the questionnaire's translation, I asked a professional Arabic translator who has a master's degree in English language translation to translate all the questionnaire's items into Arabic. Translation of the questionnaire was deemed necessary to avoid vocabulary confusion for language beginners, foster natural conversation, and achieve cultural sensitivity (Khalaila, 2013). Given that translation matters and, if wrongly done, it would compromise the outcomes of a study and key aspects, a well trained and experienced professional was also sought for carrying out the task. The translation was also deemed necessary to achieve consistency apart from increasing the clarity of the intended questions and seeking out accurate responses (Khalaila, 2013). The participants were empowered to understand the intention of the research through translation which contributed towards better outcomes and understanding of the issue under study.

For the sake of reliability, the questionnaires were run in a pilot study with different participants studying grammar in English at the university in their first-year level before the study began. After the completion of the questionnaire, the participants were asked if they went through any questions that may not have been understood by them. A few words in some were not enough to make them clear, such as item "Because of the class today, I would attend similar other grammar classes **even if they were not required**." Some participants thought if they agreed with this, they would be asked to attend other grammar classes in their program. Therefore, I removed the last part of the statement to avoid misinterpretation. In addition, the test of internal consistency using Cronbach's alpha was run using SPSS and found to be a reliable questionnaire (please refer to table 5-1 under section 5.1.1 in chapter 5).

3.3.3 Voice messages

Unlike questionnaires, in which respondents are restricted by preselected items, learners' diaries (delivered by a voice message) enable learners to provide more details or information about their thought processes, perceptions, and feelings (Aubrey, 2017). Indeed, diaries provide rich data, as Miller (1997) has emphasised that "a diary might provide important personal insights of a

reflective nature, which are less accessible through observation and interview" (p. 40). As a result, diaries may enable the researcher to look at learners' engagement experiences from unconstrained perspectives from different individual learners (Mackey et al., 2015). Before the study took place and through the pilot study, the participants were overloaded with writing diary entries, so they produced very few words as a reflection in their diaries, and others did not write a diary entry when they were requested to do so. Therefore, a written diary was replaced with a voice message to send via WhatsApp to the teacher after each class, as it requires less effort and provides more details. Through the piloting, voice messages were found to be richer in information and more convenient for participants to share after classes than keeping diaries. Therefore, learners were instructed to express their reflections via voice messages in Arabic within 24 hours of each class. The learners were provided with some suggestions on how to express their reflection, such as prompt questions as a helpful stage to elicit their experiences through classes, such as "How well do you feel you learned in this class?" and instructions like "support your reflection with examples" and "don't pay attention to saying it formally, say it as you would like".

3.3.4 Semi-structured interviews

Although the conventional classification of interviews into structured, semi-structured, and unstructured types may be useful in providing their fundamental classification, it is not a straightforward concept given the diverse definitions provided for each in existing literature. In qualitative interviews, the purpose of the research will guide the choice of which one suits better (Kvale & Brinkmann, 2009). Argumentation is more likely to be put into structured and unstructured interviews, which seem to be often disregarded or rejected by some researchers in qualitative interviews. The former is blamed on its predetermined questions, which can restrict participant responses and fail to generate the thick descriptions that qualitative interviews always rely on (Kvale & Brinkmann, 2009). Unstructured interviews, on the other hand, have also been criticised as they lack a clear directive structure (nondirective) that should be guided by a purpose (Nunkoosing, 2005). When making decisions about selecting interviews as a method of data collection, it is assumed that interviews are an obvious choice for qualitative researchers who seek to understand the perspectives of participants. However, not all research questions can be effectively answered with only interviews (Creswell, 2013). Therefore, this study used other qualitative tools for gathering data, such as observations and learners' voice messages.

For the current study, semi-structured interviews were utilised, which permitted participants to share and describe their experiences of grammar classes, whether in the intervention teaching group or in the traditional teaching group. This kind of fairly loose interview does not mean that I

have overlooked the research purpose; however, the research focus, participants' perspectives and meanings, and the exploration of other themes outside the interviewer's categories are still priorities. The nature of a semi-structured interview provides additional advantages for participants in that they can explore their reflections and their experiences during grammar classes to better understand their engagement and their experiences of Flow. Additionally, Kvale and Brinkmann (2009) emphasised that the reason behind using semi-structured interviews was to provide more insights and as much detail in descriptions of what participants had directly experienced as possible.

During the pilot study, I interviewed four volunteers studying an English writing course at the university in their first year. The aim was to practise interviewing students and check my ability to run the interview. After each interview, I asked the interviewees to give their feedback on the interview. The participants in the current study were selected from both groups, with roughly ten interviewees from each group. The selection process was based on their behaviour in the classes, their voice messages, or being randomly asked for volunteers. Each interview was conducted via Zoom and lasted between 20 minutes to half an hour. In preparation for conducting the interviews, I attended two training sessions that took over sixteen hours of practising interviews. This training made me feel a bit more confident in making interviews, aided in the selection of the appropriate type of interview for my study, and also helped me prepare relevant questions for each interview. In order to conduct comfortable and safe environmental interviews, I carefully considered the preferences of the participants regarding the best time for the interviews. Additionally, I carefully selected the types of questions to be asked during the interviews. The aim of the interviews was to gain a better understanding of the participants' experiences in relation to their engagement in grammar lessons (Cousin, 2013). I conducted the interviews in Arabic not only to achieve consistency in data analysis using MAXQDA software but also to minimize tension and increase interactivity with learners who were at their beginning level in language acquisition. The goal was to eliminate misunderstandings and have a focused conversation about being familiar with Arabic.

To address the research questions of this study, I asked a series of open-ended questions to the interviewees targeting the three dimensions of engagement and their state of Flow. The questions included the learners' experiences of grammar classes, their experience with online learning for the intervention group, their feelings about classes, their relationships with peers and the teacher, their strategies for learning grammar, their comprehension of grammar topics, their experience doing tasks and activities, and so on. These questions were followed by many probing questions to expand their meanings and elicit further data (see figure below). The aim of targeting

those questions during the interviews was to gain a better understanding of how the intervention teaching impacted students' engagement and their Flow state during grammar lessons.

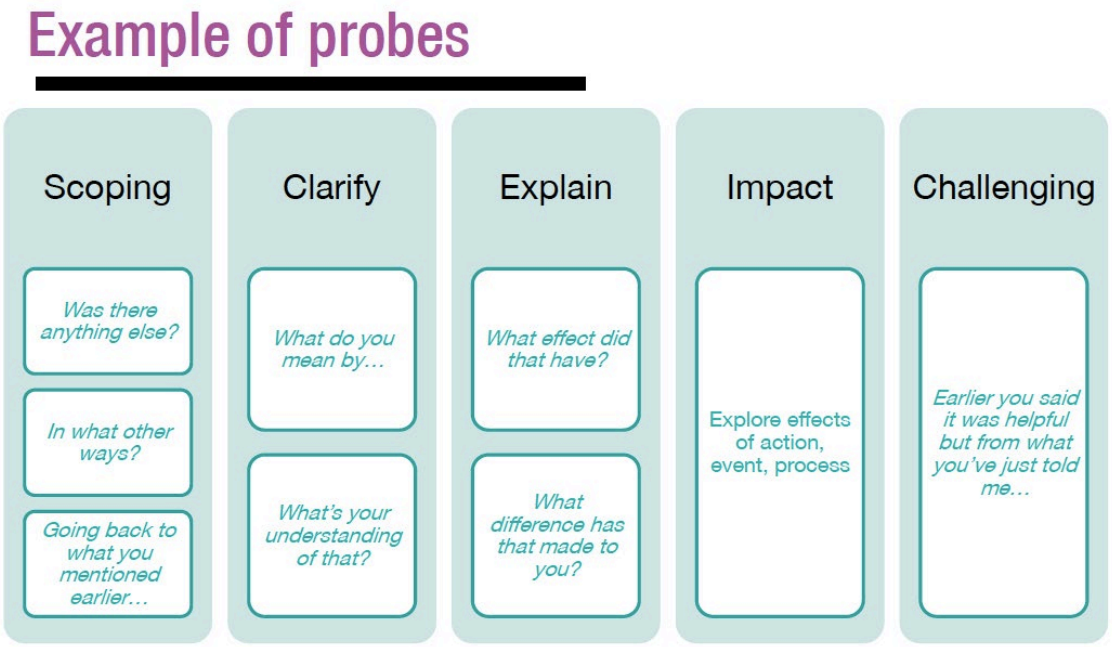


Figure 3-2. Example of probes questions

3.3.5 Classroom Observations

Classroom observation is a commonly used method in second- and foreign-language research. It is very useful for gathering in-depth information about the research (Mackey & Gass, 2015). The strength of observation is that it can capture live data in a classroom setting (Cohen et al., 2011). Thus, what students may do in class differs from what they say (Cohen et al., 2011). In other words, it is used to reveal unexpressed student voices. Observation allows researchers to be aware of the research and look at things that might be missing from other methods, like situations where learners may not feel comfortable expressing themselves freely through voice messages or interviews.

When combined with other methods, observation assumes an important method in capturing learner engagement. Given that learners were informed that they were being observed in their classroom actions, observation occurred naturally, allowing learners to remain in a natural learning environment. Thus, observation covers their behavioural engagement, which can be observed during classes through group work, task completion, and their physical behaviour within the classrooms. For instance, much evidence was observed from learners who belonged to the

intervention group who demonstrated greater mobility within their classrooms compared to the control group, despite both groups being granted the freedom to follow their preferred approaches to classroom work. In addition, observation is not limited to capturing behavioural engagement; it also observes other dimensions, like when learners are cognitively engaged by asking different questions or making learning strategies.

Even though it is useful for collecting data, observation has raised some methodological concerns in the literature. One notable concern relates to observer effects, which means the presence of an observer may impact learner behaviour in their classes (Waxman et al., 2004). These effects may manifest either negatively, such as increasing anxiety, or positively, leading to enhanced performance of learners better than usual known as observer's paradox (Waxman et al., 2004). To address this concern and minimise its impact, I played the role of observer and teacher. I observed the participants while teaching for the first six weeks before starting to collect the study data in the remaining six weeks of the semester in order to familiarise myself with their behaviours and establish a sense of normality for them in my presence while observing them. Another methodological concern raised by Waxman and colleagues (2004) relates to the duration and frequency of observations required to obtain valid and reliable data. The current study sought to address this concern by giving an adequate amount of time for classroom observations to ensure the validity of the collected data. Additionally, the observations were conducted six times during the data collection to ensure the reliability of the data collection and a few weeks before the actual data collection began.

Observations were conducted straightaway in class time and note-taking completed immediately after each class or when learners were engaged in tasks. As I had not obtained consent from learners to visually record them in class because they felt they needed to safeguard their identity, I granted their permission to have them audio recorded in class. This helped in capturing significant events that might have otherwise been overlooked, as it is possible to cover everything in classrooms (Emerson et al., 2011; Lee et al., 2017). For the reliability and validity of observation, I used a semi-structured observation design. The design of the observation was divided into three sections based on the definition of engagement, which included the three dimensions of engagement with the most related indicators to each mentioned in the literature (Fredricks, 2004). Some indicators were already written in the fieldnotes as a checklist, while additional space was provided for what participants came up with. A reflection section was added to the observation sheet to expand my observation once I had time during the class or in the break time. Additionally, after each class, I wrote a reflection on what happened in class in relation to the teaching procedures and the material design and compared it to my fieldnotes (see Appendix E below for my teaching reflection).

3.4 Qualitative data analysis

A *research journal* was one of the most useful resources I had throughout the project because it served as a place for me to document my reflections and thoughts on the developing data and the research process during my entire work on the project. My involvement in the project's analysis, likely began on the first day of my immersion in the teaching process, I mean before the data was officially collected but the participants consent in participating in the study were received from the day one of teaching. This would provide additional room for validating and evaluating the project tools throughout constant amendments prior to the final version of tools utilised in the study. Both the act of writing and subsequent revisiting of individual entries led to numerous annotations and analytical notes connected to specific data records.

3.4.1 Data storage and transcription

The interviews were digitally recorded using the *Zoom platform* and stored electronically as sound files under the file name, which included the date and other essential information for the purpose of making identification as simple as possible. Voice messages sent via WhatsApp from individual participants after each physical F2F class were also recorded electronically as sound files with a participant's pseudonym name within an identifiable group inside a week number. These sound files were then placed in individual document folders that were assigned to each participant. Observations made in the classroom, either from instant observations while teaching or through listening back to audio recordings, were typed up and compiled into a single document that indicated the lesson's date and the number of weeks that it was observed. Thus, word-processed observation fieldnotes were the main observational data records.

As it informs the early stages in the analysis, both interviews and voice messages were transcribed into word documents as in its original language Arabic. Although I found the transcription process to be time-consuming, it has helped me become more comfortable with the data by allowing me to identify some initial meaningful patterns. I continued my reflection on the data while I transcribed the recordings into a word processor, highlighting key passages and adding my own comments as annotations in contrasting font colours. After finishing transcribing any single interview or voice message, I double-checked my work against the original recordings to ensure accuracy.

3.4.2 Thematic Analysis (Coding procedures)

Observations, interviews, and voice messages were meant to help me better comprehend and interpret the quantitative data (questionnaires). After the initial quantitative data analysis, it

remained necessary to understand each dimension of learner engagement, which may not be possible to disclose in only quantitative data. I utilised the MAXQDA software to make sense of analysing the qualitative data since it supports the Arabic version, which was required because all interviews and voice messages were in Arabic, and to assure the flexibility of moving back and forth and simply retrieving data. Marjaei et al.'s (2019) study support the view given that they observed MAXQDA software to be effective in thematic and content analysis and was mainly used by researchers to help in the classification of data. The same study also noted that the software has a benefit as it organises a wide range of data (video, text, and photos) with their cultural and social context (Marjaei et al., 2019). The ability to order qualitative data into meaningful information as such motivated its usage. Apart from MAXQDA software being effective in transcribing data, it was chosen because it has the advantage of showing data connection in a study as well as linking external and internal information to a project, allowing for flexibility compared to alternatives like NVivo (Oliveira et al., 2013). Notwithstanding its benefits, Kuckartz and Rädiker (2019) observed that MAXQDA has a limitation for researchers involving a team because each member has to save information individually before merging it for analysis. However, the current study did not involve a team in data collection.

MAXQDA software was also chosen because of its ability to accept and organise data from different sources for analysis, easy-to-use tools, and comprehensively represent visual data (Kuckartz & Rädiker, 2019). However the software is deemed challenging and restrictive for people without knowledge of thematic analysis and how it operates as one of the biggest hindrances in usage. The problems were overcome by learning about the usage of the application and its critical features and comparing evidence-based studies that applied the approach in the past.

In the present study, thematic analysis was utilised to draw out details from the data by classifying it into initial codes, themes, and sub-themes and making meaningful links between them. The "thematic" method of qualitative data analysis was introduced in the 1990s, beginning with scholars like Aronson in 1994. However, Braun and Clarke published a seminal paper in 2006 outlining a workable process for employing this method, and ever since then, it has gained widespread attention. They defined it as a strategy for first detecting, then analysing, and presenting patterns found in data. It is a thorough procedure that provides a number of relevant themes that help answer research questions. This analytical approach was chosen because of its flexibility and accessibility to those who, like me, were new to qualitative data analysis (Terry et al., 2017), and it served to achieve the research aims by analysing its qualitative data.

I followed what Braun and Clarke (2006) indicated as practical actions to take before, during, and after the thematic analysis process throughout all six stages: becoming familiar with the data, generating initial codes, searching for themes, reviewing themes, defining and naming themes, and producing the report (see figure below). This was done in accordance with the work of Braun and Clarke (2006) in the thematic analysis system. This study ensured a consistent process of going back and forth through the data by following these steps in sequential order. To begin, I familiarised myself with the data by listening to all recordings as many times as I could during and after data collection, including interviews and voice messages. Then, I proceeded to the process of transcription, which I had already described because it was a piece of my analysis. Transcriptions provided me with plenty of time to absorb the data that had been written in a manner that allowed it to be read repeatedly.

Table 3-1 Phases of thematic analysis developed by Braun and Clarke (2006)

Phase	Description of the process
Familiarizing myself with my data:	Transcribing data (if necessary), reading and re-reading the data, noting down With initial ideas.
Generating initial codes:	Coding interesting features of the data in a systematic fashion across the entire data set, collating data relevant to each code.
Searching for themes:	Collating codes into potential themes, gathering all data relevant to each potential theme.
Reviewing themes:	Checking if the themes work in relation to the coded extracts (Level 1) and the entire data set (Level 2), generating a thematic 'map' of the analysis.
Defining and naming themes:	Ongoing analysis to refine the specifics of each theme, and the overall story the analysis tells, generating clear definitions and names for each theme.

Producing the report:	The final opportunity for analysis. Selection of vivid, compelling extract examples, final analysis of selected extracts, relating back of the analysis to the research question and literature, producing a scholarly report of the analysis.

The next phase was generating the initial codes. coding is defined as a word or a few words that represent the idea of a chunk of text (Terry et al., 2017). Regarding the thematic analysis approach, there are two types of coding: 1) *semantic coding*, which captures any explicit meaning or is known as a surface level, and 2) *latent coding*, which captures the text's implicit meaning (deeper surface) (Terry et al., 2017). This study used both kinds of coding to establish themes. For instance, in the sematic coding, a participant said *"My experience of the lecture today in grammar class was beautiful and enjoyable, and for the first time I didn't feel nervous or fearful of making errors."* This was coded as meaning that he enjoyed the class and was confident. For the latent coding, a participant stated that, *"If I do not understand the target grammar, after the lecture I talk to my colleagues to explain it to me. If I couldn't meet with them, I contacted them online via WhatsApp and asked them to explain it to me."* This was coded as a lack of teamwork among classmates in the class.

Coded data is different from themes, as the latter are broader and would be produced in the next following step (Braun & Clarke, 2006). Coding data can be done either manually or through a software programme. In this study, the MAXQDA software was used to tag segments from exported word files within codes. Coding went through the entire data set systematically to draw full attention that could form a desirable repeated pattern (themes). Coding was deliberately highlighted with different colours, but it does not have to, to help in retrieving and grouping similar codes under each colour. For example, red-coloured segment codes are labelled as evidence that may indicate cognition. This would assist in grouping and merging relevant codes into common interests. Memos and notes were also used to record any comments or questions that would need to be addressed later through ongoing coding. Furthermore, I manually reflect on each coded completion of each single interview or voice message by either leading questions for the subsequent planned text analysis for coding, writing any new codes that immerged from that text to sequence evidence, or simply checking back. The coded documents were reviewed again, and the overall amount of coding was reduced by combining comparable codes into one

code to develop patterns for the following step more effectively. The next step was to combine the comparable codes to represent sub-themes. Subsequentially, the final phase was searching for themes. After the coding completion and the comparable codes were combined, sub-themes were reunited and represented as main themes. Once the themes were aligned with each engagement dimension, any Irrelevant sub-themes or themes were excluded.

For the validity and reliability of coding, upon completion of coding for two interview scripts, I shared them with my supervisor to check my coding process. Subsequently, I received a confirmation of agreement from my two supervisors, accompanied by comments for amendments. Additionally, I have chosen chunks from different interviews and voice messages to share with my L1 Arabic PhD student colleague, who was concurrently engaged in data analysis using the same MAXQDA software. The aim was to assess the degree of correspondence between my coding and that of my colleague. The coding outcomes showed a relative degree of consistency. With this affirmation, I proceeded to finish the coding procedure and then identified the main themes. The validation of these themes was undertaken through a number of meetings with my supervisor.

3.5 Quantitative data analysis

To prepare for importing the data into SPSS *version 28*, each participant questionnaire was coded in the Excel document with numeric values ranging from 1 to 5. (5 strongly agree, 4 agree, 3 neither, 2 disagree, and 1 strongly disagree). Then, the results of each week's questionnaire responses for both groups were entered into the SPSS with the group name and week number and saved as *Control Group Week 1. sav* or *Intervention Group Week 1. sav* . The rationale for this was to test the reliability scores for each of the questionnaires in sequence (refer to chapter Five in section 5.1.1 for more details). Once the coding for all questionnaire responses had been finalised, the data from SPSS was exported to Excel in order to obtain the means for each participant for the entire weeks. By doing that, I had, for example, in the intervention group, six weeks of repeated questionnaire responses with their means for each individual and then placed each response of a participant, such as in week one, with all his responses for the remaining of the weeks (see figure below).

3.5.1 Repeated measures ANOVA tests

After conducting a search in SPSS for relevant tests, the Repeated Measures ANOVA test is used (refer to the Findings Chapter in section 5.1.2.2 where the assumptions of the Repeated Measures ANOVA tested before proceeding with tests). The repeated measures ANOVA test is employed

when the same measurements are made multiple times with the same participants under independent observations (Cronk, 2016). The independent variable *Between-Subject Factors* in this study is the GROUP and it has two levels (the intervention and control group) and the other independent variable *Within-Subject Factors* is the (TIME) which was represented by the dependent variables of the repeated measurements (during six weeks) to all participants.

To enter data into SPSS, the means for each individual participant were obtained for each week and were allocated to each dependent variable (week numbers). In the SPSS, the first variable column was labelled as ID (participants number identifications) in the *variable view window*, the second variable as a 'GROUP' (0 intervention and 1 control), and the remaining variables as WEEK NUMBERS (W1, W2, …)

Chapter 4 Flipped and interactive pedagogy, grammar teaching, and tertiary learners

This section provides a description of the intervention design for language teaching implemented in this study; the grammar module was selected to be taught. The design was developed on the basis of Flow Theory, in order to best achieve the research objectives related to learners' engagement. Flow Theory is operationalised as the way in which content is constructed and taught to encourage learners to become intensively involved in learning with a high degree of concentration. there should be a perceived balance between challenges and skills, and people should feel interested and have a sense of control (Csikszentmihalyi, 1975, 1990). This chapter reviews grammar teaching literature in the L1 Arabic EFL context since this study was conducted in a grammar course at a public university in Saudi Arabia. The chapter then introduces a detailed description of the instructional and practical design, followed by the theoretical basis of the design.

4.1 Grammar literature (Saudi Context)

The importance of teaching grammar to ESL learners has a long history in literature, beginning with an initial focus on accuracy only before giving priority to fluency. Scholars have argued that the degree of its significance depends on the type of learner. For example, teaching grammar to young learners is likely to be less convincing and helpful compared to adult learners, for whom knowledge of how language works is crucial when learning a second language in the classroom (Althaqafi, 2018). However, in EFL contexts, the debate has moved on to how grammar should be taught in classrooms. Historically, the Grammar Translation and the Audio-lingual methods of teaching grammar were predominant in EFL classrooms, in which grammar rules were basically displayed to the learners in a deductive way. In the Saudi context where this study took place, learners have traditionally been taught grammar in isolation from communication skills and knowledge sources, with the teacher and textbook relying rarely on other sources (Alarbai, 2016; Assalahi, 2013). This has created a passive attitude towards grammar lessons for Saudi English EFL learners and boredom, which resulted in disengagement, generated antiFlow experiences, and reduced the learners' chances of naturally experiencing Flow state. Being in Flow means that students are completely immersed in their learning, usually because it is something they enjoy doing (Csikszentmihalyi, 1975, 1990). Therefore, the present study used the flipped learning approach as a pedagogic intervention approach using Flow Theory for the design to examine if the intervention impacts learner engagement among Saudi English EFL learners and induces their

state of Flow. In the present study, the intervention group taught in flipped classrooms, where learners review the content materials outside the class, which are made more feasible with technology, and then come to class to not be lectured but to work with peers and teachers in a communicative and meaningful environment (Bergmann & Sams, 2012). While the control group was taught in traditional classrooms, depending on textbooks and worksheets.

4.2 The flipped classroom design and implementation

This section contains a brief description of how the intervention was organised and gives details about the course description, instructional procedures, and online learning, including asynchronous and synchronous modes of learning.

The teaching intervention and the data collection in this study were scheduled to last six weeks out of the 12-week semester. However, I taught the control and intervention groups from the beginning of the semester, even before data collection, in order to make them familiar with me by watching me teach and observing them during classes. For the intervention group, students received training on how to use the online course materials, making it mandatory for all learners to engage with and review the digital content. By online course materials, it means the various videos adapted on grammar or designed using software like Nearpod, which learners interacted with before class time. Furthermore, online course materials included games and quizzes. As this was an essential part of the course requirements, learners were monitored to log in to Blackboard, and those who were not logged in received a reminder message to prompt their engagement with online materials.

In order to design six weeks of a flipped learning approach, I looked at the learning outcomes for the entire course, then specified the learning outcomes for the flipped classes (6 weeks). To meet those learning outcomes, I had to deliver part of them in asynchronous mode and the others in synchronous mode. For activities conducted asynchronously, learners were required to enrol online through Blackboard in order to access class materials before they met face-to-face. These activities encompassed viewing videos, which could either be scenario-based videos addressing the grammar topic or multidimensional explicit explanations of the grammar topic. Moreover, the asynchronous activities extended to quizzes or digital games that focused on the grammar topic, designed via the Nearpod website. On the other hand, synchronous learning would be carried out F2F in the classroom as an extension of the learning posted in Blackboard and reviewed before the class (detail in section 4.3.2).

On the contrary, the control group received no training on engaging with and using digital materials or content review via Blackboard at the start of each week. The students were mainly

exposed to offline learning using a F2F interaction in a classroom setting and guided through the same textbook and material. The learning outcomes for the entire course were not modified as was done in the case of the intervention approach. However, group work, collaboration, and face-to-face classrooms were encouraged in both contexts.

4.2.1 Course Description

This research was conducted during the first term of the academic year 2022 at a Saudi public university. The grammar course chosen in this study is offered by the Department of English Languages and Literature for beginners, who are placed in Level 1. This course adopts the Focus-on-Form (FonF) Approach to raise the students' awareness of the fundamentals of English grammar while they can still communicate effectively in a socially meaningful context. Grammatical elements targeted in the course include time tenses, asking questions, nouns and pronouns, model auxiliaries, connecting ideas, comparison, the passive, count/noncount nouns and articles, adjective clauses, grounds and infinities, and noun clauses (see Table 4.1 below).

Table 4-1 The grammatical element covered in this course

chapters	List of Topics	Contact Hours
1	Present time	3
2	Past time	3
3	Future time	3
4	Present perfect and past perfect	3
5	Asking questions	3
6	Nouns and pronouns	3
7	Modal Auxiliaries	3
8	Connecting ideas	3
9	Comparisons	3
10	the passive	3
11	Count/noncount nouns and articles	3
12	Adjective clauses	3
13	Gerunds and infinitives	3
14	Noun clauses	3

The main purpose of this grammar course is to enable learners to practise and apply contemporary grammar rules in their speech and incorporate them into their writing. Chapters 6, 7, 8, 10, and 12 highlighted in the table above were selected for the flipped teaching approach design, and the researcher constructed their content. Conversely, I taught the same chapters to the control groups, but the design and instructions followed the course specifications provided by the English department. For the flipped design, the chapters were distributed as follows:

Week 7: Nouns and pronouns

Week 8: Modal Auxiliaries

Week 9: Connecting ideas

Week 10 and 11: The passive

Week 12: Adjective clauses

The course materials were designed in relation to the above chapters, based on the plan set out by the Department of English for teaching grammar by using the course textbook *Fundamental of English Grammar (4 Ed.) by Azar and Hagen*. I used the textbook as a mandatory source and other learning websites to source the activities implemented with regards to each unit's teaching objectives. By selecting content materials and activities, I paid attention to the learner's relevance, culture, age, and appropriateness to the context. To reduce the effects of this new approach to learning, I began to use this method of teaching at the beginning of the semester and before data collection. Each unit in the flipped learning approach contained asynchronous and synchronous learning modes to enable learners to make use of the most appropriate time for their out-of-classroom learning. That meant learners used an asynchronous learning mode or materials designed before a lesson to learn grammar rules outside the class at their set time and preferred pace, before meeting physically in a classroom.

4.2.2 Instructional Procedures

In this section, the instructional design used in the flipped teaching approach is presented. The design of this new style of learning is relatively different from the normal teaching style, mainly due to the way in which the content is provided to learners and how the activities were carried out for both online and offline learning modes (see Table 4.2 below).

Table 4-2 The instruction of both interactive pedagogic intervention and Traditional classrooms

	The intervention design	**Traditional classrooms**
Course length	**6 weeks**	**6 weeks**
Online training sessions	**One session**	**None**
F2F classes per week	**1 class (3 hours)**	**1 class (3 hours**
Online activities	**Yes – pre class activities**	**No**
Working with peers	**In classrooms and online**	**In classrooms**
Teacher's assistance	**Online & F2F**	**F2F**
Online content review	**Yes**	**No**
Types of activities and tasks	**Interactive/digital tasks**	**Textbook's exercises**

Regarding the design, the flipped teaching approach was developed in two stages within different learning processes, in which learners were requested to follow and complete each week in sequence. Based on flipped learning, learning combined online and offline environments (see figure 4.1), whereas in traditional classes learning almost exclusively took place in an offline environment, although there may have been a homework element introduced in some classes. As this design had an online learning space, I conducted a training session for learners on how to review the content and use the collaborative learning space on Blackboard. Two hours were provided for this training session at the beginning of week one. Learners were explicitly directed to the content via Blackboard, allocated in groups, and provided with the Blackboard access details in order to make sure that learners used the system properly and were not resistant to change. Blackboard was not used for collaboration in F2F classes and therefore the concept was new to the students.

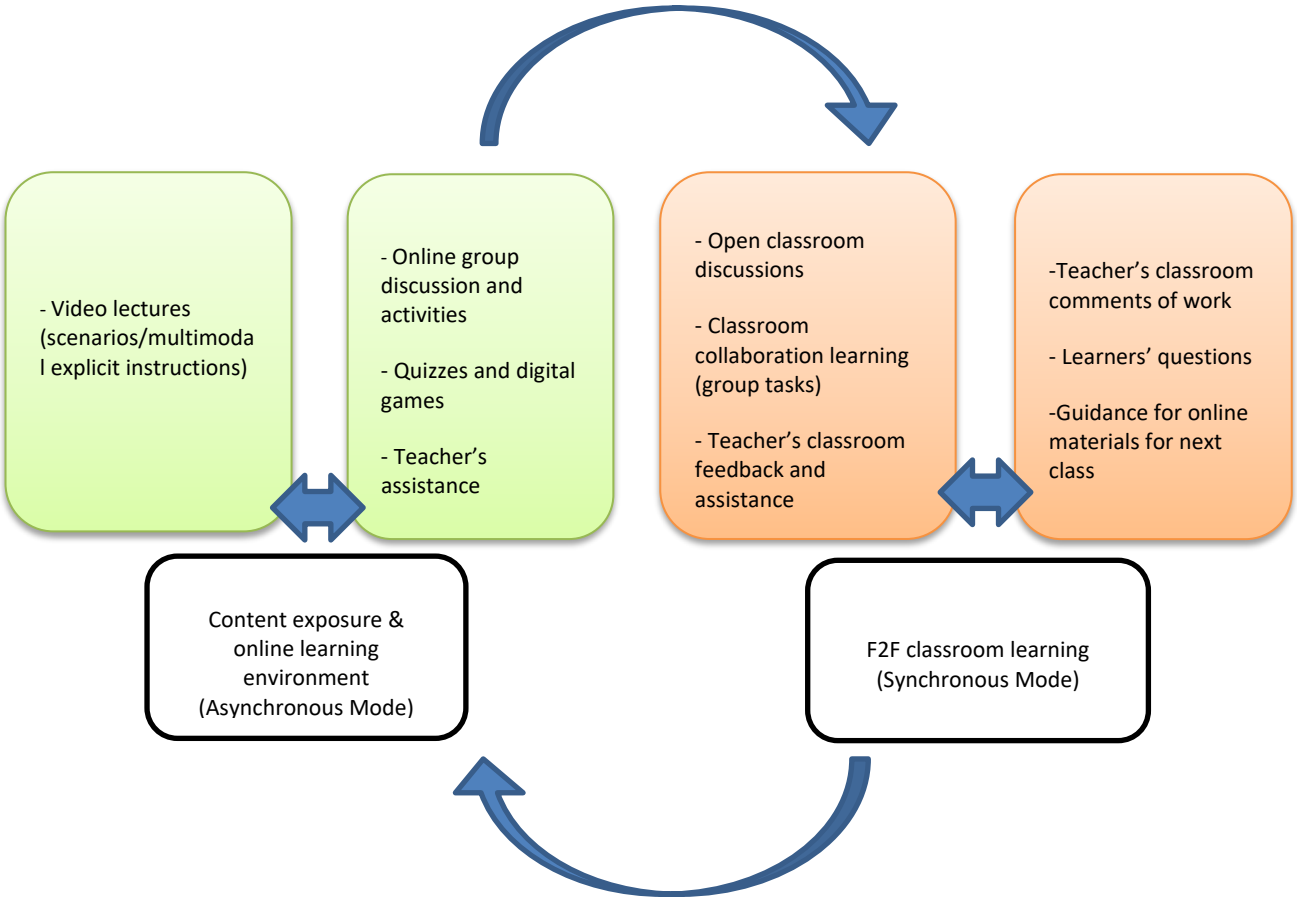


Figure 4-1 Flipped learning approach

The subsequent process of instruction for the intervention design can be described as follows:

Content exposure and asynchronous activities: Based on Figure 4-1 above, learners were requested before each class to review the new content by watching short videos about the

grammar topics, some of which came as stories or multidimensional explicit instructions. The length of videos was a maximum of 15 minutes so as to avoid losing learners' interest (McConville and Lane, 2006). Mainly the videos were sourced from the internet using platforms like YouTube. The selection of videos was based on the quality of the content and the unit's objectives. Some were explicitly taught grammar rules, whereas others were designed for implicit grammar teaching, in which learners were asked to spot the grammatical elements related to the unit's objectives. Reading texts was also another element of teaching content that was carefully selected for its quality, learners' proficiency, and the unit's objectives; however, learners stated that they did not prefer reading texts, so this choice was not used during data collection.

Videos were provided with either prompt questions in advance to trigger learners attention to the content or were followed by automated quizzes to check their understanding. Next, learners interacted asynchronously through individuals and groups via the Blackboard platform to complete the week's assigned activities. The online learning space provided on Blackboard ensured additional practise of the content presented in the videos. Learners were assigned to groups in advance, and once they had logged onto Blackboard, they could see their groupmates and the instructions for the tasks. Interestingly, group work does not require each member to log in at the same time to work simultaneously; however, consistent work can be done at various times depending on the learner's schedule and availability. I have access to groups, so I could provide feedback and assistance once I had been asked, or I could comment on their work at any time when monitoring their discussions.

F2F learning (synchronous learning mode): Once learners had met F2F in the classroom, I started asking prompted questions to all groups to run an open discussion about the online sources. After that, instructions were given to work on each task in the same collaborative groups assigned online, or they could choose where they sat and which group they wanted. Tasks were designed based on the unit's objectives and chosen to be more intensive than those already done online. The learning outcomes of tasks were distributed, with some targeting the grammar elements for speaking and writing skills. Each task was followed by the teacher's feedback and the learners' questions for the teacher or other groups. In order to ensure the consistency of work in the classroom, the tasks were constructed gradually from moderate to complex to achieve the condition of Flow, where there should be a perceived balance between challenges and skills. These could be constructed when I chose the first tasks from exercises in the textbook, as it is mandatory for me to use the textbook in classes. By the end of class time, I reviewed the next unit content with learners to ensure the flexibility of using the resources for the next week. The approach was pursued for each of the six weeks that were flipped.

4.2.3 Asynchronous online learning in the flipped teaching approach

As mentioned above, the online approach was used in the flipped classroom to provide and practise new content using the institution's Blackboard system. Via the platform, learners had either one video or one reading text and two weekly activities, which included practising an activity based on a new grammatical element provided for each weekly topic. Regarding the construction of the platform in the Blackboard system, each week was indicated by a different title and a distinct primary objective for the week. For example, week 9 in the term (but week 1 in the flipped classroom) was entitled '***nouns and pronouns***', with the objective of *understanding and using correctly and purposefully the nouns and pronouns*. Moreover, all materials for the whole six weeks were accessible to the learners from the start of the teaching period. Every week, the learners watched videos that had been posted and practised new material by completing the activities assigned in group discussions on their wiki page.

Regarding the construction of videos, content was based on the objectives of each grammatical element for each week. The textbook was the main resource for guidance in the construction; however, quality resources on the Internet were used to construct the videos. As mentioned before, there was a different video for each week; however, each video had similar stages of construction to ensure that this online resource would be used as effectively as possible (see Figure 4.2). in the present study I used pre-existing videos from different websites like Facebook and YouTube; however, I used the similar stages of evaluating the selection of videos.

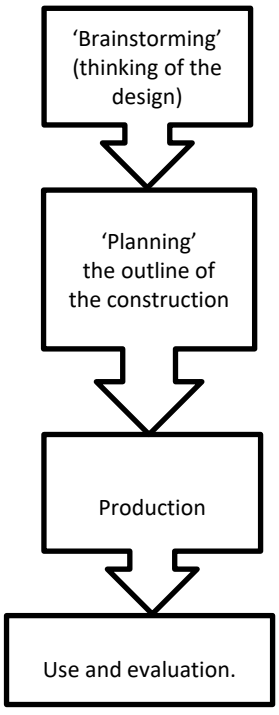


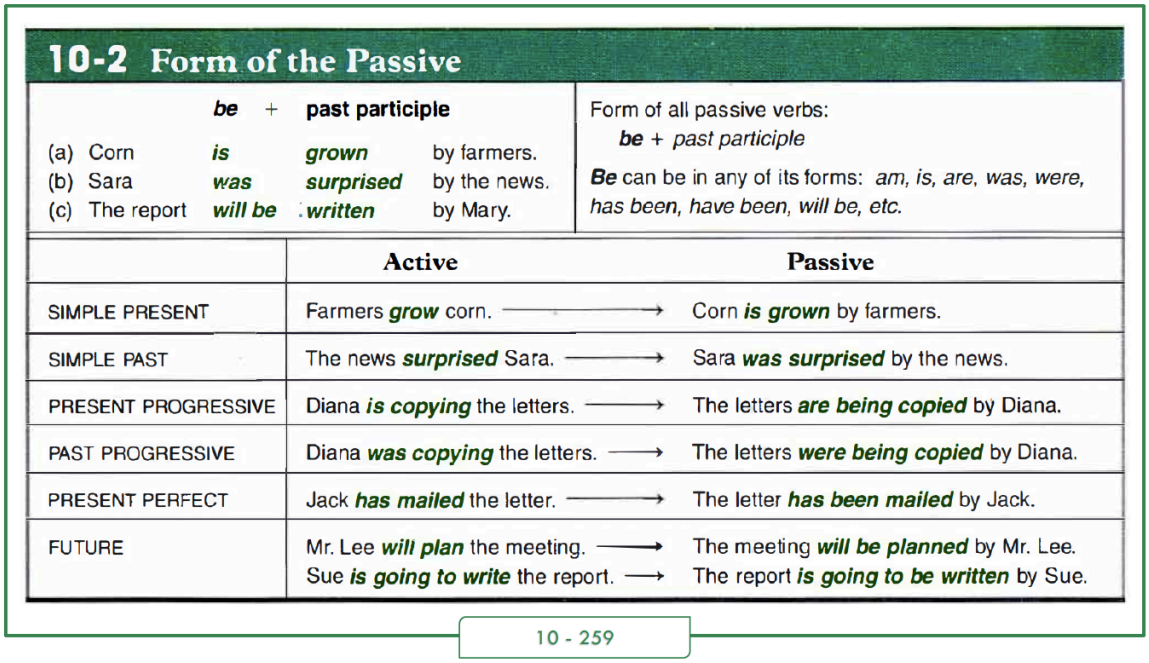
Figure 4-2 The video design process

Each stage of the video design was important to ensure the quality of the content and the presentation; these started from the concept for the selected materials in drawing an outline of the video slideshows, to ensuring the appropriate quality of the audio/visual recording, and through to the use and evaluation. Once this process of video construction had been created and was ready for use, I asked the course teacher to review it and provide feedback. Based on this, comments were considered, and any necessary adjustments were made. Below is an example of a flipped learning approach used in a unit to facilitate productive student learning.

4.2.4 An example of one unit design for the intervention group

The unit was titled The Passive and presented in week four for the flipped learning context. To ensure the quality of the entire design on both online and offline materials, the learning objectives for this topic were carefully considered. The unit objectives were *a) to understand and distinguish between passive and active tenses; b) to use them correctly in spoken and written situations; c) to distinguish and use properly the different passive tenses; and d) to correctly use the form of passive in different tenses.*

The textbook was the main source and was mandatory for the teacher and learners; thus, the design chronologically followed the organisation of the grammar elements presented in the unit to guarantee the amount of learning for both traditional and flipped classrooms. However, the flipped design tasks and activities were designed by me in addition to the pre-class videos and warm up activities, which were unlike activities in the control group as they only depended on textbook exercises. For this unit, the textbook provides nearly eight explicit grammar rules inside box shapes with various elements relating to the passive form, followed by many exercises (see Figure 4.3 below). In order to design the materials and start the intervention, I looked at the different grammar elements to be covered for each unit.



10-2 Form of the Passive

	be	+	past participle	
(a) Corn	is		grown	by farmers.
(b) Sara	was		surprised	by the news.
(c) The report	will be		written	by Mary.

Form of all passive verbs:
be + past participle

Be can be in any of its forms: *am, is, are, was, were, has been, have been, will be, etc.*

	Active	Passive
SIMPLE PRESENT	Farmers *grow* corn. →	Corn *is grown* by farmers.
SIMPLE PAST	The news *surprised* Sara. →	Sara *was surprised* by the news.
PRESENT PROGRESSIVE	Diana *is copying* the letters. →	The letters *are being copied* by Diana.
PAST PROGRESSIVE	Diana *was copying* the letters. →	The letters *were being copied* by Diana.
PRESENT PERFECT	Jack *has mailed* the letter. →	The letter *has been mailed* by Jack.
FUTURE	Mr. Lee *will plan* the meeting. →	The meeting *will be planned* by Mr. Lee.
	Sue *is going to write* the report. →	The report *is going to be written* by Sue.

10 - 259

Figure 4-3 Grammar explanation from textbook

I had to modify part of the content in the videos sourced to suit my student's learning needs and facilitate the flipped learning approach. I started with the video lecture design using Adobe Premiere Rush software. This software allows users to make professional videos of good quality; not only that, it helps in changing and editing any video clips by integrating other videos or modifying the speed of the video presentation. Additionally, I used the PowToon platform to create and customise my own visual presentations related to the video's construction. As mentioned above, each video design went through the same process; thus, I brainstormed and outlined the desired elements before the final production of the video. I mainly considered the simplicity and multimodality of the video presentations, such as visuals, simulation, and colours (see Figure 4.4 below). Because meanings are remade, distributed, and interpreted through different communicative resources, language is only one mode among others (Kress & van Leeuwen, 2001; Jewitt, 2008). Once the video was completed, I asked a colleague to review it and return with his feedback to adjust and make any necessary changes.

As mentioned above, these decisions to make the video clips were made with Flow encouragement in mind. First of all, the clips, to a certain degree, may challenge learners enough to encourage the consistency of watching the videos, but challenges are within boundaries and not beyond their reach; if a clip is too challenging, it may inhibit Flow state, or if it is not challenging at all, boredom appears and antiflow may be the result (Csikszentmihalyi, 1975, 1990). For example, in videos that ask learners to spot grammar rules while watching, it may become more challenging to them, but their proficiency level has been considered when the clips

are made, and that prevents anxiety that would impede Flow state. As these video contents were represented in an online mode, learners had control to review the videos anytime and anywhere with a chance of video repetition. By doing that, learners perceive a sense of control over their exposure to the video content, which may encourage Flow state during the review. Attention was also given to ensuring that videos were not boring or unrelated; therefore, the design and the selection corresponded to their age, interests, and culture, such as a selection of a scenario clip. By considering these, learners may find them intrinsically interesting, which would boost their Flow during their clip viewing. Importantly, the creation of videos aims to make learners more focused, absorbed in, and intensely aware of their mental processes (Csikszentmihalyi, 1975, 1990), which would enhance their Flow state. Egbert (2003) argued that learners in Flow state had experienced both indirect and direct focus, in which the former induces fluency whereas the latter contributes to the accuracy of language use. In these videos, attention was given more to the direct focus of noticing, as learners concentrated more on the grammar elements included in the videos.

Activity one was a short multichoice quiz following the video posted on Blackboard to check learners' understanding and retention of the grammar presented in the video. I used FlexiQuiz software to create the quiz, as this software features auto-grading and provides many attempts for the test. Learners individually completed the quiz, and their answers and grades were not shown to others. By creating the quiz, I considered all elements shown in the video and selected statements from the exercises in the textbook. To do this, I reviewed all the unit exercises in the textbook and selected one statement from each to complete the statements of the quiz. The creation of this short quiz task was for checking purposes and not to encourage Flow.

In addition to quizzes, supplementary digital activities were designed through the Nearpod platform, focusing on specific grammar topics. These supplementary tasks afford learners the flexibility to engage in them many times, satisfying their individual learning requirements. Notably, these activities feature an automated correction tool, whereby incorrect responses are flagged in red, followed by the provision of an accurate answer, while correct responses are indicated in green. These kinds of activities were designed as different choices learners can use after watching videos (see figure below).

Figure 4-4 Sample of the online video

In stage two, learners met face-to-face in the classroom and sat together if they preferred with the same group they had already worked with, or they could change their groups. At the beginning of the class, I made comments and asked questions about experiences with the online resources, and the groups shared questions and answers. This would encourage cognitive challenges when learners ask intense questions or make arguments, which result in positive emotional and cognitive engagement. At the beginning of each class, I provided groups with a sentence puzzle task where they could match the appropriate grammar forms. This activity served as an opening activity to engage and prepare learners, alternatively offering them the option to use their smartphones for QR code scanning from the board to do the same task (see figure below). This task was designed as a warming up exercise in which they could begin their collaboration work (emotional engagement).

Later, the tasks gradually increased in complexity, taking into consideration the learners' developing skills and their developing comprehension of the grammar topics. This development contributed to the enhancement of the Flow state, subsequently positively influencing their cognitive engagement. A diverse range of tasks were administered during class time, ranging from traditional worksheets to digital tasks. Notably, two distinct digital game tasks, referred to as "Time to Climb," designed on the Nearpod website were introduced – one prior to the break and the other at the end of the class. Instructions were provided for students to scan the QR code displayed on the board using their smartphones at the same time. Each student selected a unique nickname and preferred character, adding a competitive element to the task with real-time

updates on their positions throughout the game. This competitive approach aimed to introduce enjoyment into the learning environment, fostering emotional engagement and facilitating Flow state experiences, ultimately contributing to a more enjoyable and effective learning environment.

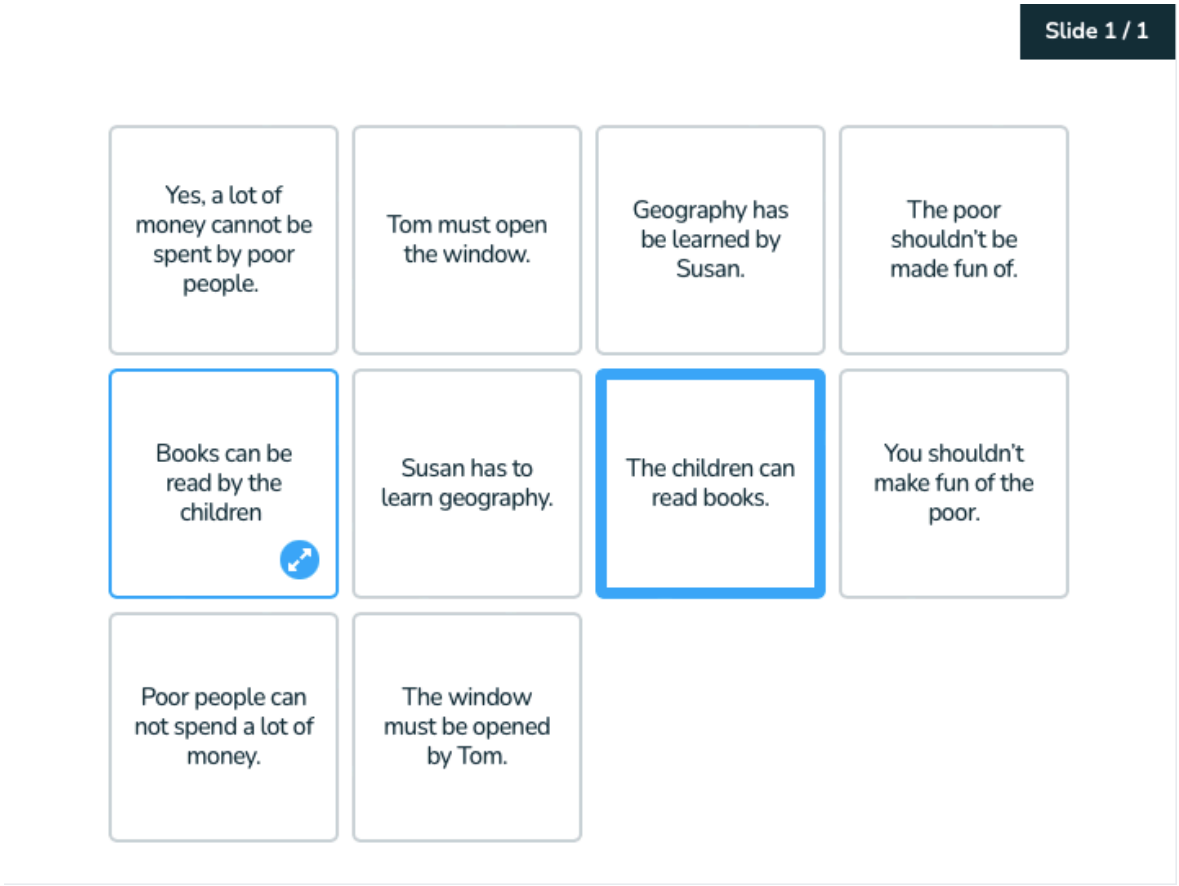


Figure 4-5 A task from Nearpod platform

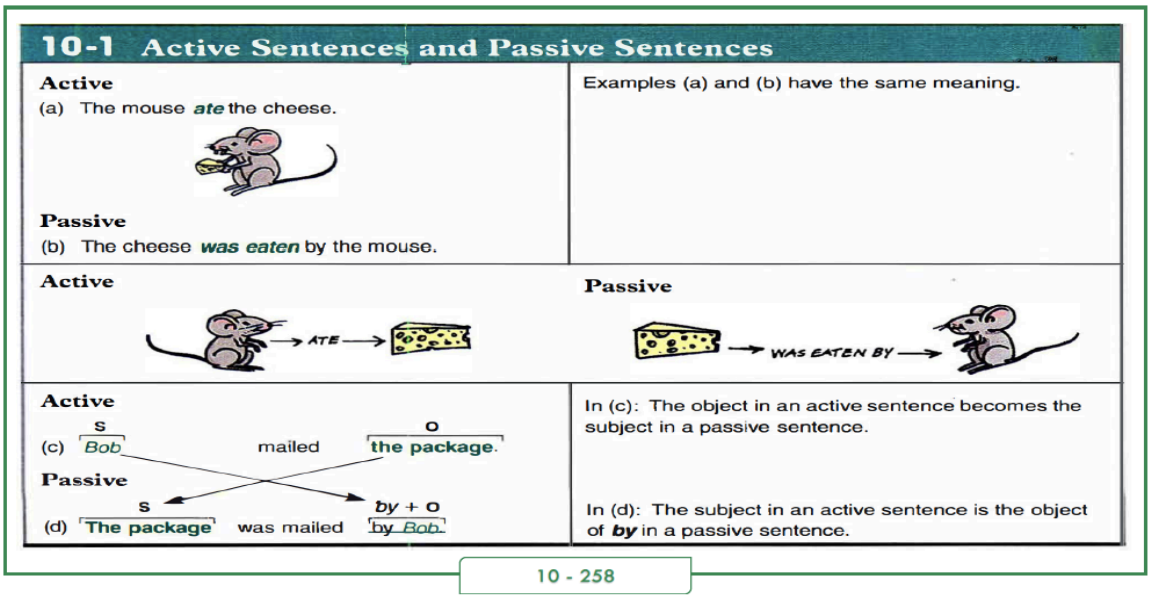
The instructional design of the flipped learning approach was constructed by considering two theoretical frameworks: Theory developed by Csikszentmihalyi (1975), and Bloom's revised taxonomy of knowledge (Anderson & Krathwohl, 2001). The description of the two theories is provided in the next section with justification for the selection.

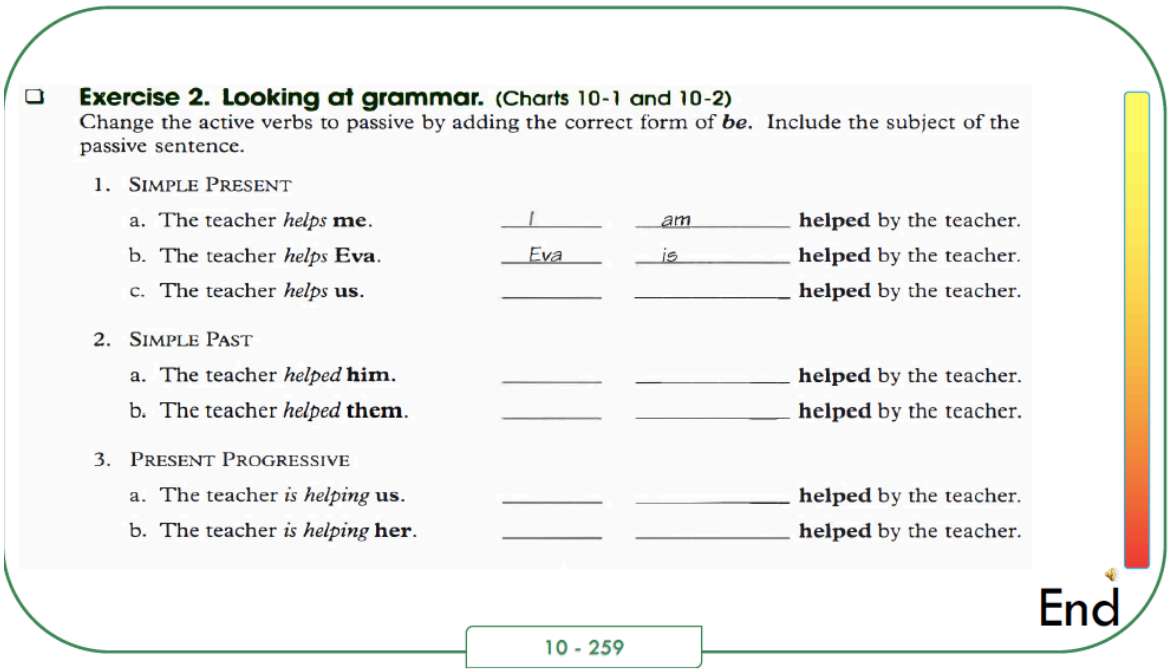
4.2.5 An example of one unit in the control group

The unit was titled The Passive and presented in week four during data collection. This unit was already designed by the main teacher who has taught this module every semester. The learning objectives for this topic were *a) to understand and distinguish between passive and active tenses; b) to use them correctly in spoken and written situations; c) to distinguish and use properly the different passive tenses; and d) to correctly use the form of passive in different tenses.*

The lesson of this unit and others began with a brief review of the preceding unit, followed by an immediate transition to explain the new lesson of the week. The revision of the last lesson was presented through a slideshow, taken from the previous week's presentation materials. For the current unit, 'The Passive', I presented the lesson through a projector-based slideshow, using a deductive way of teaching by explaining the grammar formula explicitly as in the textbook format. These were essentially captured screenshots of the textbook pages, created by the main instructor from the previous classes. This method was employed to ensure that learners could simultaneously reference their textbook, as it was a limited source of learning grammar.

Beginning with the first grammar formula delineated on page 258 within boxes 10.1 and 10.2, a deductive instructional approach was explicitly used to explain the formula, aiming to clarify the distinctions between the active and passive voice as shown in box 10.1 (refer to the screenshot slideshow below). The instructional procedure encompassed eight slides to provide extra information on how to make active sentences into passive voice sentences; subsequently, students were asked to apply and practice the transformation of active sentences into passive voice sentences (Umida et al., 2020). For example, I requested that learners complete Exercise 2 on page 259 immediately after explaining grammar box 10.1 (see Exercise 2 below). Once the learners completed the exercise, each group or individual was asked to share their responses, afterward cross-referencing their answers with the correct answers displayed on the board (see the answered exercise below).





Exercise 2. Looking at grammar. (Charts 10-1 and 10-2)
Change the active verbs to passive by adding the correct form of ***be***. Include the subject of the passive sentence.

1. SIMPLE PRESENT
   a. The teacher *helps* **me**. I am **helped** by the teacher.
   b. The teacher *helps* **Eva**. Eva is **helped** by the teacher.
   c. The teacher *helps* **us**. _____ _____ **helped** by the teacher.
2. SIMPLE PAST
   a. The teacher *helped* **him**. _____ _____ **helped** by the teacher.
   b. The teacher *helped* **them**. _____ _____ **helped** by the teacher.
3. PRESENT PROGRESSIVE
   a. The teacher *is helping* **us**. _____ _____ **helped** by the teacher.
   b. The teacher *is helping* **her**. _____ _____ **helped** by the teacher.

End

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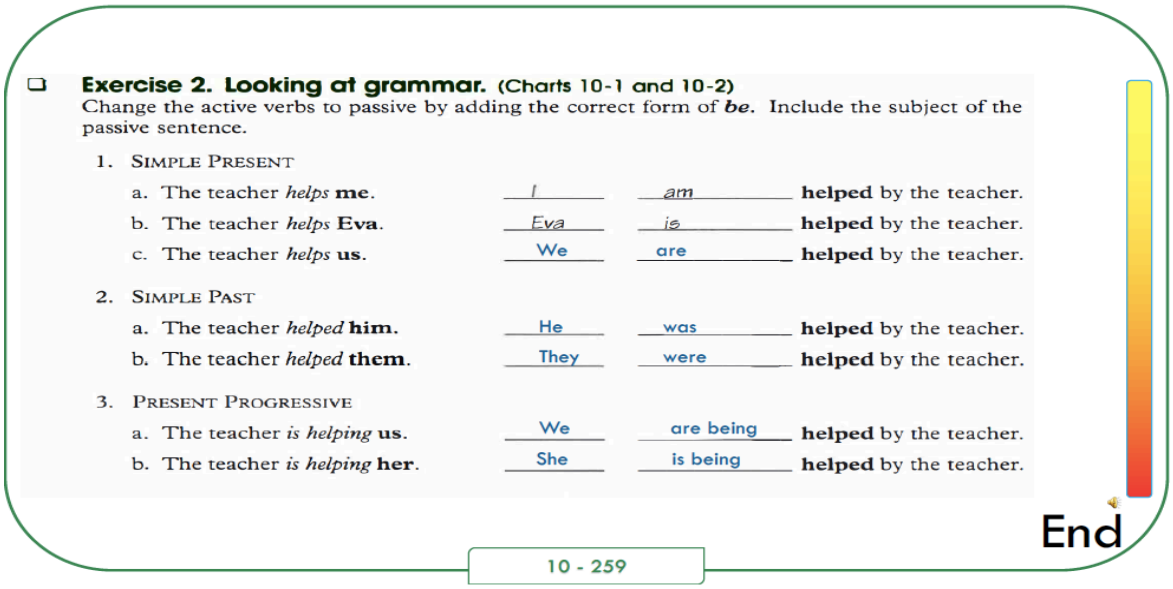


Exercise 2. Looking at grammar. (Charts 10-1 and 10-2)
Change the active verbs to passive by adding the correct form of ***be***. Include the subject of the passive sentence.

1. SIMPLE PRESENT
   a. The teacher *helps* **me**. I am **helped** by the teacher.
   b. The teacher *helps* **Eva**. Eva is **helped** by the teacher.
   c. The teacher *helps* **us**. We are **helped** by the teacher.
2. SIMPLE PAST
   a. The teacher *helped* **him**. He was **helped** by the teacher.
   b. The teacher *helped* **them**. They were **helped** by the teacher.
3. PRESENT PROGRESSIVE
   a. The teacher *is helping* **us**. We are being **helped** by the teacher.
   b. The teacher *is helping* **her**. She is being **helped** by the teacher.

End

10 - 259

During this lesson and others, learners were offered the option to complete exercises in the textbook collaboratively with their classmates, either in groups or individually. Group work was encouraged, but this was not mandatory to comply with individuals' preferences. After an exercise was completed, I resumed the slideshow presentation to explain the subsequent grammar formula, accompanied by the following exercises in the textbook. This sequence procedure was maintained until finishing the unit. Generally, the last 10 minutes of the lesson were reserved for addressing student queries and providing instructions for homework.

Homework assignments typically encompassed the completion of sentences from exercises that could not be covered within the class time.

Chapter 5 Quantitative research findings and discussion

According to research, engagement is responsive and may be enhanced by deliberate intervention (Eccles,2016; Shernoff, 2013; Zhou, Hiver, & Al-Hoorie, 2021). As mentioned in previous chapters, this study used the pedagogical intervention to see if there is any impact on learner engagement. Consequently, this approach leads to an understanding of the changes in student engagement resulting from the use of a pedagogical intervention in language teaching. It is perceived that a combination of the various datasets described (please refer to 3.3 for details) can offer a complete picture of whether or not the participants in the intervention and control groups underwent any change in engagement in grammar classes. Since the belief that the concept of engagement is defined as a multidimensional construct that includes *behavioural, emotional,* and *cognitive* components (Christenson et al., 2012; Fredricks, 2004), it was used to shape the framework of the thematic analysis. Before analysing the qualitative data (interviews, voice messages, and observations) to provide the major themes related to each component of engagement in this study and its connections to Flow Theory. In this chapter, I first examined the questionnaire data and performance tests to gain a broad picture of whether there are any differences in student engagement between the two groups. The questionnaires were used to collect quantitative data to help answer research question one: " *Does the use of the pedagogic intervention in grammar classes lead to differences in engagement and performance in Saudi EFL learners?*" Additionally, performance tests were also used to determine if their scores indicated an improvement in engagement.

5.1 Quantitative data analysis

5.1.1 Reliability for questionnaires

When evaluating the results of Table 5-1 below, which shows the reliability coefficient for each questionnaire measuring student engagement for both groups, Plonsky and Derrick's (2016) meta-analysis of reliability coefficients in SLA has been considered. They suggest that instruments with a Cronbach's alpha in the range of 0.74 to 0.82 should be considered acceptable, while 0.82 and above indicate high reliability. Based on these criteria, the questionnaires for both groups were assessed as reliable scores based on Table 5-1. However, the sub-constructs of student engagement measurements in questionnaires – cognitive dimensional (4 items), behavioural dimensional (4 items), and emotional dimensional (4 items) engagements fall short of being considered acceptable. As a result, findings for the sub-constructs of engagement are not reported in the questionnaire analysis, but they will be reported in detail in the qualitative

analysis regarding the interviews, voice messages, and observations analysis. The lack of reliability in the questionnaire subsections corresponds with the challenges that scholars and researchers continue to face when it comes to operationalizing and measuring these dimensions of engagement. (Fredricks, Reschly, & Christenson, 2019).

Table 5-1 Cronbach's Alpha for engagement questionnaires

Cronbach's Alpha on weeks distribution						
Group	W1	W2	W3	W4	W5	W6
Intervention group	.80	.84	.80	.82	.83	.89
Control group	.75	.78	.74	.73	.77	.86

W1 = week 1 and so on

5.1.2 Testing the questionnaires

5.1.2.1 Repeated Measures ANOVA test and T tests

As mentioned in Chapter 3, the repeated measures ANOVA test was performed to evaluate changes in student engagement for the intervention and control groups during the six weeks of the questionnaire completion. The repeated measures ANOVA test is employed when the same measurements are made multiple times with the same participants under independent observations (Cronk, 2016). The independent variable *Between-Subject Factors* in this study is the GROUP, which has two levels (the intervention and control group). The other independent variable *Within-Subject Factors* is the TIME, which was represented by the dependent variables of the repeated measurements (during six weeks) to all participants.

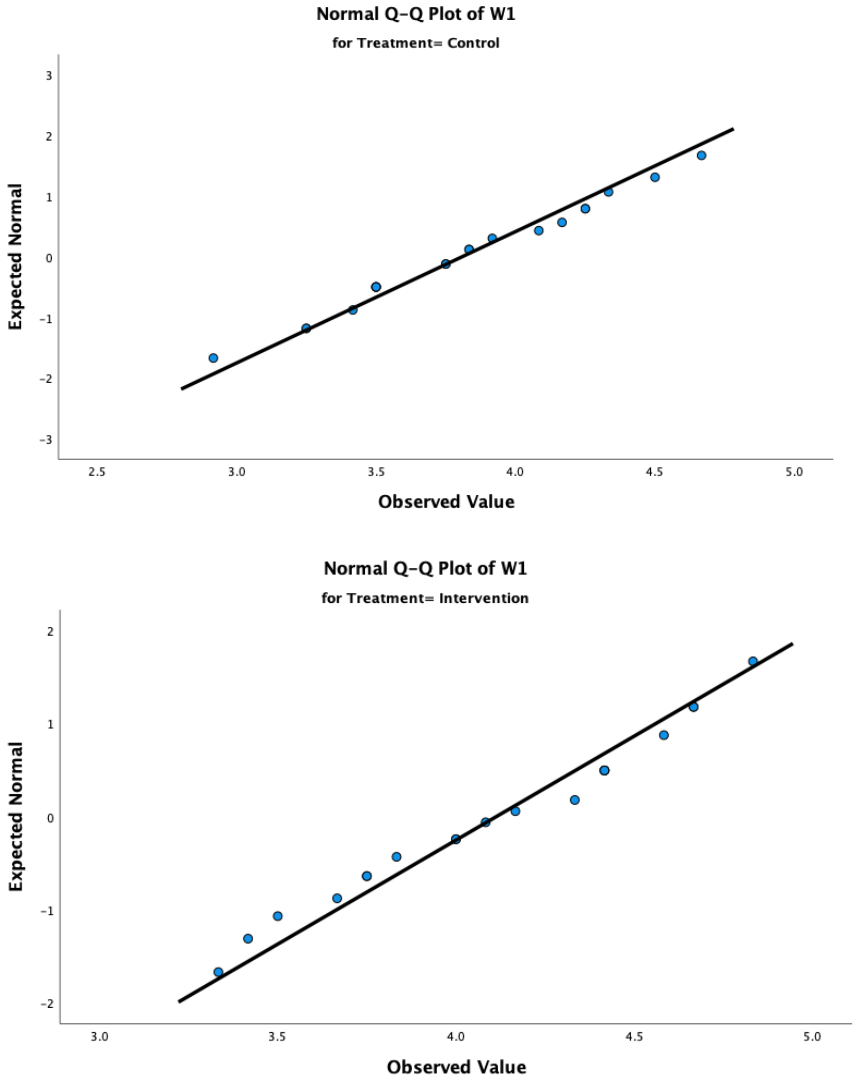
5.1.2.2 Testing assumptions of Repeated measures ANOVA tests

As with other tests, it is essential to be aware of the assumptions of the Repeated measures ANOVA testing that must be met before proceeding with the test.

The first assumption is that the dependent variable measurements must be at continuous levels in order to be considered valid (in my study, the measurements took place every week in a continuous time for each group with the same instrument-questionnaires). The continuous level in the SPSS refers to the scale, which can be either an interval scale or a ratio scale. However, in the questionnaires that I used, it was regarded to be an ordinal scale because it was constructed with Likert-scale categories. Nonetheless, it was still considered to be a scale even if it did not

have interval or ratio scales, indicating that it matched the assumption of the continuity of measurements.

The second premise is that the data should be normally distributed in each group. In this case, the number of participants in both groups was equal, there were no outliers in either group's distribution, and the Q-Q plot shows a fair distribution (see Figure 5-1 below. An example of week 1).



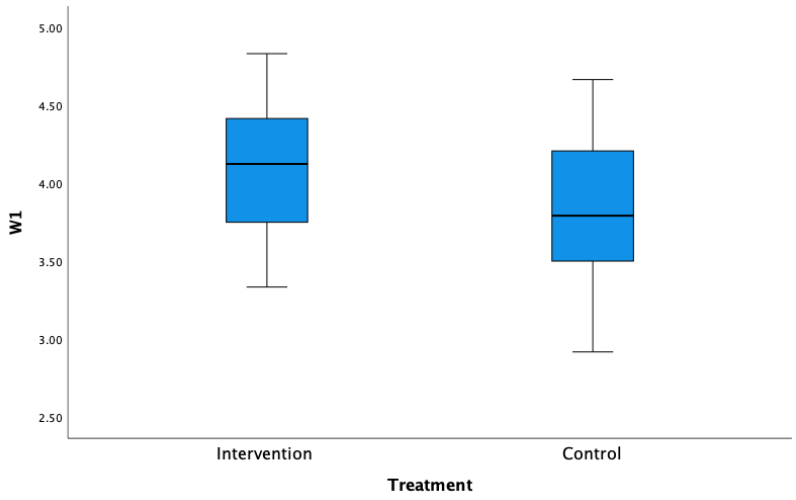


Figure 5-1 Normal Q-Q plots and the boxplot without outliers in WEEK 1.

The third assumption is the homogeneity of variance and the homogeneity of sphericity. In order to check these aspects, I used SPSS to test both assumptions.

Levene's Test of Equality of Error Variances[a]

		Levene Statistic	df1	df2	Sig.
W1	Based on Mean	.003	1	38	.956
	Based on Median	.003	1	38	.956
	Based on Median and with adjusted df	.003	1	37.238	.956
	Based on trimmed mean	.003	1	38	.956
W2	Based on Mean	.557	1	38	.460
	Based on Median	.506	1	38	.481
	Based on Median and with adjusted df	.506	1	37.757	.481
	Based on trimmed mean	.612	1	38	.439
W3	Based on Mean	1.743	1	38	.195
	Based on Median	1.483	1	38	.231
	Based on Median and with adjusted df	1.483	1	37.974	.231
	Based on trimmed mean	1.852	1	38	.182
W4	Based on Mean	.606	1	38	.441
	Based on Median	.286	1	38	.596
	Based on Median and with adjusted df	.286	1	37.908	.596
	Based on trimmed mean	.525	1	38	.473
W5	Based on Mean	5.979	1	38	.019
	Based on Median	5.834	1	38	.021
	Based on Median and with adjusted df	5.834	1	36.190	.021
	Based on trimmed mean	5.998	1	38	.019
W6	Based on Mean	.089	1	38	.767
	Based on Median	.171	1	38	.681
	Based on Median and with adjusted df	.171	1	37.973	.681
	Based on trimmed mean	.121	1	38	.730

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept + Treatment
Within Subjects Design: time

Figure 5-2 Homogeneity of variance test

Mauchly's Test of Sphericity[a]

Measure: MEASURE_1

Within Subjects Effect	Mauchly's W	Approx. Chi-Square	df	Sig.	Epsilon[b] Greenhouse-Geisser	Huynh-Feldt	Lower-bound
time	.463	27.835	14	.015	.732	.841	.200

Tests the null hypothesis that the error covariance matrix of the orthonormalized transformed dependent variables is proportional to an identity matrix.

a. Design: Intercept + Treatment
Within Subjects Design: time

b. May be used to adjust the degrees of freedom for the averaged tests of significance. Corrected tests are displayed in the Tests of Within-Subjects Effects table.

Figure 5-3 Homogeneity of Sphericity test.

First, to check the *homogeneity of variances*, I used Leven's tests of variances (please refer to Figure 5-2 above). The test indicates that if each mean of the dependent variables (the means of each week) is greater than 0.05, the assumption of variance homogeneity is met. As a result, in this test, all means are greater than 0.05, with the exception of the mean of week 5, whose value is less than 0.05. However, since this is the only one significant result and meets others, it will not be regarded as a violation of this assumption, and the test continued.

After both the control and intervention group met the assumption of *homogeneity of variance*, the *homogeneity of sphericity* had to be tested. Sphericity is the condition in which the variances of differences between all conceivable pairs of groups are identical. Sphericity was therefore assessed in SPSS using Mauchly's test (see Figure 5-3 above).

Mauchly's test of sphericity indicates that the value is less than 0.05, which is statistically significant, but it must be greater than 0.05 to satisfy the sphericity assumption. Hence, the sphericity findings are invalid. SPSS provides an alternative if the sphericity test fails, with one of the other options being Epsilon. Epsilon offers three test options, the first of which is The Greenhouse Geisser, which is less than 0.75. Therefore, it shows that the sphericity assumption has been satisfied, and the Repeated Measures ANOVA test can be conducted.

5.1.3 Questionnaire results

This section provides different t tests used in analysing questionnaires, the pretests, and the posttests.

5.1.3.1 Descriptive statistics

Table 5-2 Below illustrates that the Within-subject factor (for each group) consisted of six dependent variables under independent variable (Time), spanning from *week 1 to week 6*. Then we had the independent variable Between-subject factor (Group), composed two levels: *intervention* and *control* group. The table indicates a sample size of 20 participants for each group, with three missing participants in both groups.

Table 5-2 Within-subject factors

Within-Subjects Factors

Measure: MEASURE_1

time	Dependent Variable
1	W1
2	W2
3	W3
4	W4
5	W5
6	W6

Table 5-3 Between- subject factors

Between-Subjects Factors

		Value Label	N
Group	0	Intervention	20
	1	Control	20

Descriptive Statistics

	Group	Mean	Std. Deviation	N
W1	Intervention	4.1125	.44776	20
	Control	3.8083	.46209	20
	Total	3.9604	.47479	40
W2	Intervention	4.3792	.44547	20
	Control	4.0958	.52236	20
	Total	4.2375	.50020	40
W3	Intervention	4.3958	.43079	20
	Control	4.0875	.52460	20
	Total	4.2417	.49886	40
W4	Intervention	4.4542	.43045	20
	Control	3.8083	.40474	20
	Total	4.1313	.52633	40
W5	Intervention	4.5083	.39727	20
	Control	3.7375	.59866	20
	Total	4.1229	.63549	40
W6	Intervention	4.4625	.56226	20
	Control	3.8750	.58583	20
	Total	4.1687	.64009	40

Table 5-4 Descriptive statistics for the intervention and control groups

The descriptive statistics indicate that the intervention group had a higher mean score than the control group during the first week (W1). During weeks two and three, the mean scores for both groups were slightly closer, with a slight advantage for the intervention group. However, the

mean scores of the control group decreased significantly during weeks 4, 5, and 6, while the intervention group's mean scores increased noticeably (for further clarification, refer to Figure 5-5). Thus, the mean score data show that students in the control group reported low improvement in engagement over the six weeks of data collection, implying that the pedagogical intervention of teaching was successful in its goal of increasing student engagement in grammar classes.

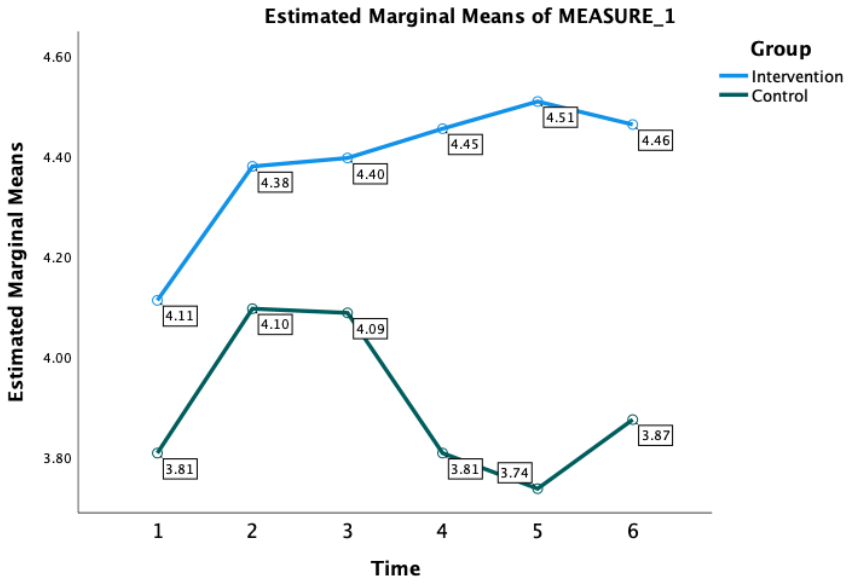


Figure 5-5 The profile plots of the mean scores for the intervention and control group

5.1.3.2 Pair-sample t test

Before examining the effect for TIME and the interaction result for TIME × GROUP and the GROUP from *Tests of Between-Subjects Effects*, I conducted the Repeated Measures ANOVA test to calculate and compare the scores of student engagement measurements of participants at six different times (from week 1 to week 6). First, a significant effect was found in the intervention group (F (5, 95) = 3.02, p, .014).

Given the noticeable impact of time on the intervention group, it was necessary to carry out a T-test to compare the results between each week, from the first to the sixth. This involved comparing WEEK 1 to WEEK 2, WEEK 2 to WEEK 3, WEEK 3 to WEEK 4, WEEK 4 to WEEK 5, WEEK 5 to WEEK 6, and finally, WEEK 1 to WEEK 6. Using pair-sample *t*-tests, it was revealed that student engagement improved significantly from Week 1 (M = 4.10, sd = .44) to the end of the intervention in Week 6 (M = 4.43, sd = .55). Additionally, between week to week, participants in the intervention group improved significantly from Week 1 (M = 4.06, sd = .47) to Week 2 (M = 4.36, sd = .45), whereas they maintained a similar level of improvement in engagement scores for

the remaining pairs weeks from WEEK 2 to WEEK 3 until WEEK 5 to WEEK 6 (see the Mean and Std. Deviation below in Figure 5-6).

Tests of Within-Subjects Effects

Measure: MEASURE_1

Source		Type III Sum of Squares	df	Mean Square	F	Sig.
time	Sphericity Assumed	2.008	5	.402	3.023	.014
	Greenhouse-Geisser	2.008	2.792	.719	3.023	.041
	Huynh-Feldt	2.008	3.321	.605	3.023	.032
	Lower-bound	2.008	1.000	2.008	3.023	.098
Error(time)	Sphericity Assumed	12.620	95	.133		
	Greenhouse-Geisser	12.620	53.044	.238		
	Huynh-Feldt	12.620	63.108	.200		
	Lower-bound	12.620	19.000	.664		

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	W1	4.0580	23	.46968	.09794
	W2	4.3623	23	.45199	.09425
Pair 2	W2	4.3674	22	.46195	.09849
	W3	4.3485	22	.43918	.09363
Pair 3	W3	4.3485	22	.43918	.09363
	W4	4.4432	22	.45960	.09799
Pair 4	W4	4.4659	22	.43084	.09185
	W5	4.51136	22	.388573	.082844
Pair 5	W5	4.49603	21	.391291	.085387
	W6	4.4524	21	.54998	.12002
Pair 6	W1	4.0985	22	.43767	.09331
	W6	4.4318	22	.54532	.11626

Paired Samples Test

		Paired Differences					t	df	Significance	
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference Lower	Upper			One-Sided p	Two-Sided p
Pair 1	W1 - W2	-.30435	.66553	.13877	-.59215	-.01655	-2.193	22	.020	.039
Pair 2	W2 - W3	.01894	.61878	.13192	-.25541	.29329	.144	21	.444	.887
Pair 3	W3 - W4	-.09470	.45665	.09736	-.29716	.10777	-.973	21	.171	.342
Pair 4	W4 - W5	-.045455	.368867	.078643	-.209001	.118092	-.578	21	.285	.569
Pair 5	W5 - W6	.043651	.285797	.062366	-.086442	.173744	.700	20	.246	.492
Pair 6	W1 - W6	-.33333	.48181	.10272	-.54696	-.11971	-3.245	21	.002	.004

Table 5-6 Pair-sample t tests scores for the intervention group

When conducting paired-sample t-tests in the control group, it was found that there was an overall negative impact of time on student engagement from the first week (*M* = 3.8, *sd* = .47) to the end of the treatment in week six (*M* = 3.82, *sd* = .62). However, there was only a significant

improvement in student engagement between week one (*M* =3.78, *sd* =.47) to week two (*M* =4.07, *sd* =.52), as can be seen more clearly in qualitative analysis in my class reflections. Additionally, there was a significant decrease in student engagement from week three (*M* =4.07, *sd* =.50) to week four (*M* =3.71, *sd* =.49), with no further improvements in engagement in the remaining weeks (please refer to Figure 5-7 below for more information). To summarize, the intervention group demonstrated a significant increase in engagement over time. In contrast, the control group did not exhibit any improvement over time with the exception of week one to week two, which was found to be highly increased.

Tests of Within-Subjects Effects

Measure: MEASURE_1

Source		Type III Sum of Squares	df	Mean Square	F	Sig.
time	Sphericity Assumed	2.346	5	.469	2.447	.039
	Greenhouse-Geisser	2.346	3.605	.651	2.447	.060
	Huynh-Feldt	2.346	4.553	.515	2.447	.045
	Lower-bound	2.346	1.000	2.346	2.447	.134
Error(time)	Sphericity Assumed	18.217	95	.192		
	Greenhouse-Geisser	18.217	68.490	.266		
	Huynh-Feldt	18.217	86.508	.211		
	Lower-bound	18.217	19.000	.959		

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	W1	3.7817	21	.46657	.10181
	W2	4.0714	21	.52127	.11375
Pair 2	W2	4.0435	23	.51546	.10748
	W3	4.0580	23	.49711	.10365
Pair 3	W3	4.0720	22	.50415	.10748
	W4	3.7159	22	.48772	.10398
Pair 4	W4	3.7159	22	.48772	.10398
	W5	3.7841	22	.59131	.12607
Pair 5	W5	3.7717	23	.58074	.12109
	W6	3.7210	23	.68378	.14258
Pair 6	W1	3.7817	21	.46657	.10181
	W6	3.8214	21	.62154	.13563

Paired Samples Test

		Paired Differences					t	df	Significance	
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference Lower	Upper			One-Sided p	Two-Sided p
Pair 1	W1 - W2	-.28968	.51816	.11307	-.52554	-.05382	-2.562	20	.009	.019
Pair 2	W2 - W3	-.01449	.47914	.09991	-.22169	.19270	-.145	22	.443	.886
Pair 3	W3 - W4	.35606	.63682	.13577	.07371	.63841	2.623	21	.008	.016
Pair 4	W4 - W5	-.06818	.80534	.17170	-.42525	.28888	-.397	21	.348	.695
Pair 5	W5 - W6	.05072	.75157	.15671	-.27428	.37573	.324	22	.375	.749
Pair 6	W1 - W6	-.03968	.66647	.14544	-.34306	.26369	-.273	20	.394	.788

Figure 5-7 Pair-sample t test scores for the control group

5.1.3.3 Repeated Measures ANOVA tests

After demonstrating the effects of each group over time, the next step was a Repeated Measures ANOVA test to analyse the main impact of TIME and the interaction between TIME × GROUP and the GROUP from Tests of Between-Subjects Effects. When describing the results, I used the F (the degree of freedom) and the significance level for each main effect and interaction. Since the assumption of sphericity has failed when running the assumption test using the Repeated measures ANOVA test, the Greenhouse-Geisser line under the Epsilon categories is used for testing the results (see Figure 5-8 below).

Tests of Within-Subjects Effects

Measure: MEASURE_1

Source		Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Time	Sphericity Assumed	2.128	5	.426	2.622	.026	.065
	Greenhouse-Geisser	2.128	3.659	.582	2.622	.042	.065
	Huynh-Feldt	2.128	4.204	.506	2.622	.034	.065
	Lower-bound	2.128	1.000	2.128	2.622	.114	.065
Time * Group	Sphericity Assumed	2.226	5	.445	2.743	.020	.067
	Greenhouse-Geisser	2.226	3.659	.608	2.743	.035	.067
	Huynh-Feldt	2.226	4.204	.530	2.743	.028	.067
	Lower-bound	2.226	1.000	2.226	2.743	.106	.067
Error(Time)	Sphericity Assumed	30.838	190	.162			
	Greenhouse-Geisser	30.838	139.046	.222			
	Huynh-Feldt	30.838	159.747	.193			
	Lower-bound	30.838	38.000	.812			

Tests of Between-Subjects Effects

Measure: MEASURE_1
Transformed Variable: Average

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Intercept	4120.959	1	4120.959	6605.542	<.001	.994
Group	14.017	1	14.017	22.468	<.001	.372
Error	23.707	38	.624			

Figure 5-8 Tests of Within and Between-Subjects Factors

As a result, the repeated measures ANOVA was calculated to examine the effects of the group (intervention and control) and time (week 1 to week 6) on student engagement. A significant time × group interaction was present ($F(3.65,139) = 2.47$, p .035) (see Figure 5-9 below for clarification). Additionally, the main effect for time was significant ($F(3.66,139) = 2.62$, p .042) and that was presented in detail when tested time for each group with the Paired-sample t test above. The main effect for the group was statistically significant in favour of the intervention group ($F(1,38) = 22.4$, $p < .001$).

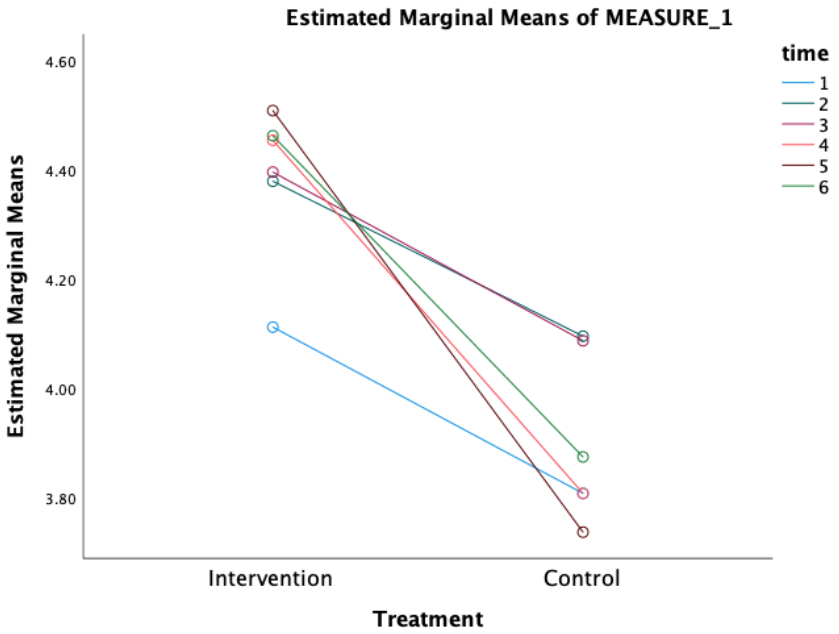


Figure 5-9 Time x group interactions

5.1.4 Pretest and Posttest Results

The pretest was administered one week prior to the study to determine participants' proficiency with the grammatical units covered in the study and to ensure that there were no differences in their proficiency levels. The test was administered to both groups and consisted of 16 multiple-choice questions drawn from a subsection of the final exam only including the subjects covered in the study. To prevent the final exam test from being disclosed, I modified the questions by altering their structure, for example, in a multiple-choice question the sentence "_____ *Ahmed was sad, he smiled"* was altered to "---------- *it was cold outside, we went swimming in the lake."* After the treatment and by the end of the semester, the participants had completed the final exam, and I looked at only the subsection scores where the pretest was taken from and accounted for their scores to compare their two tests to examine if there were differences in their performance.

To analyse the results of both tests using SPSS, two types of tests, the ANCOVA test and the Repeated Measures ANOVA test, were conducted for the pretest and posttest analyses. The former is commonly used for the covariant (the pretest) and the dependent variable (the posttest). However, I utilised the latter because the former had failed to meet its homogeneity-regression slope assumption prior to the test run. Before I ran the Repeated Measures ANOVA test to examine if there were any differences in scores for the pretest and posttest between the two groups, I used the Paired-Sample t-test on each group separately to see if there was a

significant difference between the pretest and posttest results. For the intervention group, the mean on the pretest was 6.00 (sd = 2.40), and the mean on the posttest was 11.83 (sd = 3.04). A significant increase from the pretest to the posttest was found in the intervention group ($t(22)= -11.708$, $p < .001$) (see Figure 5-10 below). For control group, the mean of the pretest was 6.85 (sd = 2.43), and the mean of the posttest was 11.43 (sd= 2.57). A significant increase from the pretest and posttest was found in the control group as well ($t(22) = -6.561$, $p < .001$) (see Figure 5-11 below). The findings of the current study indicated that there were no significant differences in performance between the two groups. Notably, the control group had a higher pretest mean score (*M = 6.85, sd = 2.43*) compared to the intervention group (*M = 6.00, sd = 2.39*). However, the posttest mean score for the intervention group (*M = 11.83, sd = 3.04*) was slightly higher than that of the control group (*M = 11.43, sd = 2.57*) as shown in Figure 5-12.

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Pretest	6.00	23	2.393	.499
	Posttest	11.83	23	3.040	.634

Paired Samples Test

		Paired Differences					t	df	Significance	
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference Lower	Upper			One-Sided p	Two-Sided p
Pair 1	Pretest - Posttest	-5.826	2.387	.498	-6.858	-4.794	-11.708	22	<.001	<.001

Figure 5-10 Paired sample test for intervention group

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Pretest	6.85	23	2.428	.506
	Posttest	11.43	23	2.573	.537

Paired Samples Test

		Paired Differences					t	df	Significance	
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference Lower	Upper			One-Sided p	Two-Sided p
Pair 1	Pretest - Posttest	-4.587	3.353	.699	-6.037	-3.137	-6.561	22	<.001	<.001

Figure 5-11 Paired sample test for the control group

Descriptive Statistics

	Treatment	Mean	Std. Deviation	N
Pretest	Intervention	6.00	2.393	23
	Control	6.85	2.428	23
	Total	6.42	2.422	46
Posttest	Intervention	11.83	3.040	23
	Control	11.43	2.573	23
	Total	11.63	2.792	46

Figure 5-12 The pretest and posttest mean scores for the intervention and control group

5.1.5 Quantitative results summary

The mean scores in the descriptive statistics indicate that the pedagogical intervention was effective in achieving its objective of increasing student engagement in grammar classes (see Figure 5.4 for more details). However, the reliability tests indicate that the quantitative data (questionnaires) was inadequate in measuring all aspects of engagement, which is in line with what other scholars (such as Fredricks, Reschly, & Christenson, 2019) have stated regarding the challenges in accurately measuring each component of engagement. As a result, this study adopted a mixed methods design to address this limitation and attempted to comprehensively measure each aspect of engagement using different data collection methods, for example, interviews, voice messages, and observations. The results of the Repeated Measures ANOVA tests and the t-tests showed a significant affect over time for the intervention group, suggesting that student engagement levels improved from the first week to the end of the six-week intervention study. In contrast, the control group exhibited a negative affect over time, indicating a decline in student engagement levels from the first week to the sixth week of the study.

Despite the results suggesting there was a significant increase in the level of student engagement in intervention groups, no significant differences in performance were noted. Notably, the pretest mean scores for the intervention group were slightly lower than those of the control group, but during the posttest phase, the intervention group had slightly higher mean scores. The difference may be due to a delay in performance which takes long to achieve. The outcomes need to be understood from that perspective. The upcoming section undertakes a comprehensive discussion of the findings presented above in relation to research question one.

5.2 Discussion of Quantitative Research Findings

This section undertakes a comprehensive discussion of the findings presented above in relation to research question one. A critical examination of the headings above suggests they are based on quantitative data analysis, which was gathered through questionnaires and performance test scores. These data sources were employed to address the first research question, which sought to investigate the potential impact of the pedagogical intervention on learner engagement and performance in grammar classes.

5.2.1 The impact of the pedagogical intervention on Reported learner engagement

This section discusses the findings pertaining to differences in learner engagement between the intervention and control groups. The examination of quantitative data obtained from the repeated questionnaires and the pre-and-post performance tests was used to determine within-group changes in engagement over time and facilitate a comparative analysis of engagement changes between the two groups. This relates to the following research question: '*Does the use of the pedagogic intervention in grammar classes lead to differences in engagement and performance in Saudi EFL learners?*'

Regarding this research question, the descriptive statistics reveal that the mean scores of the intervention group exhibited a higher perceived value, indicating a significant improvement in learner engagement. Conversely, the control group's mean scores were comparatively lower, suggesting a lack of improvement in engagement (refer to Chapter Five 5.1.3.1, for more info). This may imply that the pedagogical intervention of teaching was successful in its goal of improving learner engagement (Al-Hoorie et al., 2020, Li& Li, 2022). Additionally, the *Paired Sample t-tests* showed that there was a significant improvement of learner engagement over time for the intervention group from week 1 (M = 4.10, sd = .44) to the end of the intervention in Week 6 (M = 4.43, sd = .55), whereas the control group showed no significant improvement over time from the first week (M = 3.8, sd = .47) to the end of the treatment in week six (M = 3.82, sd = .62; please *refer to 5.1.3.2 for more details*). These measurements of engagement over time between the two groups were made to ensure a reliable level of changes in learner engagement in evaluating the change in the effect of the intervention over time (Betts, 2022). The changes in engagement improvement are in favour of the intervention group. The observed increase in learner engagement over time can be attributed to the essential qualities of the pedagogical intervention approach focused on collaborative and interactive learning tasks (Gasmi, 2016). It is likely that learners developed positive attitudes and a sense of belonging towards the intervention, which subsequently influenced their engagement levels (Knifsend et al., 2022).

Furthermore, the Repeated Measures ANOVA tests, that were used to measure the repeated questionnaires for six weeks to determine the difference between the intervention and control group in relation to their engagement, showed that there was a statistically significant improvement impact in favour of the intervention group ($F(1,38) = 22.4$, $p < .001$; please refer to 5.1.3.3 for more details). This result was compatible with other studies showing the positive impact of the pedagogical intervention that focused on a flipped content method on learner engagement (Amiryousefi, 2019; Jamaludin & Osman, 2014; Lee and Wallace, 2018; Li & Li, 2022; Svalberg, 2018; Tran &Nguyen, 2020).

The *Pair-Sample t tests* again showed that both groups had a significant improvement in terms of their performance between the pretests and posttests. This corresponded with the study conducted by Li and Li (2022), which suggests that learner engagement and performance were not only influenced by the use of an interactive intervention including a flipped content, but also other factors may impact their engagement and learning, such as learner motivation, individual differences, and a different teacher role in a class. Li and Li's study argued that not all intervention classes guaranteed positive learner engagement and better learning. Quality and efficiency are crucial in the successful application of the interventions and their impact on student engagement and learning (McLaughlin, 2013). This is particularly evident in the present study, where classrooms were not only flipped but also characterised by increased interactivity and collaboration. Surprisingly, the quantitative results in the current study indicated no significant differences in performance between the two groups, even though the intervention group had slightly higher posttest mean scores and more active performance in their classes (please refer to 5.1.4 for more details). It may suggest that individual differences, such as motivated learners in the control group, affected the result, which is discussed below in the individual differences and learner engagement in section 6.5.3. Therefore, the current study's results contracted the findings of Svalberg's (2018) study, which associated higher performance with learner engagement, and more precisely, with cognitive engagement. This interpretation of the increase in cognitive engagement was attributed to the qualitative findings that showed learners from the intervention group demonstrated more evidence of cognitive engagement (refer to section 6.3).

The present study did not report the significance of each individual engagement component in the questionnaires, as they failed to meet the required reliability coefficient and were considered unacceptable for the quantitative analysis (Plonsky & Derrick's, 2016; please refer to section 5.1.1 for further details). This finding contradicts previous studies, such as the one conducted by Li and Li (2022), which demonstrated acceptable reliability in measuring each engagement component through their questionnaires. However, the lack of reliability coefficient of each dimension of engagement questionnaires within the current study aligned with assertions highlighting the

quantitative challenges associated with measuring individual dimensions of engagement (Fredricks et al., 2019).

The improvement in learner engagement observed in the intervention group is likey linked to the inherent characteristics of the intervention approach in this study. This approach not only included a flipped content but also encompassed more interactive tasks, effective group work, a different teacher role in classes, and various kinds of learning activities, including digital and worksheets activities. On the other hand, the control group's learning tasks and activities primarily relied on textbook exercises and a teacher-fronted approach. Therefore, in the intervention, learners had more opportunities to view and familiarise themselves with new content online prior to extensive classroom practice, as outlined by Bergmann and Sams (2012), learners were able to thoroughly engage with the materials, leading to increased engagement. In other words, the intervention group had more chance to practise content in class (O'Flaherty, & Phillips, 2015; Vitta & Al-Hoorie, 2020), resulting in learners actively engaged in materials before the class and engaged in a diverse range of activities and tasks within their classrooms. These kinds of tasks and activities went beyond only the flipping approach model, which had more classroom interactivity and communicative teaching methods (Touchton, 2015). The upcoming chapter will analyse the qualitative data, including interviews, observations, and voice messages. The focus will be on identifying themes related to the three engagement components - behavioural, emotional, and cognitive - and exploring any potential evidence of learners experiencing Flow aligned with their engagement.

5.2.2 Summary of the discussion of quantitative findings

The quantitative results revealed that the intervention group significantly improved their engagement in grammar lessons compared to the control group. This suggests that the pedagogical intervention succeeded in improving learner engagement (Al-Hoorie et al., 2020; Amiryousefi, 2019; Li& Li, 2022). Thus, these results helped to answer the first research question, which indicated that the teaching intervention had a significant impact on learner engagement but did not have a statistically significant impact on their performance. Additionally, the limitations of the questionnaires used in this study became apparent as they failed to accurately measure the significance of each engagement component due to inadequate reliability coefficients (Plonsky & Derrick, 2016; please refer to section 5.1.1 for further details). Given the unsuccessful quantitative outcomes of measuring each individual's engagement, the present study employed mixed methods research to overcome this limitation, allowing for further investigation of learner engagement.

The posttest performance scores were found to be slightly higher in the intervention group but significantly did not make a difference in performance between the two groups. This result contradicts Svalberg's (2018) claim that greater performance is linked to learner engagement, even though the present study provided further evidence of learner engagement for the learners in the intervention group (please refer to section 5.2.3 on how learners in the intervention classes were cognitively engaged). It could be argued that the small difference in the posttest performance scores between the two groups can be attributed to the presence of motivated learners in the control group who demonstrated their interest in learning grammar and English in general, which may have positively influenced their performance. This highlights the importance of addressing individual differences in the classroom, as discussed below. The difference may be due to a delay in improved performance, which takes longer to achieve. Equally, it may be due to the use of self-reporting, where learners may have inflated their engagement level attained compared to the actual level of engagement obtained. The outcomes need to be understood from that perspective.

Chapter 6 Qualitative research findings and discussion

In this chapter, the qualitative data (interviews, voice messages, observations) will be examined thoroughly to understand the changes in student engagement for the intervention and control groups as well. Thus, the following analysis is organised around common themes of the three dimensions of student engagement developed by Fredricks 2004, and simultaneously, along with evidence of students experiencing the state of Flow in which they were intensely involved in learning with a high degree of concentration, there should be a perceived balance between challenges and skills, feel interested, and have a sense of control (Csikszentmihalyi, 1975, 1990). The aim of combining Flow state occurrences with their appropriate engagement themes is to a) prevent repeating previously discussed engagement themes, b) provide clarity on how they relate to each individual engagement theme, and c) provide me with more room to elaborate on them in the discussion and concluding section. The processes on how the qualitative data were analysed will be presented briefly. By using the MAXQDA software (please refer to 3.4.2 for more details), I followed what Braun and Clarke (2006) indicated as practical actions to take before, during, and after the thematic analysis process throughout all six stages: becoming familiar with the data (by listening and transcribing data), generating initial codes, searching for themes, reviewing themes, defining and naming themes, and producing the final approaching themes (for more information refer to Thematic Analysis (Coding procedures) in chapter 4). To provide an overview of the themes discovered in this study related to any of the three dimensions of student engagement, I have created a diagram (see the Figure 6-1 below). This will help to provide an overview of themes found in this study before I go through them in more detail.

I begin with presenting the behavioural engagement themes for both groups in this study, as it may be clearer for readers as it is measurable mostly as actions unlike the themes of emotional and cognitive engagement. Within each theme, a variety of data sources are utilized to support and enhance the claims that have been made about it. It should be noted, however, that the goal of this thesis is not only to determine if the pedagogical intervention improved student engagement or not (quantitative data), but also to explain why it did or did not and how Flow Theory that drove the intervention design induced their Flow state and affected their engagement in classes. As a result, more emphasis will be placed on examples in any key themes and sub-themes for each of the three components of engagement, accompanied by an interpretation of any evidence demonstrating learners who encountered a state of Flow during their engagement. In spite of the fact that this study produced a lot of data to support the assertions made regarding the effectiveness of the intervention in improving student engagement, the constraints of space

and time prevent me from going into as much detail as I would want. Nevertheless, the illustrative excerpts from the data are representative of overarching themes in the research.

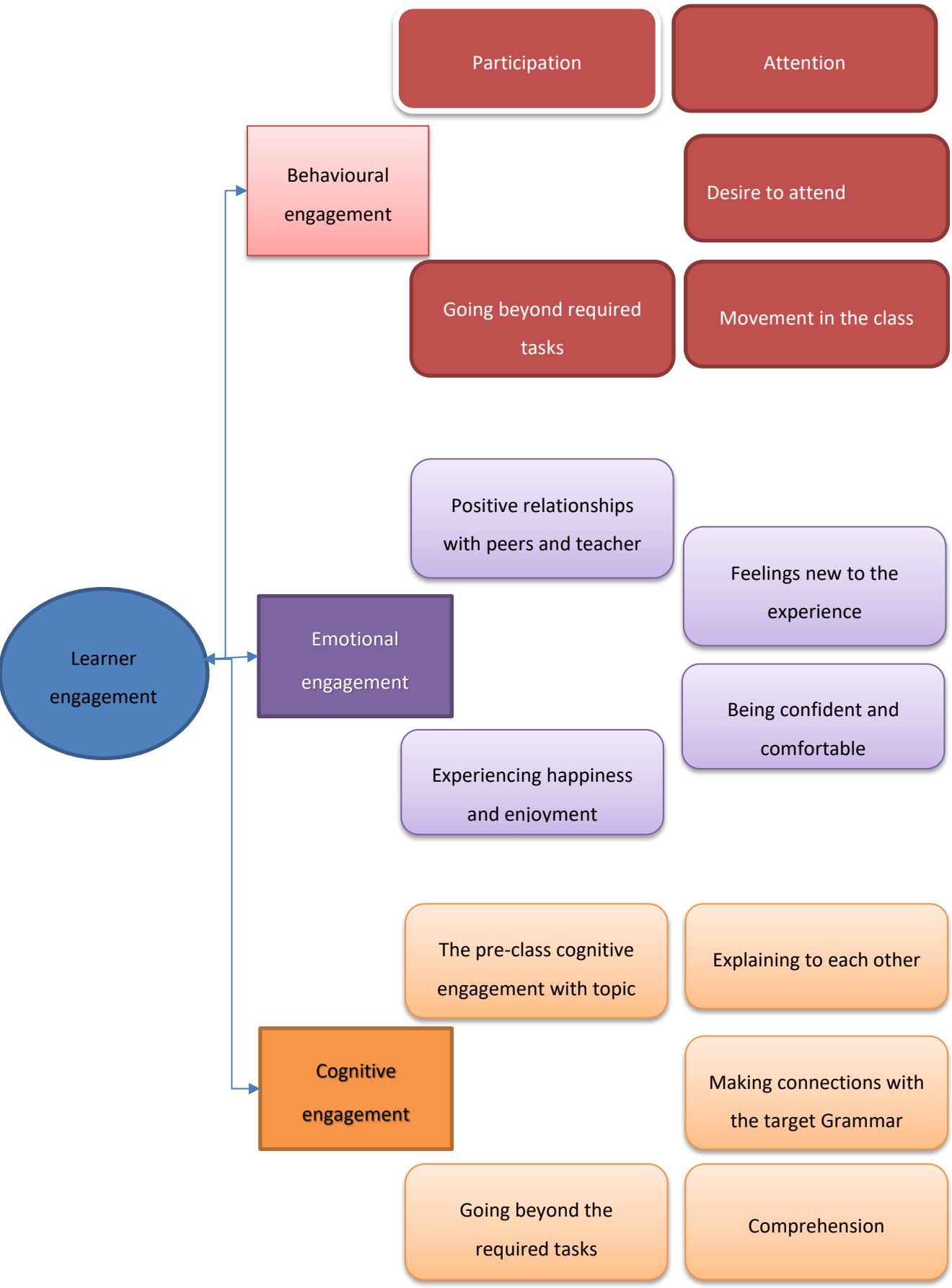


Figure 6-1 The themes of the three dimensions of student engagement

6.1 Behavioural engagement themes

Behavioural engagement refers to the observable actions and behaviours of participants in a class or in a particular activity or task, which includes actions such as attendance, participation, and completion of activities and tasks. In this study, the interviews, observations, and voice messages revealed several behavioural themes, particularly from those who participated in the intervention teaching classes, while the control group revealed relatively few themes. With each main theme contributing to the evidence of behavioural engagement for the intervention group, there is a counter-theme, if established, of obvious disengagement for the control group. Each theme reported will incorporate its sub-themes, which were initially formed, along with supporting evidence of learners experiencing a state of Flow during their engagement. Based on behavioural engagement, the following themes were revealed in the data: *participation, attention, desire to be in class, movement in class, and going beyond required tasks* (see the table below)

Table 5-1 Behavioural engagement themes

The main themes	The subthemes
1. Participation	- Involvement in class discussion - Task completion - Investing time in watching videos
2. Paying attention	- Attentive in classes - Paid attention more on activities and tasks
3. The desire of attendance	- Preparedness - Looking forward to the next classes
4. Movement in class	- Seating themselves in groups - Changing their groups - Moving between groups during tasks
5. Going beyond the requirements of the task	- Doing extra work on the internet - Watching the videos more than once

6.1.1 Participation

As indicated before, each overall theme comprises subthemes, and so the theme 'participation' includes subthemes; *involvement in class discussion, investing time on watching videos, and task*

completion. Therefore, several indicators in the data (e.g., observations, interviews, and voice messages) suggest that students in the intervention group participated more in the grammar sessions. Learners who had enrolled in the intervention classes showed a significant preference for it, as indicated by their participation in the prerequisites for the grammar classes, despite the fact that it was their first experience with the intervention instruction. Beginning with this example from my classroom observations in week 3 (see the extract below) the participants in the intervention group showed increased participation in their classes, particularly at the start of each class, where they actively shared their pre-class experiences.

(Observation Field Notes, week 3. Intervention group)

> *"At the beginning of the class, all students participated when they were asked about the video content. They all gave their opinions; they talked about what they liked more; and even talked about the challenges in that video clip. They were eager to add to what others did not say when they talked about the video. The participation from students would take longer, but ten minutes was the maximum for the video discussion."*

Nine out of 20 students in the intervention group during the interviews and voice messages mentioned that they were participating in the grammar classes. Therefore, the learners' comments from interviews and voice messages provided additional evidence of their class participation. For instance, Fahad, who was part of the intervention group, mentioned in his interview that he had the opportunity to participate in the classes at any time, which allowed him to be an active learner (see the excerpt below from Fahad's interview).

(Fahad's interview. Intervention Group)

> ***Me**; Thank you for your time. Do you want to say anything or add anything?*
>
> ***Fahad**: I don't think I have anything to add... but I would say that I had the opportunity to participate all the time in the class and the instructional teaching was not that long and was for a specific goal and directed to the activity or exercise in which we were working, and....*

Six other students in the intervention group reported completing their tasks during class time, which indicates their participation in grammar tasks. Ramzi, for instance, said that he and his classmates did complete the class tasks and commented on how well other classmates participated. Notably, he didn't say "I" very often. Instead, he said "we" or "each student" several

times to show that he was not the only one who did the work in class, but also to put the focus on his classmates (see the excerpt from Ramzi's voice message).

(Ramzi's voice message, week 5, intervention group)

> *"Today we discussed the passive and active voice …. today was the most day in which we completed the exercises. We all the students, each student and each student participated, and we were able to participate. At the beginning, each student looked at the grammar rule by himself, then participated in the group and discussed it with a colleague …. ".*

Emphasis on participation in grammar classes for the intervention group went further when all students stated that they invested time in watching the videos before they came to each grammar class. Sam, for example, when I inquired about what distinguished this grammar course from other classes, he replied with his opinion that he typically watched videos and finished pre-class activities on Blackboard prior to coming to class. This pre class work indicated that he was engaging with the topic before the classes (see the excerpt below from Sam's interview)

(Sam interview, Intervention group)

> ***Me**: Why do you think the grammar classes in this semester were different from other classes?*
>
> ***Sam**: Yes, there was a difference, because I watched the videos for each class, and I did some warming up activities before the class as well...*

Since reviewing the videos was convenient, some of them were able to watch them if they missed a class or even if they wanted to watch them more than once. This happened when I interviewed Mahmoud and asked him why he mentioned a lot in the interview that the review at the start of each class helped him learn a lot. Despite missing some classes, Mahmoud's dedication to learning grammar was evident through his consistent use of Blackboard and video resources to stay engaged with the lessons. This demonstrated his active participation in the grammar course (see the excerpt below for Mahmoud's interview).

(Mahmoud interview, Intervention group).

> ***Me**: You mentioned a lot that the review at the beginning of the lecture was useful to you? How this helps you?*

> ***Mahmoud**: Yes, it is true, because sometimes I miss some lectures, but I go back to watch the previous video before the new lecture, and at the beginning of the new lecture, there is often a simple review of the past week, and this thing helps me a lot.*

In contrast, most students in the control group were unlikely to participate in grammar classes. The only exceptions were three students who showed a desire to participate in all the classes, thinking that they had the chance to do so. The remaining students in the control group indicated that they missed out on class discussions, felt excluded by the teacher as only those with better English skills were given opportunities to participate, and lacked the motivation to engage in the lessons (see figure below).

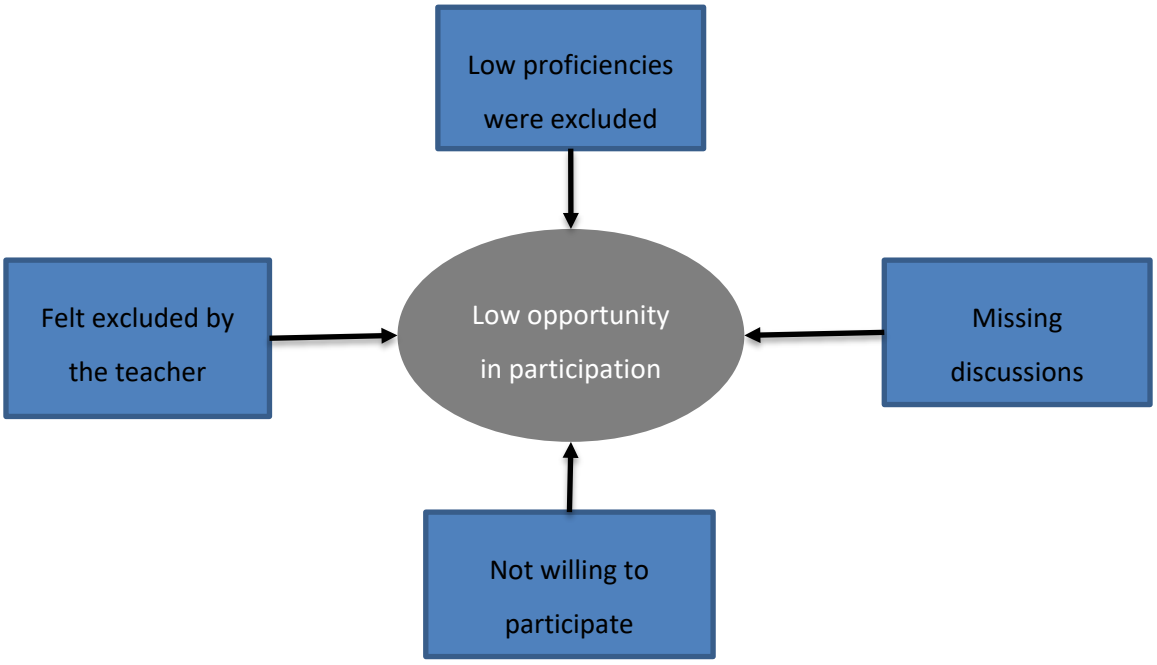


Figure 5-1 The subthemes of non-participation in the control group

One of the three participants who showed increased participation in the control group reported that he had the chance to participate in all classes by talking to the teacher. Additionally, he did not feel that the class instructions took longer, which differed from the opinions expressed by other members of the control group. Yasser was observed to initiate conversations with the teacher during class, as noted in my field notes, which suggested that he was actively participating in the grammar classes (see the excerpt from Yasser's voice message).

(Yasser voice message, week 2, Control group)

"Today the class was beautiful, and the lecture was not boring, as you gave me a chance to participate and talk with you, and there was no long time for explanation… "

Several students were dissatisfied with the classes in the control because they felt they had limited opportunities to participate, and this was due to various reasons. Jaber was among these students who were unable to participate, and when asked why, he indicated that he was unable to do so. This implied that Jaber, along with some of his classmates, were behaviourally disengaged in the classes (see the excerpt below from Jaber's interview).

(Jaber interview. Control group)

***Me**: Do you think that you personally had this problem, or have you noticed it in some other students?*

***Jaber**: Yes, I noticed this problem with some of the students, but not all of them. This is because some did not get the opportunity to participate, or they may not have been able to focus during the entire class time. For me, I tried a lot to participate, but I did not get the opportunity.*

So Jaber kept bringing up the problem as it was, which was that the teacher was only letting some students participate in, which made it harder for him to participate. (Jaber interview, Control group)

Me: what do you think is the reason?

Jaber: I don't know, but I raised my hand to participate, but you didn't pick me .

Khalid and four additional students from the control group shared Jaber's problem that they were marginalized by the teacher who only allowed students who knew the correct answers to participate, while disregarding those who were unsure. Khalid also wished for other ways to ensure that all students had the opportunity to participate in the classes (Khalid interview, Control group).

Me: I would like you to explain more when you mentioned the same routine, what do you mean exactly?

Khalid: For example, the same way of solving problems in tasks when you only pick the students who raised their hands to make answers; this scenario is not good in classes because if the selection was random, it would be better because it would always keep everyone focused.

However, this was not the sole reason for not participating in classes. I interviewed Shaie and another classmate, they said that they did not want to participate or were not willing to participate in classes even when they knew the answers, indicating that they were not enthusiastic to participate in the classes. This suggests that they lacked enthusiasm and enjoyment to participate in the classes (Shaie interview. Control group).

***Me**: You have mentioned that you already knew the answers, but you didn't participate! Can you say why?*

***Shaie**: Yeah, you're right I know the answers, but I don't have the desire to participate.*

The aforementioned excerpts revealed that the learners in the intervention group were more behaviourally engaged in the grammar lessons. This was demonstrated by their participation before and during class through completing activities and tasks. In contrast, the control group showed less behavioural engagement, with some not participating in class due to the instructions they were given, teacher inattention, or a lack of interest. A small number of learners in the control group were engaged due to their interest in studying grammar and their willingness to initiate conversation with their teacher. The next section will explore the theme of behavioural engagement in relation to learners paying attention and not being distracted in the grammar lessons.

6.1.2 Paying attention

Paying attention here means the act of focusing or concentrating on a task or during class time. Most students in the intervention group reported being focused and attentive during grammar classes, while learners in the control group reported not paying attention and frequently distracted with the exception of one student who showed his ability to pay attention in his grammar classes. Participants who were part of the intervention group indicated that they paid attention during class, group activities, and other tasks. For instance, Sari, a participant of the intervention group, reported that he paid more attention during grammar classes in the current semester, whereas he found it difficult to pay attention in other classes. He explained that this

was due to the teaching approach used in grammar classes, which incorporated more activities and tasks (see the excerpt below form Sari's interview).

(Sari interview, intervention group)

> ***I**: May some people say to you that the teacher's explanation can help you more? What do you think?*
>
> ***Sari**: There is no doubt about your class; you were explaining, or exactly there were instructions in the class, but what I mean is that a long explanation causes you to get bored, and you feel that it is more and more complicated and more difficult, and even that the focus decreases when the whole lesson is explained, but here, working in groups, yeah in groups and different activities make you more focused and more relaxed. Compared to other lessons, where I was distracted and thought outside the classroom.*

Sari, in the above example, described his attentive behaviour during classes, suggesting that he was actively engaged and experiencing Flow state as he focused on the work and avoided getting distracted by external factors. This was in contrast to other classes where he found himself getting distracted more frequently, hindering his ability to experience Flow and engagement in those classes.

Fayez, another participant, expressed that the flipped classes were attractive and enjoyable, which encouraged him to remain focused throughout the entire class and prevented him from being distracted or busy with other things during that time. Similar to his classmate Sari above, Fayez also apparently experienced Flow state and was engaged as he was able to pay attention in the classes during his involvement in various activities and tasks, which made him focus and not get distracted (see the excerpt below for Fayez's interview).

(Fayez interview, intervention group)

> ***Fayez**: … I see that the class was interesting and good; the work was good, and my attention was constantly focused on it. I did not remember that I thought outside the class because there were many things and different events…"*

In the preceding example, Fayez indicated that he was fully paying attention during the entire class period, whereas others did not indicate that they were focused on the entire class period, but they did mention that their attention increased in the grammar classes. In light of the fact that the length of class time was thought to be a barrier to making a student keep concentrating in the grammar classes, another participant from the intervention group commented that he did not

notice the time when he was doing the tasks and activities during the class time because he paid attention to what he was doing during that time. During the Flow state, individuals perceive time as passing quickly, which helps them stay focused and concentrated for as long as needed. This is why Sultan did not notice time during his classes, as he experienced both Flow and engagement at the same time (see the excerpt below from Sultan's interview).

(Sultan interview. Intervention group).

> ***Sultan****: ... because my attention in the class and in doing the activities and tasks made me not feel the time and feel that I took my time in the lesson and was satisfied.*

In contrast, the participants in the control group were observed to be distracted and easily unfocused during grammar classes, even those who were previously shown to be engaged. They attributed their failure to not paying attention to the teaching method in the classes, which lacked excitement and attractiveness. Additionally, the participants felt pressured to complete all tasks within a limited timeframe, which often led to further distraction. For instance, Abdul felt disconnected and isolated during class exercises, which impacted his ability to focus. He believed that the lack of interaction with peers contributed to his difficulty in paying attention, even during task completion (see the excerpt below from Abdul's interview).

(Abdul interview, week 2, control group)

> ***I****: Does this thing influence you when it doesn't happen in the class?*
>
> ***Abdul****: To be honest, I tend to feel lazy and my level of attention decreases, especially when there is no interaction in the lesson, and of course the result will be the opposite for me, such as laziness, and I cannot focus even if I was doing the exercises; I will not remember them even.*

Two participants from the control group reported inconsistent attention during classes, which was dependent on the class content. They noted that they were more likely to focus if something was interesting to them, but generally, their attention was low for the majority of the class. Shaie was one of the participants who experienced this, sometimes losing focus but occasionally paying attention when the material was engaging and interesting (see the excerpt below from Shaie's interview).

(Shaie interview, week 5, control group)

Shaie: Be honest with you, my focus decreased and became very weak, Occasionally, I am able to concentrate better when something in the class piques my interest, but this only happened a few times. Another point is that sometimes, especially with the slides in the projector, it takes a long time to read from the slides, and I can't pay attention to you when you talk, which weakens my focus even more.

The aforementioned examples suggest that the intervention group learners were more engaged with their lessons and tasks by paying attention due to finding the grammar lesson activities and tasks useful and interesting. On the other hand, the control group was not consistent and lacked interest in paying attention during their grammar classes, which hindered their ability to actively engage in their grammar lessons. The upcoming theme will probe deeper into how the intervention group learners were more inclined to attend their grammar classes in person.

6.1.3 The desire to attend

This overarching theme is comprised of two subthemes: looking forward to the next class and preparation (see the figure below). Based on interviews, voice messages, and observation records, it was found that the students in the intervention group displayed a greater eagerness to attend their grammar lessons compared to those in the control group. Furthermore, over half of the students reported being well-prepared and patiently waiting for class to begin after completing the required online pre-class activities. The observation notes also indicated that overall, the intervention group students had better attendance in their grammar classes compared to the control group, except for in week two when the control group had higher attendance. This indicated that the intervention group demonstrated greater behavioural engagement, as evidenced by their attendance and eagerness to attend classes, when compared to the control group, who displayed dissatisfaction, which resulted in lower attendance or lack of desire to attend classes.

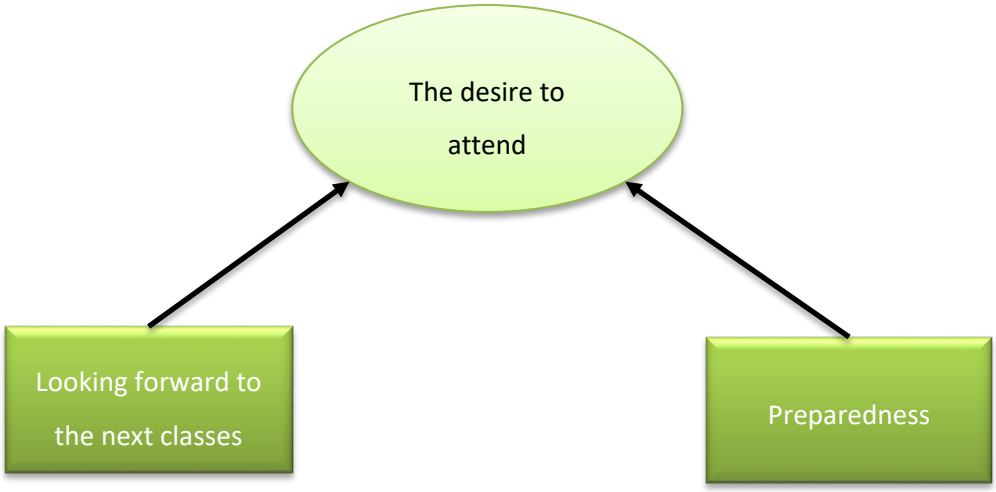


Figure 5-2 The subthemes of the desire to attend

Fayez, a participant of the intervention group, showed a strong desire to attend every grammar class. He found the classes to be distinct from one another, not duplicated in other classes, and perceived the changes made in the classes to be beneficial, which supported his enthusiasm to attend class more frequently (see the excerpt below from Fayez' interview).

(Fayez voice message, Week 4, Intervention group)

> *"Today I will talk about my experience in the grammar class that I attended, both from my opinion and from my experience in the lecture. The thing I like most about it is that it is always different from the previous one, and there is nothing repetitive or as usual about it... This increases my enthusiasm more to attend the lectures in the grammar classes… this is something I like a lot and makes me always attend and pay attention to the lesson and feel the change that happens in lectures, and I hope that we will continue and look for the best."*

Furthermore, when I interviewed Mo to find out if the intervention teaching had changed his feelings, he was instantly assured of the need of attending the classes, as he still required clarity on what he had been involving with online before to the class (see the excerpt below from Mo's interview).

(Mo interview, intervention group)

> ***Me**: Did this make a difference in your feelings when you came to the class? How?*

***Mo**: Yes, because in the video there are things that I want to ask about, so I have to attend the class so that I can ask the teacher and the other students. I mean that this thing does not stop me from attending the classes; as I mentioned, there are things that I need to clarify...*

After some showed their preferences to attend the classes clarifications or simply because they liked them, more than half of the learners in the intervention group stated that they preferred attending grammar classes for another reason. This was because they were well prepared for the lessons and were looking forward to the classes. Suhail, for instance, stated that he reviewed the material ahead of time using Blackboard, which helped him be ready for the next classes (see the excerpt below from Suhail's interview).

(Suhail interview. Intervention group)

***Me**: Tell me more when you mentioned that before the lecture, I watched the video and did the activities on the blackboard. How was the experience?*

***Suhail**: Yes, it helped me because I am preparing for the next lecture; I mean, before the lecture, so that I wrote down the notes on a piece of paper so that at the time of the lecture, I will understand.*

During the same interview with Suhail, I inquired about his feelings on the previous class. However, his answer diverged from the question as he expressed his excitement for the upcoming class, suggesting his eagerness to attend. This serves as further proof of Suhail's intention to attend the next class (see the excerpt below from Suhail's interview).

(Suhail interview. Intervention group)

***Me**: Okay, describe your feelings in the grammar lecture today?*

***Suhail**: Sometimes I am very eager for the next class because of the work with groups, so...*

Some participants were eagerly anticipating the classes due to their curiosity about what would happen during them. For example, during my interview with Fahad, I asked about his experience with reviewing pre-class materials. He expressed his excitement for the upcoming classes, and he

was looking forward to the classes to see what he would learn during the class time. (Fahad interview. Intervention group)

> *Fahad: ...and my curiosity about the lecture increased, and I want to attend the next class to see because the video clip did not explain everything because the video gave me the idea but not the whole explanation, which suggests to me that there is more in the lecture.*

Only one student in the control group showed interest in attending the grammar classes, while the other participants did not express any readiness or enthusiasm for attending. Hamzah was the participant in the control group who demonstrated a desire to attend the grammar classes. He considered his experience positive, came to class prepared, he even mentioned encountering some challenges and problems during the grammar classes. Hamzah was also observed in the grammar classes as being consistently active and motivated to learn grammar (see the excerpt below form Hamzah's interview).

(Hamzah Interview, week 2, control group)

> ***Me**: First, I want you to talk about the last lecture and the previous lectures in the class. Your experience with the lecture in general?*
>
> ***Hamzah**: …. I arrived at the class well-prepared and eager to learn before the lecture began. Upon a quick reflection, I believed that my attendance was good, despite some obstacles and complexities in the grammar formulas that caused confusion. However, I found the teaching method to be excellent, as I mentioned in previous voice messages, and felt that I had a thorough understanding of the grammar topic. Additionally, I felt that you did an excellent job of explaining the grammar, which contributed to my understanding...*

Some other learners who were in the control group indirectly conveyed their lack of interest in attending grammar classes by expressing their dissatisfaction with the classes. Jaber was one of the learners who was dissatisfied with the classes and demonstrated his disinterest in participating in the grammar classes (see the excerpt below from Jaber's interview).

(Jaber interview. Control group)

> ***Me**: Explain to me why you said it looks like other classes?*

> ***Jaber**: I mean, the way of teaching was very normal, frankly, that I do not see anything different in it. There is nothing in it that attracts me or anything that makes me focus on the lesson. I mean, I can say it was boring and I apologise by saying this.*

The previous excerpts indicate that the intervention teaching method encouraged learners to increase their desire to attend classes. This was because the flipped learning classes helped learners come to class prepared and looking forward to upcoming classes. This was in contrast to the control group, which received traditional teaching methods and exhibited dissatisfaction and boredom in their grammar classes. The next theme will explore how students were physically engaged in their grammar classes.

6.1.4 Movement in the classes

In contrast to the classes in the control group, learners in the intervention group were notably more active in class during group work. Despite the fact that fewer students in the intervention group commented on their movement in the classroom, they were observed for several instances of their movement during the lessons. For instance, notably in week 4 of the intervention group, learners were free to switch between groups as often as they wished. For both intervention and control groups, learners had the option to pick where they would be most comfortable sitting, and if they wanted to switch groups, they could do so on their own without even having to ask for permission (refer to the Discussion Chapter in section for further details) (see the excerpt below from my observation fieldnotes in week 4).

(Observation notes, week 4, Intervention group)

> *"Today in the class, the learners had the chance to sit where they preferred to work with their peers in groups... they moved between groups from activities to another… One student moved twice during the same activity between two groups...."*

Another example from my field notes when I asked each group to nominate one member after finishing the task to visit another group to receive feedback. This occurred more frequently in intervention classes, where group members could move from one group to another to discuss what they had done and then compare their work to the work of the other group before returning to their group with feedback. This sense of control by selecting where they sit or moving frequently between their groups supports the enhancement of the Flow state for learners as they

become more responsible about their behaviours in the classes (Observation note, week 5, Intervention group).

> *"Each group nominated one member to visit the next group to discuss with them what they did and look at their work, and he returned to his group with feedback to discuss with them…."*

By looking closely at what participants said during interviews about classes, I noticed that one participant, for example, did not let the interview end without expressing his thoughts on his own and others' movements between groups. He was highly impressed and viewed the experience as significant and beneficial not only to himself, but to his peers as well (see the excerpt below form Sari's interview).

(Sari interview. Intervention group)

> ***Me**: Thank you. Are there any suggestions or things you would like to add or talk about?*
>
> ***Sari**: Yes, I remembered in one of the lessons that you changed the group members from one task to another, and I see that it was a good idea so that you get to know more students and hear more and different opinions.*

In contrast, individuals in the control group were rarely observed to move in their classes. They mostly remained seated, working individually, even though they had the choice to work in groups. They moved in groups if they were asked to, but if they had the choice to work individually or in groups, they mostly worked alone. One of the students even expressed feeling tired and bored after enduring the two-hour-long lesson. As a result, the learner's ability to experience a state of Flow in his grammar classes was reduced since he was required to adhere strictly to the lesson instructions (see the excerpt below for Ibrahim's voice message).

(Ibrahim's voice message, Week 2, Control group)

> *"...during the lecture, sometimes I feel tired and bored because I am always sitting all the time, and I think this made me tired in the class time…."*

Another example came from my observations of classes where students were arranged in rows and facing me at the front for the entire duration of the class, which was typical of all English classes there. They were not able to effectively interact with their peers, which made collaborative work more challenging and ultimately led to feelings of isolation and loneliness, preventing them from the movement in the classes (see the excerpt below from my observation fieldnotes in control group)

(Observation fieldnotes. Week 3. Control group)

> *"Students sat like queues and made the work for them harder…. one student ignored his peer request of assistance, and he was sitting in front of him…"*

Abdul who was denied help from a classmate was asked in the interview about his relationships with other classmates. The learner mentioned that there was a disconnect between them as students in the class, which resulted in limited communication and reluctance to sit close to each other (see the excerpt below from Abdul's interview).

(Abdul interview. Control group)

> ***Me**: For the last lecture, how was your relationship or your work with the students?*
>
> ***Abdul**: I felt that there was a distance between us as students, but the groups somewhat brought me closer to the students, but despite that, there was no more communication. I don't know how to describe it exactly.*

The following relates to how learners take actions to invest more in their learning.

6.1.5 Going beyond the required tasks

Going beyond the requirement tasks means going above and beyond what is expected or required of a task. The aspect was measured from the perspective of behaviour acting rather than thinking to be covered on the cognitive dimension. This can include completing additional tasks or activities that are not outlined in the initial lesson description. This theme may overlap with the cognitive engagement themes, but here it refers to the action of going above and beyond what is required and completing additional tasks. As a result, learners in the intervention group demonstrated their behavioural engagement by fulfilling the requirements of the grammar class. However, nearly half of the students went beyond the requirements by completing additional tasks that were not required of them. Some examples of this include using the internet to find more information and being eager to learn more grammar formulas. Others said that they were

satisfied after watching the videos on the blackboard, and this satisfaction made them to re-watch the videos multiple times.

Mahmoud expressed his appreciation for the intervention approach employed in class during his interview, especially the use of videos displayed on the blackboard. He found these videos interesting and enjoyable, and he was motivated to explore additional resources on the internet to enhance his learning. Mahmoud's behaviour indicated that he willingly participated in optional tasks related to grammar, indicating his enthusiasm to acquire more knowledge. Mahmoud was also observed actively engaged in grammar classes (see the excerpt below from Mahmoud's interview).

(Mahmoud interview. Intervention group)

> ***Me****: Is this something new to you?*
>
> ***Mahmoud****: Yes, this was the first time I had seen a class like this.*
>
> ***Me****: Ok, how do you feel about this thing, given that this is the first class to be this way?*
>
> ***Mahmoud****: Of course, it was a nice feeling. It means that even the videos you send to us give you access to other clips that I personally benefit from.*
>
> ***Me****: Can you explain it to me more?*
>
> ***Mahmoud****: I mean the same channel on YouTube that I benefit from and subscribe to so that I receive all new content in the English language.*

Several students from the intervention group reported watching the videos multiple times, despite not being given any explicit instructions on how many times to view them. For instance, Rami mentioned rewatching the videos and making comparisons between viewing them only once versus multiple times. This indicates that Rami was behaviourally engaged with the course material before class by taking the advantage to watch the videos repeatedly (see the excerpt below of a participant voice message).

(Rami's voice message, Week 5, Intervention group)

> *"… I benefited more, and I watched the video more than once, and I benefited twice as much. I meant the previous videos I used to watch once I benefited from them by 20 to 30%. Today, I greatly benefited, because I watched the clip more than once, and it made*

the target grammar easy for me when I came to the class, and I did not face any difficulty understanding the grammar formula in the last lesson."

6.1.6 Summary of behavioural engagement results

The results from qualitative analysis indicated that students who were part of the intervention group exhibited greater levels of behavioural engagement during grammar lessons. In contrast, the control group students showed limited instances of behavioural engagement, with several even showing no engagement at all. The learners in the intervention group demonstrated increased *participation* during their grammar lessons. They were able to complete their tasks, both those assigned before class, such as watching videos and completing simple activities on Blackboard, and those given during class time, such as group activities and tasks. In contrast, the control group decreased participation in their classes, except for three students who showed increased participation due to their individual differences, such as their motivation to learn grammar and their personalities. The learners in the control group also indicated that they felt left out by their teacher, which discouraged their participation in class activities. Additionally, they perceived that participation was limited to those with higher proficiency levels, which further reduced their motivation to engage in classroom participation.

The findings also revealed that the learners in the intervention group displayed more attention during their group work and task completion activities. In comparison the control group appeared to pay less attention and tended to be distracted in their classes, except for a few who showed attention. The results suggested that most learners in the intervention group were more behaviourally engaged and experienced a state of Flow due to their attention in class. Moreover, the study found that attendance records and a desire to attend classes were more evident among the intervention group learners, who were better prepared for lessons and eager for face-to-face interactions. In contrast, the control group exhibited lower attendance rates, except for one student who strongly desired to attend all grammar classes.

The intervention group displayed greater mobility within their classes, including moving between groups, switching groups, and choosing which groups to collaborate with. In contrast, the control group complained of fatigue and boredom from being seated in class. The learners in the intervention group also went above and beyond in their grammar lessons, completing extra work such as researching the internet and re-watching videos. Only one participant in the control group showed additional effort by searching the internet for help in understanding the grammar lessons. This indicates that learners in the intervention group were more behaviourally engaged in grammar classes and experienced a sense of Flow when they could choose their groupmates and

exert control over their learning experience. The following section of this chapter will probe into additional themes regarding emotional engagement and instances of flow-state experiences among learners.

6.2 Emotional engagement themes

The findings from interviews, observations, and voice messages revealed a number of emotional themes, notably among the participants who took part in the intervention teaching classes. On the other hand, the findings from the control group revealed a very small number of themes. There is a counter-theme, if it is formed, of apparent disengagement for the control group associated with each primary theme that contributes to the evidence of emotional engagement for the intervention group. The representation of each primary theme will include its associated subthemes, which served as the foundation upon which the primary themes were built. Based on the level of emotional engagement, the following themes were identified: *positive relationship with teacher and peers, new feelings due to new experience, being confident and comfortable, and experienced enjoyment and happiness* (please refer to the table below)

Table 5-2 Emotional engagement themes and their subthemes

The main themes	The subthemes
1. Positive relationships with peers and teacher	- With peers - With teacher - Making friends - Received help from peers - Collaboration
2. The Novelty Effect	- Lesson was different - Different activities and tasks - Combination of learning and entertainment
3. Confidence and Comfort	- Feeling relaxed - Trust on peers - Feeling comfortable in groupwork - Feeling comfortable in classwork
4. Enjoyment and happiness	- Enjoyed grammar Classes. - Appreciation of the way lessons were taught - Excitement to do assigned work and collaborate.

6.2.1 Positive relationships

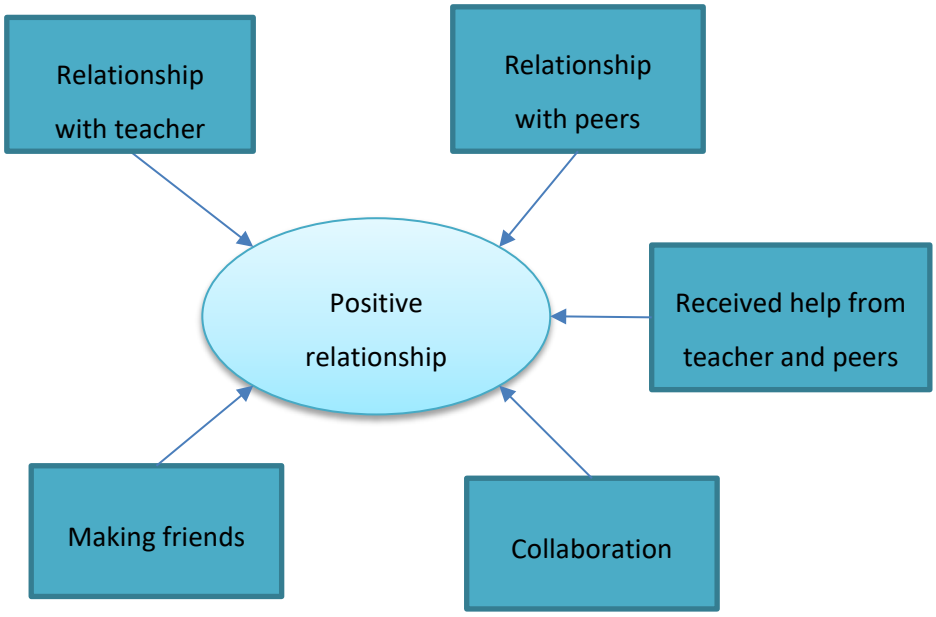


Figure 5-3 The subthemes of positive relationships

The figure presented above illustrates that the theme of "positive relationship" emerged from several subthemes identified through diverse research data sources. The interviews, observations, and voice messages in this study revealed that participants in the intervention group enjoyed positive relationships with both their peers and teacher. Conversely, the control group indicated a lack of positive relationships among themselves and with their teacher. The following excerpts include examples of both positive and negative relationships experienced by participants.

Several instances in the data suggest that the intervention group learners had mostly positive relationships with their peers and their teacher. Roughly half of the intervention group students mentioned their close relations with classmates during interviews and/or voice messages, and fieldnotes from observations provided several indications of their excellent relationships with each other. For instance, during my interview with Fayez from the intervention group, he initially discussed his work with peers, but when I asked him to describe his relationship with his classmates, he expressed a strong connection with them (see the excerpt below from Fayez' interview).

(Fayez interview, Intervention group)

***Me**: How was the relationship between you as students in the classes?*

***Fayez**: Honestly, it was fun and... very interesting; I did not feel alone, and we were closer, to the point that the relationship between us as students was very strong, as if we had known each other for a long time, even though we only met at the start of working in the group.*

On the other hand, the control group learners lacked interpersonal relationships in their grammar classes, as evidenced by my interviews with them, their voice message responses, and my fieldnotes and observations of their classes. As an example, I questioned Shaie from the control group and asked him whether he could seek clarification from a classmate if necessary. He stated he would do it, but he never did, and he didn't even explain why. As an interviewer, I provided some potential reasons for why he did not even seek for assistance from his peers to determine if this was the reason or whether he would provide alternative explanations (see the excerpt below form Shaie's interview).

(Shaie interview. Intervention group)

***Me**: Ok, did you ask one of the students with you in the class to help you explain something specific?*

***Shaie**: Yes, and this is for sure, but unfortunately, I did not consult anyone or ask anyone for help.*

***Me**: Is there a specific reason?*

***Shaie**: No, there is no particular reason.*

***Me**: Or did you not have the opportunity to ask for help from anyone?*

***Shaie**: In fact, I do not know the students who are with me in the class, and there is no relationships between us.*

Shaie's case emphasized the absence of the relationships among participants in the control group during their classes, and this was effectively addressed with other participants during my interviews with them or when they sent me their voice messages. The participants in the intervention group not only expressed satisfaction with their close relationships with each other but also demonstrated a positive relationship with their teacher. This was in contrast to those in

the control group, with the exception of a participant who enjoyed grammar classes and had a positive relationship with the teacher, such that he only sought advice and guidance from the teacher and not his peers. Due to their positive relationship with the teacher, the intervention group participants felt comfortable expressing their opinions and preferences for grammar classes without any pressure, in a secure and safe environment. For instance, Mo shared in his voice message how he and his peers noticed a difference in their grammar classes due to their positive relationship and friendship with their teacher, highlighting the impact it had on their learning experience (see the excerpt below from Mo's voice message).

(Mo voice message. Week 1. Intervention group)

> *"……The last point I would like to mention is the way the teacher treated us; he is the one who works to ensure that the academic atmosphere is very suitable for us, and that was very rare in other classes. I saw this in the classes: the students talked with the teacher without feeling pressure, and they felt relaxed. In fact, I enjoy the lecture when it is in the grammar subject with the teacher, and I also do not forget the teacher's role in taking our opinion into consideration a lot inside the lecture, so thanks to him."*

Several indicators point to the fact that the intervention group participants generally had strong relationships with their classmates. Collaboration among students in the classroom and during group work was one such indicator, which was notably evident among most of the intervention group participants but not among those in the control group. Specifically, the intervention group participants reported collaborating with each other during class and while working on group assignments. For instance, Ahmed shared his experience of receiving help from his peers and how collaborating with them had a positive impact on his learning (see the excerpt below from Ahmed's voice message).

(Ahmed voice message. Week 3. Intervention group)

> *"Based on the lecture last Monday, it was excellent. The collaboration among us in the group, as well as my groupmates, is what made the lecture enjoyable for me. It was useful to me because I sometimes knew the answer to the first question but not the second. I asked my colleague to explain to me this point and why it was In this way, there was collaboration that helps you understand more, because if you do not understand from the class, you will understand from your colleague in the group.... From this, you understood the target grammar and collaborated with your colleagues… "*

Although the intervention group members worked together collaboratively which improved their relationships, the control group did not display or report any collaborative behaviour during my interviews, observations, or their voice messages. Consequently, the majority of control group participants were dissatisfied with the lack of collaboration among them. When I spoke with Zakie from the control group and asked about his experience in the grammar classes, he expressed his disappointment with the absence of collaboration in the classes and his wish to have had more opportunities to work together (see the excerpt below from Zakie's interview).

(Zakie interview. Control group)

> ***Me**: At the beginning, let me ask you about your experience with grammar in today's lesson and the previous lessons in this semester. Describe to me your feelings through this experience.*
>
> ***Zakie**: To be honest, it was not only in yesterday's lecture but even in past lectures. I would have liked the class to be run as collaborative environmental work, not individual work but rather collective work in the form of groups, meaning that each group includes four people that I knew... For example, if we are in an activity and we divide into groups, we work with each other and collaborate with each other, and in the end, we discuss with the teacher, I will be more honest with you. If this thing happens in this lecture, it will be much better.*

At the end of our interview, Zakie reiterated the importance of collaboration among him and his classmates in grammar and other English classes. By bringing up this issue again, Zakie aimed to highlight the difficulties they faced due to the lack of collaboration, resulting in decreased engagement in class (see the excerpt below from Zakie's interview).

(Zakie interview. Control group)

> ***Me**: Thank you so much for your time. I've finished all of my questions for you; do you want to add anything or comment on anything I didn't ask you about?*
>
> ***Zakie**: For me, there should be collaboration between us as students within the classes. This was something that most students needed, not just in this subject but in all English subjects.*

Based on the participants' statements above, it was evident that the intervention group had developed positive relationships with both their peers and teacher, resulting in emotional engagement in their grammar classes. This was demonstrated through their collaborative work and friendships within the classroom. Conversely, the control group lacked these relationships, leading to a negative impact on their class engagement. The subsequent theme focuses on the new emotions experienced by learners during their involvement in the intervention teaching classes.

6.2.2 New feelings due to new experiences

Over half of the participants in the intervention group reported feeling different during their experience in the grammar classes, as shown by their interviews and/or voice messages after the classes. Due to the fact that some emotions cannot be observed, my fieldnotes do not contain this kind of information about emotions that were mentioned by the participants during interviews or voice messages. According to their descriptions of their grammar class experiences, students were delighted and felt differently when exposed to a diversity of lessons and activities from one lesson and/or activity to the next, which positively impacted their grammar learning. The following data examples indicate how students felt when exposed to this kind of grammar learning environment for the first time. For instance, Mo shared that the innovative teaching methods he experienced had a significant impact on his emotions. He found the use of instructional videos and peer guidance in the classroom to be novel and exciting, and his grammar learning journey brought him joy and expanded his imagination for upcoming lessons, as they consistently offered innovative and distinct approaches (see the excerpt below from Mo's interview).

(Mo interview. Intervention group)

> ***Me****: At the beginning, let me ask you to talk about your experience in the grammar classes, or, in a different way, describe to me your feelings and your experience in the grammar classes today and also for the previous sessions?*
>
> ***Mo****: Frankly, my feeling was different in terms of the method of the lesson, and it was different from others, for example, the video clips before the class… The other example is the way the groups work inside the class in terms of interaction and making friendships with other students…*
>
> ***Me****: In your opinion and from your experience, what is the thing that made this grammar class different from others?*

***Mo**: As I mentioned before, it was that way of teaching class—about change and renewal—and it is not like others in the normal routine; it is different from others. For example, I have five other English courses, but this one was different, and this thing made me see the difference between it and others, and here is the change that I watch on a weekly basis, and this thing keeps boredom away from me.*

***Me**: What does change mean to you, such as what you mentioned is the change from one week to another week?*

***Mo**: Honesty, it means a lot to me because this does not make you feel bored and makes you more keen to…, and this thing makes you know that the next classes will be different from this one. In contrast, in other English classes, you will know what will happen, and I mean that I will be listening and sitting in my place only, but here in the grammar classes, there are many things to happen that are innovative and more fun.*

Beginning with how Mo ended his talk with the example above "innovative and more fun,". Learners in the intervention group had different feelings about the classes, describing them as a combination of learning and entertainment tasks designed to enhance their grammar skills. Many found these activities to be new and unique experiences, such as using mobile phones for the first time instead of relying on traditional textbooks and paper-based tasks. Some also viewed the tasks as entertaining and competitive, with sports and movie events and timers on their phone screens that allowed them to compare their performance with their peers. Sari commented on how these entertainment activities were unusual and unprecedented during his interview, indicating that he and his peers were emotionally engaged in their classes and experiencing something new (see the excerpt below from Sari's interview).

(Sari interview. Intervention group)

***Me**: OK, you mentioned that you enjoyed the activities that involved electronic games. How fun do you think it was? Does it make a difference to you whether the activities are paper-based or electronic?*

***Sari**: In fact, it was another new method of learning, and it was not like the usual learning from a textbook and paper. I had never seen anything like this before. The activity was educational and at the same time entertaining, and it also had a sense of competition about winning first place, which is something fun, enthusiasm and competition.*

Based on the participants' comments, it appears that they were satisfied with the new learning experience, as evidenced by their optimistic descriptions. This suggests that they may have experienced the Flow state, as they were emotionally engaged by enjoying the experience. The Flowing theme is about the confidence and comfort that learners experienced in the study.

6.2.3 Confidence and Comfort

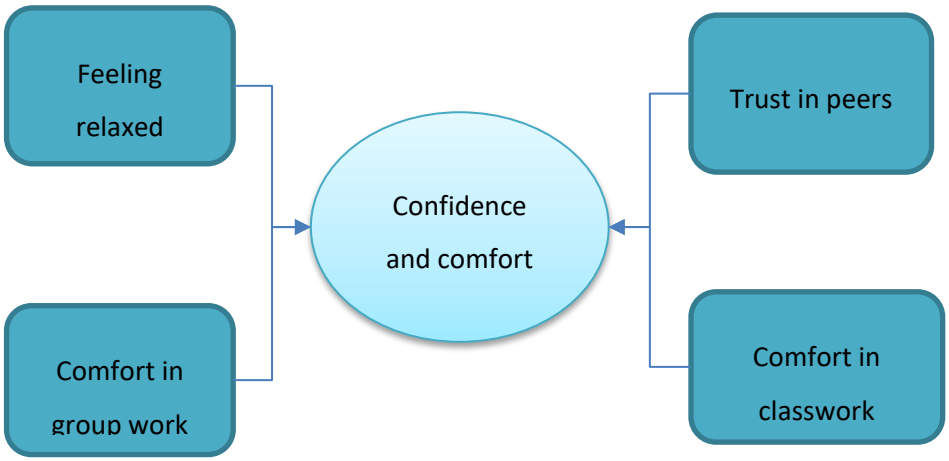


Figure 5-4 The subthemes of confidence and comfort

The students who were part of the intervention group expressed higher levels of confidence and comfort while attending their grammar classes in comparison to the control group, who reported experiencing feelings of anxiety and discomfort (as indicated in the figure above). Almost half of the intervention group students claimed to feel confidence and comfort during their classes, both when working individually and collaboratively with their peers. I also observed several instances in my observation fieldnotes where members of the intervention group demonstrated confidence, whereas no such examples were observed among the control group. The participants in the intervention group were observed to be confident, relaxed, and fearless of being misunderstood when expressing their ideas and responses during their grammar sessions. For example, in week five, the participants were grouped together to complete tasks on the topic of "Passive Voice and the Passive Modal Auxiliaries." They interacted with each other confidently, sitting in close proximity and engaging in joyful discussions that demonstrated their mutual comfort and confidence while working together.

(Observation fieldnotes. Week 5. Intervention group)

> *"They sat close to each other... Everyone speaks to each other a lot (confidently)... They had a sense of humour during their conversation… they looked to be happy (comfortably) while doing their task work together… All group members talked to me about what they thought of their work, no matter if their opinions were different; they all talked."*

Additionally, learners in the intervention group disclosed their confidence in many incidents during their experience in grammar classes, compared to other classes where they seemed to be less confident. This increase in confidence was due to their exposure to pre-class content, such as reviewing video clips beforehand. Regarding their talk during the interviews and voice messages, the pre-class materials helped in accelerating their confidence in the content so that they come to class with a sense of being able to do work in a relaxing learning environment. (See the excerpt below when I asked Ahmed if the review of material before the classes would make a difference to him or not, as if there were no materials in advance to review.) He replied that reviewing the content in advance had made him confident in the classes, and this resulted in engaging with the topic in a relaxed learning context (see the excerpt below form Ahmed's interview).

(Ahmed interview. Intervention group)

> ***Me**: Does this mean that when you come to class and watch the video and complete the blackboard activities, or when you come to class for another subject and there are no videos and no blackboard activities? Do you think this makes a difference?*
>
> ***Ahmed**: We certainly have examples, such as in the writing classes. We enter the lecture with no knowledge of the subject. The teacher directly.... However, in this class, I watch a clip before the lecture and come to the class with confidence. The evidence of that is that when the grammar class has finished, I usually don't have questions because everything was fully understood by me, and I am now ready for the next topic, while other subjects still have questions that are usually unanswered after each lecture.*

Several other students expressed feelings of ease and comfortable while collaborating with their peers in class. They reported that they did not experience any anxiety about providing incorrect answers or failing to complete tasks. As a result, they felt satisfied and not burdened to get everything right on the first try, and they were willing to try again without giving up (see the excerpt 1 below as an example of a voice message received from Raied stating that he was no

longer stressed and was no longer afraid of making errors at classes during his work.) This was evident when students reported their chance of working with peers compared to working with the teacher alone. They said that if they just spoke with their teacher, they would hesitate and feel worried, however when they mostly discussed and worked with peers, they felt at ease and comfortable (see excerpt 2 below of the Fayez interview when he mentioned his preference for working with peers rather than teacher).

(Excerpt 1. Raied voice message. Week 1. Intervention group)

> *"My experience in the class today in the grammar subject was beautiful and enjoyable. It was the first time I didn't feel tense or worried about making a mistake... My experience is very beautiful, honestly."*

(Excerpt 2. Fayez interview. Intervention group)

> ***Me**: You mentioned that when you work in the group and consult with your peers, you feel more comfortable than when you ask the teacher directly?*
>
> ***Fayez**: This is true because, as you know, sometimes the teacher has some prestige, unlike when he is a student, and the student is also your mate. It will be more comfortable and flexible for peers to discuss with him rather than with the teacher.*

The participants' increased confidence was reflected in their trust in their peers. Some members of the group reported relying on their peers' efforts and ideas, demonstrating their faith in their classmates. They mentioned that when they struggled with understanding something, they turned to their peers for assistance instead of seeking guidance from the teacher, who is typically viewed as the primary source of support for learners. During an interview with Sultan, he frequently praised the value of working with peers and expressed his confidence in their knowledge and abilities while working on tasks (see the excerpt below from Sultan's interview).

(Sultan interview. Intervention group)

> ***I**: Can you tell me more about working in a group that you've mentioned a lot to me?*
>
> ***Sultan**: Yes, I mentioned it a lot because I like it more because... I will give you an example. If I don't understand something, I'll definitely talk to my group, and they'll help*

> *me explain it because there's sure to be someone in the group who knows the solution, so I consult with him and he teaches me...*

In contrast to the intervention group, learners in the control group appeared to lack confidence and feel nervous during their grammar classes. During my observations, only a small number of learners seemed comfortable and confident when expressing their ideas or engaging in discussions, while others were hesitant to contribute or speak with me or their peers. Throughout the interviews and voice messages, the control group participants displayed less confidence and relaxation in their classes. For example, Jaber expressed dissatisfaction with his grammar classes and showed that he struggled to grasp the lessons, which added more pressure on him as he was still at the beginning level of his English studies. When asked follow-up questions, he appeared to have issues with the teaching method rather than the grammar subject itself. When I asked him to explain why, he was unsure but suggested it had something to do with the teaching methods (see the excerpt below form Jaber's interview).

(Jaber interview. Control group)

> ***Me**: Explain to me more when you mentioned that the way you had been taught was not appropriate?*
>
> ***Jaber**: I'm not sure how, but sometimes the instructions became complicated; I mean, it could have been more when we got into the details of a certain grammar rule, so it became complicated and also increased the pressure for me, despite the fact that it appeared simple. The truth is that the teaching makes this difficult because the teacher spent the entire time explaining the grammar lessons in detail.*

Based on the example given, Jaber and other students in the control group appeared to lack emotional engagement in their grammar classes, feeling more pressured than confident during their grammar classes. This lack of confidence suggests that the learners may not have experienced the state of Flow, where their abilities and challenges were unbalanced due to their tension in classes.

Other students were hesitant to participate in class, possibly due to fear of making mistakes or nervousness about speaking in front of the instructor and classmates. For instance, Sami showed a preference for working with peers because it increased his confidence, even when he made

mistakes. However, he appeared to struggle by missing this confidence in his regular classes (see the excerpt below from Sami's interview).

(Sami interview. Control group)

> ***Me**: Why do you think working with peers is better for you?*
>
> ***Sami**: Yes, … and it is normal, and there is no embarrassment when you make a mistake because the number is less. When the entire class hears you and your answer is incorrect, I sometimes hesitate to share my answers because I am afraid that my answer will be incorrect.*

The examples provided indicate that learners in the intervention group were emotionally engaged and able to experience the state of Flow during their grammar lessons due to their increased confidence and comfort while working with their teacher and peers. On the other hand, the control group showed less confidence and less comfort in their grammar classes, resulting in emotional disengagement and a discouraging Flow state among learners during their lessons. The upcoming theme will explore deeper into when learners found their experience in grammar classes enjoyable.

6.2.4 Enjoyment and happiness

Even though grammar classes were not generally preferred for many English language learners, learners in the intervention group showed their enjoyment and happiness throughout their classes. Some students reported that they enjoyed the classes because they appreciated the way they were taught in the lessons, which led to their enjoyment of classwork and collaboration with peers. As long as they enjoyed the grammar lessons, they demonstrated their happiness during the class time as they were excited to do the class work. In contrast, participants in the control group reported being bored in class owing to the teacher's dominance, the repetition of the same routine in every class, and the method they were taught. Only two participants in the control group showed that they enjoyed and were excited about the classes, citing their enjoyment of the grammar lessons and their happiness with the teaching methodology. This was based on how much they liked hearing the teacher explain the target grammar in detail and how likely they were to only talk to the teacher and not their classmates. The following excerpts demonstrate instances of enjoyment and happiness among the intervention group, as evidenced by their interviews and voice messages, as well as one example from the control group who experienced

the enjoyment in classes. Conversely, the extracts provided by the control group predominantly suggest boredom experienced during grammar classes.

Fourteen participants in the intervention group expressed their enjoyment with the grammar classes by giving the advantages to the teaching approach used in these classes. They perceived the classes as unique and distinct from typical classes, which made each lesson different from the last. One of the participants, Sari, praised the grammar classes in his interview and described them as enjoyable. He was impressed with the variety of activities and experiences offered in the classes, which he did not find in other classes (see the excerpt below from Sari interview).

(Sari interview. Intervention group)

> ***Me**: Let me first ask you about your experience in the grammar class today and the previous grammar classes. Describe your feelings and how the class went.*
>
> ***Sari**: Okay, the classes that I had with you, honestly, for me, it was fun, like the teaching in the classroom. Even when I go back home and review things like the video clips before the classes, I feel comfortable and happy. Even in the class, the way I had learned was interesting and beautiful.*
>
> ***Me**: Can you explain to me more when you mentioned that it was fun for you?*
>
> ***Sari**: It was interesting because there were changes in lessons and tasks. Like in the last class, we had an electronic game activity, which I honestly liked more.*

Based on his description, Sari enjoyed his grammar classes, citing his enjoyment of various tasks and activities such as website exercises. He was particularly delighted when he had the opportunity to review videos on the target grammar before class, which heightened his enthusiasm. During the classes, he found the teaching approach engaging, as it involved a range of activities. This suggests that Sari was not only emotionally engaged but also experienced a state of Flow, as he found pleasure in the pre-class and in-class activities.

When describing their feelings throughout classwork and peer collaboration, participants in the intervention group emphasised how much they enjoyed the grammar lessons. According to their descriptions, they loved participating in the activities and completing the tasks, and they said that time flew by so quickly in class. Several participants enjoyed them since they were unique and unlike activities they had previously involved in, such as textbook tasks, in which they were

fascinating and not bored. A participant, for instance, described his experience as interesting and delightful, and he placed more importance on the quality of tasks and activities when he described them as interesting and enjoyable (see the excerpt below from Faris' voice message).

(Faris voice message. Week 6. Intervention group)

> *"Based on what happened in class today, the class was interesting and the way the target grammar was taught changed in a good way. What made these interesting things that there were changes for the activities and tasks such as the electronic learning activity when we scanned the QR code on the board using our phones. It was very interesting and beautiful too. The things that made it fun was that you can see your position in the game which might be you are the first or second one. This draws attention and make you excited to finish the the activity in the first place."*

In these activities, students utilized their mobile devices to scan the QR code displayed on the board, allowing them to log in to the Nearpod website and participate in a game with their classmates. Faris demonstrated pleasure while engaging in this class activity such as the electronic learning activity, suggesting that he was emotionally engaged and experiencing a state of Flow. Another indication that they were emotionally engaged and experiencing a state of Flow in their grammar classes is their perception that time passed quickly.

The preceding example demonstrated that students were so engaged in class activities because they were both enjoyable and competitive. There were numerous other instances of the intervention group participants demonstrating their enjoyment and happiness during their experiences in the grammar classes, but space constraints prevented me from providing details. On the other hand, the control group expressed that they found the grammar classes boring, except for two individuals who enjoyed them because they preferred following to their teacher's guidance for grammar explanations and engaging in class discussions only when prompted to respond to textbook activities or share their thoughts on a given scenario. As an example, Hamzah was more interested in the grammar classes than other subjects, and he reported many times through his interview that he enjoyed the classes and that made him not notice the time as it went so fast (see the except below from Hamzah interview).

(Hamzah interview, Control group)

> ***Me**: Ok, now let's move on to the other question. Tell me about the time in the classroom. In terms of the explanation and doing the tasks and activities, do you think it was enough?*

> ***Hamzah**: In terms of time... I did not feel the time at all, unlike other subjects in which I was always looking at my watch, hoping to finish the classes, and I don't want to explain why. However, in the grammar classes, I never felt rushed at all. At the beginning of the class, I look at my watch and suddenly see that the time has ended, so I feel that I was enjoying myself so much that I did not feel the passage of time in the classes.*

Hamzah was very engaged and interested in his grammar classes, as was evident in his involvement in classes and in my observation fieldnotes. His keen interest and motivation to learn grammar was a clear indication of improved his emotional engagement and experience of the state of Flow. He was so motivated in his grammar lessons that he lost track of time, which he described as passing quickly in comparison to other subjects. The remaining students in the control group showed boredom and distraction in their grammar classes. The majority of students were dissatisfied with their classroom instruction, such as when the instructor spent most of the class time explaining target grammar from the projector or textbook. Many of them mentioned the teacher's dominance in the classroom, which limited their involvement and discussion opportunities. This caused a large number of students to lose interest in learning grammar in classes. Others were likely bored in class owing to the regular nature of each lesson, since they were constantly required to listen to the teacher's explanation and contribute if they were asked. During an interview, Shaie, a student in the control group, expressed his dissatisfaction and boredom with the grammar classes. He attributed this to the teacher-centred approach to learning, which left him and his classmates with minimal opportunities for participation in class discussions (see the excerpt from Shaie interview below).

(Shaie interview. Control group)

> ***Me**: At the beginning, tell me about your experience in grammar class today and in previous lectures. How was it? How did you feel about this experience?*

> ***Shaie**: In the beginning... The explanation was good, but I felt bored many times because there was nothing new. I mean, I sat in the class and listened to your explanation of the target grammar, then we did the tasks and left the class. I sent you a voice message, and I explained to you frankly that I did not understand anything, and I would like to raise my hand so that I can ask and let you re-explain, but I have more than one question, so I cannot ask you all the questions, so I decided that I would not ask you, and if I went home, I would read about the grammar by myself and look at YouTube to see if someone explained it.*

***Me**: Why did you think you couldn't ask questions in the classes? Is there a problem when you want to ask?*

***Shaie**: That was because you continued to explain the target grammar and never stopped. So, there is no space for the students to ask, and I fear that the students will also get tired of the many questions I ask, and you will repeat the same explanation, which may be understood by them but does not make sense to me. So I took into account their feelings.*

***Me**: Can you explain to me what you mean when you mention that I did not stop in the explanation?*

***Shaie**: I mean, I mean you took a long time to explain the lesson and moved from one point to another, or one rule to another, and I'm not saying you're bad.*

Shaie's emotional disengagement during his grammar classes was evident, as he often expressed boredom and dissatisfaction. He struggled to understand the grammar lessons and had many questions to ask but felt that he didn't have the opportunity to share or discuss these queries with his teacher. Furthermore, Shaie believed that the grammar lessons were too difficult for him, given his limited skills in the subject. As a result, he and other students who shared his complaints were not emotionally engaged, which led to an anti-Flow state characterized by dissatisfaction and a sense of being overwhelmed by the challenging topics in grammar.

6.2.5 Summary of emotional engagement themes

According to the data above, learners in the intervention group developed strong relations with their peers and teacher, which led to increased emotional engagement in their grammar classes. This was in contrast to the control group, who did not establish such relationships and, as a result, became emotionally disengaged. Additionally, the learners reported that they felt differently towards the intervention as they found it enjoyable and stimulating to engage in diverse activities and tasks that were both entertaining and educational. This resulted in an enhanced emotional engagement and a feeling of being in a Flow state, where they were immersed fully in the experience.

Furthermore, the learners in the intervention group demonstrated greater confidence and comfort in their grammar classes, likely due to their trust in their peers, comfort with group work and class activities, and a sense of relaxation and calmness. This led to an enhanced emotional

engagement in their lessons and a feeling of being in the Flow state, where they felt capable of overcoming challenges with their grammar skills. On the other hand, the control group displayed a lack of confidence and comfort in their classes, which resulted in increased anxiety. Therefore, this led to decreased emotional engagement and an inability to experience the Flow state during their lessons due to their negative emotions.

The intervention group consistently experienced enjoyment and happiness during their grammar classes, which was attributed to the teaching approach and the natural activities they engaged in. This positive feeling experience led to a greater emotional engagement with the lessons and the incidence of the Flow state for learners. On the other hand, the control group reported feeling bored and dissatisfied with their classes, mainly due to the teaching method, teacher-centred learning, and repetitive lesson routines. However, two individuals in the control group found enjoyment in their classes due to their personal preferences for studying grammar, such as their preference for teacher instructions and explanations. Thus, the lack of enjoyment in the control group led to decreased emotional engagement and the experience of an anti-flow state. The following section of this chapter will probe into additional themes regarding the cognitive engagement and state of Flow experienced by learners.

6.3 Cognitive engagement themes

In this section, I will reveal the cognitive engagement themes that emerged from the data collected in the various research instruments: observations, interviews, and voice messages after classes). The results showed that there were a variety of cognitive engagement instances among those in the intervention group, but relatively few in the control group. Each primary theme of cognitive engagement in the intervention group will be accompanied by counter-themes of disengagement in the control group. The primary themes, along with their associated subthemes, are: a) the pre-class cognitive engagement with materials and topic, b) explaining to each other, c) making connections with the target grammar, d) comprehension, and e) going beyond the requirements of the tasks (see Table 5-6 below for more information) and (Please also refer to Thematic Analysis (Coding procedures) on how themes were established).

Table 5-3 Cognitive engagement themes and their subthemes

The main themes	The subthemes
1. The pre class cognitive engagement with the materials and topic	- Thinking about the lesson a day before. - Focusing on areas of confusion before class to better understand during class - Initial comprehension of the target grammar before the class
2. Explaining to each other	- Requesting clarification from peers and teacher - Asking 'why' questions - Involvement in open discussion
3. Make connections with the target grammar	- Explicit and implicit connections between the pre-class online and class work - Explicit and implicit connections between the new grammar structures and previous ones - the capability to connect the new grammar to future lessons
4. comprehension	- Making efforts to comprehend the grammar - Making attempts to overcome any difficulties they encountered Strategies to enhance their comprehension of the grammar.
5. Going beyond the requirements of the task	- Seeking information from additional sources - Paying attention to other language skills

6.3.1 Pre-class cognitive engagement with materials and topic

This theme refers to the mental strategies used by learners when they transitioned from reviewing online content to face-to-face learning in grammar lessons. Data from interviews, observations and voice messages showed that learners in the intervention group were prepared for the grammar lessons after reviewing the online materials before class, by watching the videos and doing the blackboard activities. This happened when students brought their notes and

thoughtful questions to class for discussion with the instructor and their classmates, which may indicate their mental preparation before the classes. Many other students in the intervention group were attentive to their misconceptions which they discovered while reviewing online materials. They further focused on these during class work through group discussions while working on tasks. Additionally, others stated that they had a basic comprehension of the target grammar based on what they recalled from the online review before class. They then applied this new knowledge in depth in their classroom work. In contrast, learners in the control group, who were assigned homework to complete at home after each class instead of the pre-class materials, did not report evidence of their cognitive engagement after completing their homework. The following are selected excerpts from the participants in the intervention group who experienced the cognitive engagement with the topic before class.

To begin with Ahmed, as an example, he was describing how he was cognitively engaged with the material before class by making notes, asking thoughtful questions, and thinking about it all day before the class (see the excerpt below from Ahmed's interview).

(Ahmed interview. Intervention group)

> ***Me****: You mentioned that you understood nearly 50 percent of the video before the class. Did you find the video to be well-designed? Can you explain why you thought the video was exceptional?*
>
> ***Ahmed****: Because after you watch the video and before you come to the class, you make notes and inquiries to bring with you, and these questions will be answered to you in the class. So the information I was looking for will be clear in class... As for me, I had questions and was thinking about it all day before the class, wondering how this grammar rules could be and what was the right thing to do, and after the class, all my questions became meaningful to me. And this will definitely help me understand the grammar and will stick in my mind. This was a good thing that happened to me because I was always asking myself questions about the target grammar and thinking about how it became like this and why this sentence became like this. After attending the class, I asked the teacher and my peers to help me understand it better, and they always explained it to me in detail so the information became clear and understood.*

This example shows that Ahmed was cognitively engaged with the target grammar as he was actively seeking out information and trying to understand the material before the class even began. Along with the signs that Ahmed was engaged, it was more likely that he was in a

moderate state of Flow while doing online tasks, like reviewing a video. This occurs when he mentioned that he had questions, brought notes to the class, and thought about them before the class began. In this scenario, he was trying to enhance his skills in the target grammar to overcome difficulties that he faced on the task. Once these questions and inquiries became meaningful and relevant to him during class, his abilities (skills) improved to match the challenge of the grammar tasks. In this moment, the balance of skills and challenges increased Ahmed's opportunity to experience the Flow in his class.

My observation also provided evidence that learners were perhaps cognitively engaged with the topic before the classes when they reviewed the materials. This was evident when they came to class with their notes and questions to discuss what they had seen in the videos, such as during the lesson on the adjective clauses (see my fieldnotes below from my observations in the week 6).

(Fieldnotes. Week 6. Intervention group)

> *"Students raised questions on video reflection at the beginning of the class… They asked many questions, e.g., why do we use "who" or "that" in all sentences? …. Are "markers" subjects in the sentences? .... What is the difference between dependent and independent sentences?"*

In the above example, the students were questioning the video they watched before the class. The questions being asked by the students were related to the grammatical structures and their usage that were covered in the face-to-face class. The students were seeking clarification on the use of certain words such as "who" or "that" in sentences, whether they are considered the subject in a sentence, and the difference between dependent and independent sentences. This shows that the students were cognitively engaging with the material and seeking clarification on specific grammar words, in order to enhance their critical thinking and deepen their understanding. The use of markers *'who and that'* in the sentences proved to be difficult for many students as they replaced the subject pronouns, which was evident by the questions they had about it. This illustrated their cognitive engagement with the grammar structure when they watched the videos prior to the class. This also demonstrated their attempt to enhance their understanding of grammar rules and dispel misunderstandings that arose from online reviews. As a result, they achieved a sense of balance between their skills and the challenges of grammar, which allowed them to enter a state of Flow.

Furthermore, the learners of the intervention group stated that they paid more attention to things they didn't fully understand in the online content, which had a positive effect on their comprehension of the target grammar. This was made clear when they mentioned that they were able to retain the information they saw in videos and apply it and pay attention to it in class. According to their comments in the voice messages, this method of processing information helped them to achieve a deeper comprehension of the target grammar and made it more relevant to them in class. Basim from the intervention group commented, for instance, that he had difficulty understanding certain points in the video but was able to comprehend them better after concentrating on them in class (see the excerpt from a participant in his voice message after class).

(Voice message. Week 3. Intervention group)

> *"… And the thing that caught my attention was that in the video there were points in which I had a problem, but I paid attention to them in the class, and I mean, it became clear to me why they were in the video clip in that way. It means a new and very good way, honestly, and I hope these videos become part of every lesson. This is the thing that caught my attention the most in today's class… "*

Basim found the video to be beneficial in his comprehension of the grammar lesson. He stated that there were certain aspects of the grammar topic in the video that he initially struggled with, but that he was able to pay attention to them during class and gain a better understanding of why they were presented in the way they were in the video. His concentration on what he didn't understand beforehand demonstrated his cognitive process both before and during class when he focused more on comprehending them. Concentrating on a task also is highly predictive of the existence of Flow for the learner, as it eliminates distractors and irrelevant thoughts that disrupt Flow. Thus, in this example, the learner was in a state of Flow because he was giving his full attention to the tasks.

Other participants reported that reviewing the pre-class videos was beneficial because it gave them an idea of the grammar structure, even though the videos did not provide detailed information. This helped them to remember and understand the grammar better before the class began. The intervention group's learners demonstrated cognitive engagement with the online materials through their ability to grasp a broad understanding of the grammar topic, as indicated by their ability to retain information. For instance, Raied stated in an interview that watching the videos provided him with an overview of the grammar structures, it was not meant to provide detailed information, but rather to give him a general understanding of the form of the grammar

before class. Therefore, reviewing the online materials to obtain an overview of the target grammar indicated his cognitive engagement with the topic before the class (see the excerpt below from Raied's interview).

(Raied interview. Intervention group)

> ***I****: No. I need your experience in person, not from your classmates.*
>
> ***Raied****: Personally, I saw the video. The video spoke in general, saying that the grammar formula is like this, and if one wants to focus on the clip, he may not understand much, but it remains that he gets an idea of the form of the target grammar before the class begins. As I mentioned, the last grammar formula was difficult and needed more focus and understanding. But the video did not explain the target grammar explicitly in detail, such as when the sentence is in the simple present, and you want to transform it into the following form, you need to add is or are, or if the sentence is in the simple past and you want to change it into the following form by adding was and were. However, it was explained to you in general that the grammar sentences change, but the main point is that you have a clearer picture of the topic rather than coming to class with no knowledge of the topic.*

The preceding examples demonstrate the learners' cognitive engagement with the materials and topic before class. In addition to this, they experienced a state of Flow by focusing on grammar rules before and during class to improve their comprehension and skills to meet the challenges of the tasks. The subsequent theme is learners, particularly those in the intervention group, explaining to each other for comprehension during class time.

6.3.2 Explaining to each other in class time

This theme implies that participants engaged in exchanging and sharing information or concepts with the purpose of enhancing mutual understanding. It means taking steps to explain, expand on, and give a possible explanation of grammar lessons in order to help peers understand them better. Data from interviews, observations, and voice messages revealed that learners in the intervention group were constantly requesting clarifications from their peers, asking why questions while engaged in activities and tasks, and debating incomprehensible grammatical structures with one another. During my observations of the intervention group, I observed students who were engaging in a task that required them to read sentences including adjective clauses and pick two answers from a list that best expressed the ideas in the sentence. This task

required students to understand the meaning of sentences in order to choose the appropriate ideas that represented sentences. To comprehend the meanings, learners must carefully read sentences using their knowledge of adjective clause use that they learned from the online materials before the class and elaborated on in depth in the class (see my fieldnotes below in week 6 for the intervention group).

(Observation fieldnotes. Intervention group)

> *"Group D.*
>
> *Participants were involved in task discussion, and one of the learners raised his hand and requested clarification from me. When I arrived, he asked about the meaning of the word "veterinarian," and before I could respond, he remembered that "who" defines nouns, and he nodded and did not even look at me! He turned back to his peers and explained to them what veterinarian meant by explaining how he recognised its meaning from the marker "who" in the adjective clause. I walked away saying yes, and he continued talking to his peers and not to talking with me."*

In this situation, a student sought clarification from me as his teacher about the meaning of the word "*veterinarian*" after debating with his peers about the sentence. Before I had the chance to reply or engage in conversation with him, the student remembered that the word in question was linked to the adjective clause lesson and realised its meaning by employing his metacognitive strategies. He reflected on what he had learned about adjective clauses in the grammar lesson. He then turned back to his group and continued discussing the topic with them, suggesting that they were debating together to gain an understanding of the word meaning. In this instance, the students were cognitively engaged in the group activity, participating in discussions and seeking guidance from the instructor. This showed that their attention was directed towards comprehending the meaning rather than just finding answers. Furthermore, their focus on the task indicates that they were in a state of Flow in addition to being cognitively engaged.

The control group participants, on the other hand, mainly relied on asking me as their teacher factual questions, usually in the form of "what" questions, in order to complete tasks or check their answers. For instance, some students asked direct questions like "What is the difference between 'who' and 'that'?" in the adjective clause lesson. Others approached me during break time to verify their answers or fill in missing answers in their textbooks. One student repeated this behaviour twice in the same break. I did not observe any instances where control group learners were asking higher-level, critical thinking questions or exhibiting deep thinking, except for one

instance that occurred during a class when a learner engaged in a debate with me about the use of "although" and "even though," which demonstrated his deep thinking for that lesson. During my interview with Abdul from the control group, he was referring to the situation between me and his classmate, expressing his admiration for the conversation between us and wishing that it would happen more frequently in class. He was describing the situation that occurred during a class where a student disagreed with my answer of using 'though' and 'even though' and there was a back-and-forth exchange between the student and me (see the excerpt below from Abdul's interview).

(Abdul' interview. Control group)

> ***Me****: What was your reaction during the last class when I thoroughly went over grammar rules and also paid attention to your classmates' answers? Did you feel you were constantly engaged in the class or did you not actively participate or have difficulty speaking?*
>
> ***Abdul****: Yes, I remember a moment during class when a student sitting in front of me disagreed with your answer and there was a back-and-forth exchange. Personally, I see this as a positive thing. Even though the student had a different perspective, it helped solidify the information for them. Honestly, I still remember the answer and the discussion. I think it's beneficial to have open discussions and allow for differing perspectives, rather than having a teacher just give one answer and not allowing for any further discussion.*

The learners in the intervention group showed a greater focus on deep thinking and comprehension through their involvement in group classwork and discussions. They were observed to engage in active discussions and debates with their peers, and this was also evident through interviews and voice messages. For example, Rayan reported that he asked his groupmates for explanations of grammar rules that he didn't understand and that this helped him to better understand and remember the target grammar. Additionally, he also emphasised that he was not the only one who asked for explanations, but that his groupmates also asked for his explanations, which further aided in their understanding and retention of the grammar rules (see the excerpt from Rayan in his voice message after class).

(Rayan voice message. Week 5. Intervention group)

> *"… Even if you don't understand, I'd ask my classmates to explain why this sentence grammatically becomes that way. They explained to me how it became like that. When*

they explained it to me or asked me to explain it to them, both ways helped me understand the grammar formula better and remember it for a long time. This is because I will keep remembering what we explained to each other as I explained it to my classmate, and even for him, he explained it to me more while we were working in groups... "

Mahmoud, another participant of the intervention group, spoke about his experience with group work in the classroom, citing the sharing of explanations to each other in their grammar classes. He mentioned that working in a group helped him a lot in understanding the grammar rules, specifically the lesson on passive sentences. This shows that during group work, Mahmoud and his classmates provided explanations to one another during their works in group, indicating their cognitive engagement in their grammar lessons (see the excerpt below from Mahmoud's interview).

(Mahmoud Interview. Intervention group)

***Me**: Regarding group work in the classes. Can you describe your experience? How did you feel during your work in groups?*

***Mahmoud**: Yes, working in a group, for example, if you remember the lesson on passive sentences that we had in class. I was not fully aware of its formula at that time, but when I asked my classmates in the group, they used to explain it to me, and I also explained it to them if they asked me about things that I knew, and honestly, this is something that helped me a lot in the class.*

***Me**: Can you please explain to me more about the kind of help that you mentioned for me in your group?*

***Mahmoud**: I mean, the thing that I did not understand from the video or in the class, such as "the passive in present perfect," so I asked my groupmates to provide me the answer and explain how it became like this, and even if I did the task correctly, I asked my groupmates to make sure.*

The preceding instances showed how participants in the intervention group obtained advantages of asking each other for explanations which indicated their improvement in cognitive engagement during their grammar classes whereas this did not appear in the control group. The next section will focus on how participants made connections to their learning of new grammar rules.

6.3.3 Make connections with the target grammar

This theme refers to the process of relating new grammar rules and structures to previously learned ones in order to apply it to different use. The qualitative data indicated that a small number of learners in both groups who explicitly reported their using a strategy of making connections while learning grammar, with five participants from the intervention group and one participant from the control group demonstrating this ability. Other instances of participants' connection-making strategies were implicitly interpreted during their interviews and voice messages after classes, even though they may not have been explicitly stated during their discussions. An example would be Sultan, who was from the intervention group, explaining how he enhanced his understanding of grammar rules by watching the video and actively participating in classroom discussions. Sultan was able to connect what he had learned prior to the class with the grammar topic discussed with his peers during the class, even though he did not explicitly state this in his voice message (see the excerpt below Sultan's voice message).

(Sultan voice message. Week 4. Intervention group)

> *Today's class was important, particularly for the grammar rules covered today. Initially, I had difficulty understanding the grammar rules by just reading the book, however, after watching the videos on Blackboard, my understanding improved by 50%. But, after attending the class and participating in group discussions, my understanding of the grammar rule became clear, as they were able to correct my previous misconceptions through the discussion with my peers. Finally, I hope that this method of learning will continue in the future.*

Others explicitly reported their ability to use the strategy of making connections with the target grammar. The extent of this connection varied; some made connections between what they had learned before the class and what they did in the class, like in the example above. Others made connections between what they had learned in previous lessons and the new target grammar they were currently learning. Both ways, regarding participants' comments, helped improved their understanding of learning the target grammar. As evidence of using the strategy of making connections with the grammar, an example was provided through an interview with a participant from the intervention group named Raied, who reported explicitly making these connections when he was learning grammar, demonstrating his cognitive engagement in grammar classes (see the excerpt below from Raied's interview).

(Raied interview. Intervention group)

> ***Me**: Ok, describe to me your feeling when you are coming to class after you have reviewed online materials such as the video.*
>
> ***Raied**: Yes, my feeling was different when I attended the grammar classes…. particularly when I entered the class and began to understand the grammar rule and begin to connect it with the previous grammar rule. I asked myself, "Is this related to the next lesson, or is this something new to me?" For example, the last grammar formula that we took was all about the rules that I learned before. This thing made me comprehended the target grammar in the correct way.*

Raied above described his experience of attending grammar classes and his realisation that the grammar rules he was learning were connected to previous rules he had learned. He also expressed a sense of curiosity and self-reflection, questioning the relevance of the current lesson to future lessons, which indicated another connection he would make between the new grammar rules and the next ones. He believed that he was on the right path by doing that, as it helped him understand the grammar rules better. Overall, his ability in making connections with the grammar, demonstrated his cognitive engagement in the grammar classes.

Zamil was the only one from the control group stated that he was making connections with the grammar rules between classes. He said that he enjoyed the teaching method used in the grammar classes, which helped him connect between the grammar lessons. No further explanation was given for Zamil's ability to make connections, suggesting it was a result of the teaching method he described. The student here in this example displayed his capability to connect grammar lessons, demonstrating his cognitive engagement in the grammar classes (see the excerpt below of the voice message from a control group participant).

(Zamil's voice message. Week 1. Control group)

> *"The class was very good, especially because the method of teaching… and I liked the way of moving from one lesson to another that allows me to easily connect between lessons."*

The previous instances demonstrated that students in the intervention group had a greater ability to connect the grammar they had studied, whereas those in the control group did not exhibit any proof of their abilities in connecting grammar rules, resulting in a negative impact on their cognitive engagement. The comprehension shown by the students during grammar lessons was

another indication of their cognitive engagement. In the next section, I will discuss what the students did to show how well they understood the grammar lessons.

6.3.4 Comprehension

This theme refers to the students' understanding of the grammatical rules being taught in the lessons. Based on the qualitative data, it can be seen that the students made efforts to comprehend the grammar being taught, attempted to overcome any difficulties they encountered, and used strategies to enhance their comprehension of the grammar. Nearly all of the intervention group participants demonstrated their ability to comprehend the grammar lessons compared to the participants in the control group. Only one student from the intervention group exhibited difficulty comprehending the grammar lesson when I interviewed him, specifically with regards to the passive voice topic, as he attempted to connect between different tenses. However, he struggled to maintain his concentration during the lesson. The intervention group's ability in comprehending the grammar lessons coincided with their results on the end of the intervention test, where they outperformed the control group. To start, Ahmed was a student of the group that received the intervention teaching. He mentioned in his interview that he had trouble understanding other English subjects, but in grammar classes, he was able to fully understand the lessons (see the excerpt below from Ahmed' s interview).

(Ahmed interview. Intervention group)

> ***I****: Does this mean that when you come to the class after watching a video and completing the activities on Blackboard, it feels different from when you come to a class for another subject that has no videos or activities on Blackboard? Is there a distinction between the two?*
>
> ***Ahmed****: Certainly, for example, in writing, when we enter the class, we have no prior knowledge of the subject. The teacher immediately begins to explain. As he explains, I feel that I have some questions that I do not understand. Therefore, I have difficulty understanding, and sometimes I cannot ask at the end of the class because the explanation is still ongoing and the teacher wants to finish the explanation completely. This happens in other subjects such as reading, listening, etc. In this class, however, I watch a video before the class and arrive with confidence. The evidence of that is that when the grammar class has finished, I usually don't have questions, and everything was fully understood by me. I am now ready for the next topic, while other subjects still have unanswered questions after each class.*

In the above example, Ahmed was explaining his experience regarding his comprehension of different subjects in the English department at his university. He gave the example of a writing class where he had no prior knowledge of the subject and found it difficult to understand and even ask questions. However, he said that in the grammar class, he always watches a video before class and arrives feeling confident, which allows him to have a better understanding of the target grammar rules. Ahmed stated that he usually doesn't have questions after grammar class and that everything was fully understood, and he feels prepared for the next topic. He emphasised the significance of prior knowledge and being well-prepared for better understanding. He personally experienced this in his grammar classes where watching a video beforehand improved his grasp of the grammar rules and enhanced his in-class performance, demonstrating his cognitive engagement in comprehending the grammar rules. Ahmed also highlighted the importance of the teacher's role in his grammar classes, even though he did not explicitly state it. This was evident when he attributed his lack of understanding or difficulties in other English subjects to the teachers. In addition to Ahmed's demonstration of cognitive engagement in grammar classes, it appears that he also experienced a state of Flow, as he was able to comprehend the grammar topic, which suggests that he had reached a balance between the level of his skills and the challenges of the tasks.

Salem, who was part of the control group, expressed his struggles with comprehending grammar rules during class. He shared that he had difficulty understanding the teacher's explanations, which highlighted the challenges he faced in his grammar classes (see the excerpt below from Salem interview).

(Salem interview. Control group)

> ***Me****: First of all, tell me about your experience in the grammar lesson, both in the previous class and even others before. Describe to me your feelings and your overall experience.*
>
> ***Salem****: In general, the atmosphere of the classes was comfortable for me, and information was easily conveyed. However, with some information, I think it's not a problem to say my opinion.*
>
> ***Me****: yes of course*
>
> ***Salem****: But with some information, there can be a problem because I want to talk to someone who can give me the information clearly and give us the opportunity to ask questions. But, for myself, I don't know about others, I want students at the same educational level as me so that I can know how they reached the information and build*

upon the same approach. For example, I remember before one or two classes, the problem was with me. I tried to understand the information, and your delivery of the information was good, and there was no problem, but I didn't understand it because I didn't know how to reach it precisely. When you participated or when the student next to me participated, I understood how they reached the information precisely, and here I was able to receive more information. Therefore, if there were group discussions, it would be better.

Salem's example above illustrates his struggles with comprehending grammar lessons, which hindered his cognitive engagement. He also mentioned that the teacher's instructions in class were particularly challenging for him, and he would often have discussions with his peers to ensure they were all on the same level and could work together to improve their grammar skills. Despite his attempts to balance his skills and the challenges presented by the grammar lessons, he found it difficult and ultimately misunderstood the topic, which hindered the experience of Flow and resulted in disengagement.

Learners also utilised a strategic approach to comprehend grammar lessons, which involved taking a deliberate, thoughtful approach to learning grammar instead of simply memorising rules. Data from interviews and voice messages revealed that the intervention group learners were more strategic in their learning, starting with reviewing pre-class materials and engaging in thorough classwork. This strategy was found to be less prevalent among learners in the control group with the exception of three students who demonstrated of being strategic in their grammar classes. The intervention group learners came to class with questions and notes from their pre-class review to clarify misconceptions. They also used class time to enhance their understanding through peer discussions in groups. In contrast, the learners in the control group only used textbooks as a means of expanding their understanding in grammar classes. In an interview, Mahmoud, a participant of the intervention group, revealed that he had difficulties with grammar in the past but found the grammar classes this semester to be more beneficial because of the use of pre-class online materials (see the excerpt below of Mahmoud's interview).

(Mahmoud Interview. Intervention group)

***Me**: Did this change your feelings when you came to the class? And how?*

***Mahmoud**: I felt compelled to attend the lecture because there were things in the pre-class video that I wanted to inquire about, so I wanted to ask both the teacher and my classmates for clarification. The pre-class content generated many questions for me, and*

attending the lecture was necessary in order for me to better understand the grammar rules.

***Me**: Can you give me an example?*

***Mahmoud**: Yes. I found the topic of the passive form challenging and had difficulty understanding the usage of auxiliary verbs like "had," "has," and "have" in particular sentences. I wrote down my questions and brought them to class, where I asked both the teacher and my classmates for clarification. This helped increase my interest and enthusiasm for attending the lecture. I realised that there were certain things that were hard to understand through video alone and that attending the lecture and asking questions helped me better understand the target grammar.*

Mahmoud demonstrated a strategic approach to comprehending grammar rules by actively engaging with pre-class video content, generating questions, and seeking clarification through attending class and asking both the teacher and classmates for further explanation. He made a deliberate effort to improve his understanding of grammar by identifying specific areas of difficulty, such as passive perfect tenses, and actively seeking clarification by writing down questions and asking for help. He also acknowledged that some concepts are difficult to understand through video alone and that attending class and asking questions is necessary for full comprehension of the target grammar. The employment of strategic learning by Mahmoud and his peers demonstrated their cognitive engagement in grammar classes, and their efforts to comprehend the grammar rules also suggest that they experienced the state of Flow, as they ultimately attained a balance between their skills and the challenges presented by the lessons.

Other participants in the intervention group also used a strategic approach of discussing the grammar rules with their classmates and then with the teacher to improve comprehension. For example, Fayez reported in a voice message that he became more aware of the target grammar rules by first discussing them with his classmates in a group and then sharing the discussion with the teacher for better comprehension, displaying his cognitive engagement in the classes.

(Fayez's voice message. Week 1. Intervention group)

"…Today's class was an effective method. It made the lecture more interactive, particularly when it came to working in a group, as I had the opportunity to talk and interact with my classmates. For instance, I first discussed this with my colleague and then also with the teacher. As a result, the grammar rules became more solidified….".

The control group had fewer students who demonstrated strategic learning during the grammar classes, with a majority of them attributing the difficulty to the teaching approach, which they felt limited their ability to fully understand the grammar lessons. However, three students reported that they were able to comprehend the grammar rules using their own strategies. For instance, Jaber was more attentive during the exercises because he was actively trying to understand the grammar rule by referencing the book and then applying it to the task at hand (see the excerpt below of Jaber's interview).

(Jaber interview. Control group)

> ***Me**: You mentioned to me that you did not focus on the teacher's instructions, but what about the exercises in the class?*
>
> ***Jaber**: Yes, I think in the exercises I was a bit more focused because in the exercise I was sitting and trying to understand the grammar rule so that I could go back to the grammar rule in the book and try to read it again and then go back and try to solve the problem.*

Jaber used his textbook as a strategic way to comprehend the grammar during the class exercises. This shows that Jaber was being strategic, where he is trying to understand the grammar rule by reading the textbook and then applying it to the exercises, which allows him to understand the grammar rule better and solve the problem. This indicates that Jaber was cognitively engaged in that class.

Another way that students in the intervention group used to comprehend the target grammar but did not appear in the control group was learning from their mistakes and making sure of their correct answers. Fayez, one of the participants, reported that working in groups was more effective than working online. He mentioned that all group members were actively engaged in discussions and provided feedback on each other's answers, which helped identify mistakes and improved his comprehension of the grammar (see the excerpt below from Fayez's interview).

(Fayez interview. Intervention group)

> ***Me**: Ok, since you mentioned the discussions with group, tell me more about your work with the group and the teacher in the class?*

> ***Fayez**: Working in groups made a significant difference for me compared to working online. It was much more enjoyable and all the students were actively participating and discussing, unlike other classes where there was little interaction. In the group, my classmates asked me questions and provided feedback on my answers which helped me to understand my mistakes and improved my understanding of grammar. The discussions were really helpful as I can still remember the sentences and grammar that we had discussed together as a group. It was especially beneficial as we corrected each other's mistakes and arrived at the correct answers.*

The preceding examples showed how learners, particularly who received the intervention teaching approach, made efforts to understand the grammar being taught, tried to overcome any difficulties they faced, and employed strategies to improve their understanding of the grammar. The following section will demonstrate how students went beyond the expected in tasks, revealing their deeper level of thinking during grammar lessons.

6.3.5 Going beyond the requirement of the tasks

Going beyond the required tasks means exceeding the expectations or requirements of a task. This can involve completing additional tasks or activities that are not specified in the original lesson plans. This type of behaviour can have a positive impact on the cognitive engagement of learners. It shows that the learners are actively trying to comprehend the grammar rules and extend their learning. When students take the initiative to complete extra tasks, it can indicate that they are cognitively invested in the learning process, which can result in a better understanding and retention of the grammar rules. Therefore, going beyond the required tasks can be a sign of an increase in their cognitive engagement. Some participants in the intervention group not only focused on the target grammar, but also reported that the videos helped them to develop other language skills such as listening skills and pronunciation, and also improved their English vocabulary.

The participants in the intervention group showed that they were actively seeking out additional videos on the grammar topic on YouTube to expand their knowledge. Ahmed, one participant, mentioned that he was excited about watching additional videos to help further his understanding of the grammar rules (see the excerpt below from Ahmed's interview).

(Ahmed interview. Intervention group)

***I**: Can you tell me how you felt while watching the video and completing the tasks on the blackboard? Were you enjoying yourself or were you feeling bored?*

***Ahmed**: … I frequently search for supplementary videos that provide additional information and illustrations of a specific grammar rule. This is because I often go deeper into the grammar rule to gain a better understanding by examining other examples....*

Ahmed in this example was actively seeking out supplementary videos to expand his comprehension of grammar. He mentioned that he frequently searches for videos that provide additional information and examples of a specific grammar rule, indicating that he was cognitively engaged in his learning because he stated that he delved deeper into the grammar rule to gain a better understanding by examining other examples. This shows that he was not only seeking out additional resources but also using them in a meaningful way to improve his understanding. Ahmed's consistent effort to seek out more information suggests that he was keen on learning and this, in turn, improved his ability to experience a state of Flow while learning.

In addition, participants were asked to view videos and complete activities on the blackboard before attending class. Some reported reviewing the materials multiple times, particularly when watching the videos, even though there were no specific instructions on how many times to watch or complete them. Mo as an example said he watched the video multiple times, and this helped in facilitating his comprehension of the target grammar compared to when he only watched it once (see the excerpt below of a participant voice message).

(Mo voice message, week 5, Intervention group)

"… I benefited more, and I watched the video more than once, and I benefited twice as much. I meant the previous videos I used to watch once I benefited from them by 20 to 30%. Today, I greatly benefited, because I watched the clip more than once, and it made the target grammar easy for me when I came to the class, and I did not face any difficulty understanding the grammar formula in the last lesson."

In this voice message, Mo suggested that by doing extra work—in this case, re-watching videos—he was able to expand his comprehension and understanding of the target grammar. He mentioned that he benefited more than he typically did when only watching videos once, and that he didn't have difficulty understanding the grammar formula in his last lesson. This implies that

exceeding the minimal requirement of watching the videos once improved his comprehension and retention of grammar rules, reflecting his cognitive engagement for the lessons.

The objective of the pre-class material was to refresh learners' understanding of the target grammar and to ensure they were prepared for class and able to actively participate. However, some learners found that they paid extra attention and concentrated on not just the target grammar but also the pronunciation of English words and expanding their vocabulary. One student, Sari, specifically noted that watching a native speaker in a video helped him improve his pronunciation and increase his vocabulary (see the excerpt below from Sari's interview).

(Sari Interview. Intervention Group)

> **Me**: You mentioned that the video made it easier for you, especially when the speaker is a native English speaker. Can you explain why?
>
> **Sari**: Of course, there is a difference because the way he pronounced the words was different, and I will learn the correct pronunciation from him compared to another non-Native speaker. Therefore, you will find that there are incorrect words or incorrect pronunciation, but here in this video, it is easier and clearer for me, and I got new words to expand my understanding of words.

Sari's example is expressing the idea that in addition to learning grammar from the pre-class materials, he was also placing a strong emphasis on learning the correct pronunciation. He notes that there is a difference in pronunciation between a native speaker and a non-native speaker, and that by learning from a native speaker, he was able to more easily understand the correct pronunciation. He pointed out that the video helped him not only with proper pronunciation, but also with acquiring new vocabulary, indicating his cognitive engagement in reviewing the videos. This shows that Sari was paying attention to more than just the grammar being taught, but also to pronunciation and vocabulary.

One student in the control group, Hamzah, reported that when he had trouble understanding the grammar during class, he would go online and look for additional materials or watch videos to help clarify his understanding. He mentioned during the interview that he did this not only for grammar but also for all of his other subjects. He was the only one from the control group who did it (see the excerpt below from Hamzah's interview).

(Hamzah interview. Control group)

***Me**: This thing is inside the class. What about things outside the class? If you have a question or inquiry, will you ask the student or wait until you ask the teacher again?*

***Hamzah**: No, for me, often when I do not understand a certain point, I go to or open the Internet and browse and search for information, or perhaps I watch a video clip or go back to the book, and this thing happens to me daily, and not only in grammar classes; this thing occurs in all subjects.*

In this example, Hamzah was actively seeking out additional resources to help him understand the material being taught in class. He mentioned that if he has a question or is unsure about something, he will go online and search for information or watch videos to clarify his understanding. He also mentioned that this is not just limited to grammar classes, but that he does this for all subjects, demonstrating his cognitive engagement with all other subjects.

6.3.6 Summary of cognitive engagement themes

The qualitative data indicated that students in the intervention group were more cognitively engaged in their grammar lessons. This began with reviewing the pre-class materials and continued during their face-to-face classes when they brought their notes, questions, and concerns to their teachers and classmates for clarification. In addition to being cognitively engaged in the pre-class materials, they were more likely to experience a moderate state of Flow when trying to improve their grammar using online materials and then persisting through challenges in their classes to fully enter the Flow state.

Another indication of learners' cognitive engagement in their grammar classes was their explanations to one another. This was particularly evident in the intervention classes, where they were more inclined to seek clarification from their peers and teachers by asking "why" questions and engaging in debates regarding complex grammatical structures. As they remained fully focused on their tasks and sought clarification, they were more likely to experience a state of Flow in their classes besides cognitive engagement. Conversely, the control group tended to ask more factual questions to obtain answers, indicating a decrease in their cognitive engagement and anti-flow experiences. Only a few of them argued with the teacher, indicating evidence of their cognitive engagement.

In addition, students in the intervention group were more cognitively engaged than those in the control group for example, their ability to use explicit and implicit strategies to connect grammar

lessons. The intervention group students were able to connect their online review with classroom learning, as well as connect previous grammar lessons with new ones.

The learners in the intervention group demonstrated cognitive engagement through their efforts to understand the grammar rules taught to them. They were strategic in their approach to comprehending the grammar topic, reflected in their state of Flow as they worked to find a balance between their skills and the challenges presented to them. In contrast, the control group showed little comprehension in their grammar classes, with only three students exhibiting the ability to understand the material through their methods, such as referring to their textbooks in classes.

Completing additional tasks indicated that learners were cognitively engaged in their grammar lessons. This was particularly notable in the intervention group, where most learners paid attention to other language skills, such as pronunciation and vocabulary, by reviewing online materials, seeking additional information online to enhance their learning, and re-watching videos multiple times. While one student in the control group sought extra information online to improve his understanding of grammar, others did not report doing any additional work.

6.4 Summary of qualitative research results

The collection of qualitative data provided detailed evidence concerning learner engagement components, including the state of Flow among learners. The limited reliability of the questionnaire subsections highlights the persistent challenges confronted by scholars and researchers in defining, operationalizing, and measuring the various dimensions of student engagement (Fredricks, Reschly, & Christenson, 2019).

In relation to the behavioural engagement of learners, it was found that the intervention group displayed more behavioural engagement instances in their grammar lessons than the control group. This was evidenced through data gathered from interviews, observations, and voice messages. The intervention group was observed to participate more actively in their grammar lessons, such as completing tasks more efficiently, whether online or in face-to-face classes. They also exhibited greater attention during their lessons and were less prone to distractions from outside factors. Additionally, their eagerness to attend classes was evident in their enthusiasm to participate after completing their tasks online, which carried over into their face-to-face classes. The intervention group also demonstrated greater mobility within their classes, with the ability to move between groups, switch groups, and choose which groups to collaborate with. Their commitment to their learning was further demonstrated through their willingness to do extra

work, such as searching for more information via the internet or rewatching videos multiple times.

In contrast, the control group displayed limited behavioural engagement or did not engage at all. This was due, in part, to their teacher's selective approach towards learners who participated more often, which reduced their motivation to learn grammar. However, three students in the control group displayed greater participation than their peers, likely due to their individual differences in personality, language proficiency level, and motivation to learn grammar. The control group also expressed difficulties with distractions during their classes, resulting in lower attention levels. They also exhibited lower attendance rates in their grammar classes, except for one student who desired to attend all grammar classes. Additionally, they reported feeling tired and bored from sitting for extended periods during their classes without the ability to move from their chairs.

Regarding the emotional engagement of learners, the findings show that students in the intervention group formed strong relationships with their peers and teacher. They also felt differently towards the intervention as they found it enjoyable and encouraging to engage in diverse activities and tasks that were both entertaining and educational. Furthermore, they displayed high confidence and comfort during their grammar lessons, indicating trust in their peers, a sense of comfort with group and class activities, and a feeling of relaxation in their learning environment. The intervention group consistently experienced enjoyment and happiness during their grammar classes, which were attributed to the innovative teaching approach and the naturally engaging activities in which they involved. In contrast, the control group demonstrated an inability to establish positive relations with their peers or teacher, resulting in a lack of emotional engagement. They also exhibited anxiety during their classes, which negatively affected their levels of confidence and comfort, further worsening their disengagement from the grammar lessons. Additionally, students in the control group frequently expressed boredom and dissatisfaction with their grammar classes, which were attributed to the teacher-centred learning approach and the repetitive lesson routines. However, two individuals within the control group exhibited a sense of enjoyment in their grammar classes due to their personal preference for studying grammar, particularly their preference for teacher instructions and explanations.

Quantitative and qualitative findings show that learners in the intervention group were more cognitively engaged in their grammar lessons. This was evidenced by their mean score at the end of the intervention test, which showed their improvement in cognitive engagement. Additionally, the data gathered from the interviews, observations, and voice messages corresponded to their performance in the test, beginning with bringing their notes and questions when they reviewed

the online materials before the class to seek assistance and clarification in the classes, as well as frequently explaining to one another. The appearance of so many instances of these further indicates their cognitive engagement during their grammar lessons. Moreover, their ability to connect grammar rules within online and in-f2f sessions, and between lessons has increased their cognitive engagement during grammar lessons. Furthermore, their strategic approach to learning grammar comprehension, reflected in their cognitive engagement. Indeed, the learners in the intervention group did not limit their grammar learning to what was required but engaged in additional tasks to enhance their language skills. For instance, they paid close attention to pronunciation and vocabulary, sought information from the internet to enhance their learning, and repeatedly watched videos to enhance their understanding. This suggests that their cognitive engagement extended beyond the lesson requirements.

Conversely, the control group did not show as much cognitive engagement in their grammar classes. They tended to ask factual questions, which minimised their ability to be more cognitively engaged and reflected a decrease in their cognitive engagement, with only a few of them debating with their teacher, suggesting an increase in their cognitive engagement in classes. They complained about the difficulties of grammar comprehension, which minimised their cognitive engagement in classes. Three exceptional students demonstrated they were being strategic to improve their understanding of the target grammar by referring to their textbooks or searching on the internet.

Along with their engagement in the grammar lessons, the learners in the intervention group simultaneously experienced the state of Flow on multiple occasions. Their attention in class was evidence of their behavioural and cognitive engagement, and their immersion in learning grammar further contributed to their experience of Flow. By paying more attention to their lessons, they could enter the state of Flow. Another sign of possibly experiencing the Flow state for the intervention group learners was feeling confident and comfortable in their grammar lessons. This emotional engagement is reflected in their feeling of the ability to balance the challenges and their grammar skills. In contrast, the lack of confidence in the control group, which resulted in increased anxiety for them, made it harder for them to experience the Flow state. Additionally, the intervention group's positive feelings, such as enjoyment and happiness during grammar classes, increased their likelihood of experiencing the Flow state and emotional engagement. On the other hand, the lack of enjoyment and boredom and dissatisfaction in the control group led to experiencing the anti-flow state. However, two of them expressed their enjoyment and interest in classes, which reflected their entry into the Flow state.

In addition to being cognitively engaged with the pre-class materials, the intervention group was more likely to experience a moderate state of Flow when using online materials to improve their grammar skills and then working through challenges in class to enter the Flow state fully. On the other hand, the control group asked more factual questions to find answers, which led to an anti-flow state, while the intervention group had the opposite experience. They remained fully focused on their tasks and sought clarification by asking each other and their teacher. Thus, they were more likely to experience a state of Flow in their classes besides their cognitive engagement. They were also strategic in their approach to comprehending the grammar topic, which was reflected in their state of Flow as they worked hard to find a balance between their skills and the challenges presented to them.

6.5 Discussion of qualitative research findings

The current section presented the qualitative findings derived from observations, voice messages, and interviews. These particular data sources were utilised to address research questions *two, three*, and *four*, thereby enhancing the comprehensiveness of the study. Moreover, the combining of these data serves to validate the understanding obtained from the questionnaires and performance tests, thereby providing a further comprehensive description. The findings from the qualitative data will also be interpreted to answer the remaining research questions. Furthermore, the inclusion of each element included in this section is linked to the existing literature and the theoretical framework described in Chapter Two. The subsequent subheadings within this section have been organised in accordance with the research questions Two, Three, and Four. These research questions are:

RQ2. *How does the pedagogic intervention influence engagement in grammar classes in Saudi EFL learners?*

RQ3. *How does the intervention induce the state of Flow of Saudi EFL learners which then affected their engagement?*

RQ4. *What other factors, in addition to the intervention in grammar teaching, influence engagement in Saudi EFL learners in a Saudi University?*

6.5.1 The implementation of the pedagogical intervention and its impact on learners' behavioural, emotional, and cognitive engagement

This section considers the implementation of the interactive pedagogic intervention, including a flipping content approach, and its impact on the behavioural, emotional, and cognitive engagement of L2 learners. According to Fredricks (2004), engagement is widely acknowledged as a multidimensional construct encompassing behavioural, emotional, and cognitive components. Nevertheless, it is essential to recognise that engagement functions as an interrelated meta-construct rather than an isolated process (Appleton et al., 2006). Consequently, it is common to encounter challenges in accurately classifying certain behaviours within one specific dimension over another (Fredricks, Reschly, & Christenson, 2019), as observed in certain findings of this present study (*refer to section 2.2* for more details). The effect of the pedagogical intervention on learner engagement is examined in depth in this section. The qualitative data were collected to compare and understand learner engagement in both groups, as the learners were taught the

same content in their grammar classes. However, the intervention group learners were exposed to the online tasks related to the content before class and offered a collaborative and interactive learning context in class, providing additional means of group discussion (Novak, 2011; O'Flaherty & Phillips, 2015; Strayer, 2012; Tucker, 2012). Thus, the following sections present a discussion of the research question, '*How does the pedagogic intervention influence engagement in grammar classes in Saudi EFL learners?'.* This discussion is organised around the following three dimensions of engagement- behavioural, emotional, and cognitive engagement- including their themes founded in this study and linked to the existing literature in Chapter Two. The overall findings in this study indicate using a pedagogical intervention through a flipped learning content approach, which incorporated collaborative, interactive, and entertaining tasks, resulted in a notable increase in learner engagement across all three dimensions. The results of this study are consistent with the investigation conducted by Li and Li (2022), which examined learner engagement in intervention classrooms using a flipped approach in different contexts (e.g., Amiryousefi, 2019; Lee & Wallace, 2018; Tran & Nguyen, 2020). Furthermore, these findings in the present study are in alignment with the research conducted by Lo and Hew (2021), who explored the impact of the interventions focused on a flipped and interactive pedagogy on student engagement in mathematics courses by examining studies between 2011 and 2020.

To begin the discussion, the subsequent section will first primarily focus on the findings pertaining to learners' behavioural engagement and then later will discuss findings relating to learners' emotional and cognitive engagement. It is important to note that due to the limited word count in this chapter, cross-references will be utilised more frequently to provide additional details found in other chapters.

6.5.1.1 Behavioural engagement

As presented in the literature and the findings of this study, the potential of using a pedagogical intervention through a flipped content approach to enhance learners' behavioural engagement has been highlighted (Hiver et al., 2021; Li & Li, 2022; McLaughlin et al., 2013; Tran and Nguyen, 2020). Therefore, the interactivity, collaborative group work, the different roles of the teacher, and the various types of activities and tasks in the pedagogical intervention of the current study positively influenced learners' behavioural engagement. The research conducted by Hung (2015) further supports this notion, emphasising that the implementation of flipped classrooms through interactive learning has a significant impact on enhancing learners' participation and fostering a greater dedication of time towards task completion, indicating an increase in their behavioural engagement.

Behavioural engagement, as outlined in the literature, encompasses various indicators such as participation, persistence, effort, attendance, attention, and task involvement (Christenson et al., 2012; Fredricks et al., 2004). Furthermore, the findings from the current study indicated that the nature of movement in classes and going beyond the required tasks, as observed in the intervention group, contribute to other instances of learners' behavioural engagement, and will be described later.

According to Furlong (2003), engagement is classified as a developmental continuum that begins with participation (behavioural engagement) that contributes to personal commitment (valuing learning). Moreover, Finn (1989) and Fredricks (2004) posit that early disengagement, characterised by inadequate behavioural participation, can lead to unsuccessful learning. Consequently, learners seemingly are behaviourally engaged through their participation in learning (Fredricks et al., 2004).

6.5.1.1.1 Learners' participation

The implementation of interventions is widely recognised as a significant factor in enhancing student engagement, particularly with regard to their participation in classroom tasks (Reschly & Christenson, 2012). Similarly, in this current study, learners in the intervention group were observed to participate more actively in their classes. This was linked to the nature of the intervention pedagogy, which went beyond only a flipped content approach, which provided them with greater opportunities to participate in interactive learning tasks, receive affordable assistance from the teacher through their group work, and the collaborative work with peers. In contrast, the control group had fewer opportunities to be involved in innovative and interactive tasks, as they were dependent on exercises in their textbooks where the teacher was usually explicitly taught the rules of grammar instead of acting as a facilitator. In this context of the current study, the pedagogical interactive intervention includes a flipped content approach has demonstrated its effectiveness in fostering learner participation, which aligned with other studies (e.g., Bond, 2020; Choe & Seong, 2016; Gasmi, 2016; Hung, 2015; Lee & Wallace, 2018). In the current study findings, it was observed that the intervention implemented prompted learners to participate more in their grammar classes. Notably, learners exhibited a higher level of participation at the beginning of each class to discuss the video materials and prerequisite online activities posted on Blackboard. This was due to the flipped learning approach featured, which differed from other teaching approaches, such as the traditional teaching approach in the control group (see my observation field notes and also refer to the excerpt of Sam's comment on reviewing videos before the class in section 6.3.1). Thus, this pedagogical intervention approach contributed to an overall increase in their participation during the classes. These findings align

with previous research that has examined the efficacy of flipped classrooms in language learning. For instance, Hung (2015) conducted a study that highlighted the positive impact of flipped learning on student participation in the classroom. Mok (2014) obtained similar findings in which learners in a flipped classroom preferred watching videos and were found to be more engaged in participating in class work.

Removing the lecturing part of teaching from the classroom, as in this intervention used a flipped content approach, naturally allows for extra time for application and collaboration in the classroom (Bergmann & Sams, 2012), which may lead to greater opportunities for learners to participate in classroom tasks within a meaningful learning context (O'Flaherty & Philips, 2015; Touchton, 2015). In the current study, the findings revealed that learners in the intervention group reported more opportunities for them to participate in their classes, similar to what other studies have reported as being effective in creating more space for participation (e.g., Touchton, 2015). This was attributed to the implementation of different tasks and activities, which provided learners with more space to engage in participation through the learning process (as indicated by Fahad and Ramzi in Section 6.1.1).

In contrast to the intervention pedagogy, the control group, which received traditional teaching instructions, demonstrated fewer opportunities for participation. Some learners reported their inability to engage in classroom participation due to the limited space of classes to participate in tasks or missed the interactive and innovative tasks compared to the intervention group (refer to Jaber's comments in the relevant section 6.1.1). There were only three learners who exhibited more frequent participation, and this was attributed to factors other than the instructional approach, such as their individual differences and their different experiences in the role of the teacher in class, as described below in section 6.4. The limited participation found in the control group was primarily attributed to the instructional practices of the teacher, who tended to focus on a select group of students who frequently participated while neglecting others who were less knowledgeable on the topic, as described by the participant Khalid "…this scenario is not good in classes…". These findings are consistent with a study by Storch and Aldosery (2013), which highlighted how teacher instructions can hinder learners' participation in class in ESL learning contexts. As mentioned earlier in the discussion above, the different role of the teacher in the intervention group was an important factor in increasing learners' participation in their classes. This feature was missing in the control group, as indicated by the descriptions of their experience.

Furthermore, the teaching instructions employed in the control group were less likely to capture the interest of the learners, leading to distractions and decreased participation compared to the intervention group. Other individuals in the control group exhibited behavioural disengagement

and had limited opportunities to participate during class (see their comments in section 6.1.1). The findings are consistent with Alharbi's (2014) study, which also concluded that teacher instructions in traditional teaching classrooms hindered learner participation by failing to generate interest in the subject matter.

6.5.1.1.2 More attendance in flipped classes

Further to the above, having the experience of learners being enrolled in the intervention group was crucial for increasing their behavioural engagement (Li & Li, 2022). Attendance represents the physical appearance of learners' behavioural engagement within the classroom setting (Fredricks, 2004; Christenson et al., 2012). The different learning environments in the intervention group, such as having more innovative and interactive tasks and collaborative group work, increased learners' desire to attend their classes. Additionally, the flipped content approach, which encompasses prior online class materials for learners to view beforehand, has exhibited a positive relationship with learners' preparedness and their willingness to attend classes (Lee & Wallace, 2018; Tran & Nguyen, 2020). In the present study, the findings indicated a higher frequency of desire and actual attendance in the intervention classes, similar to other studies that reported an increase in attendance in classes including interactive learning such as flipped classrooms (e.g., Choe & Seong, 2016; McLaughlin et al., 2013; Smallhorn, 2017). These findings contradicted others who had some fears that the flipped content approach may reduce attendance in classes as students have already been exposed to the online content before class time. For instance, Huett (2017) found that the attendance records for the flipped classroom were significantly lower compared to the traditional classroom *(p = 0,012),* suggesting no advantages of flipped content learning in terms of attendance. Similarly, Price and Walker (2021) researched to examine the percentage of learners attending over one semester. Their investigation found no substantial differences between flipped and traditional classes regarding attendance. However, in this present study, as mentioned before that, the intervention was not only a flipping content but it was more than this by providing more interactive and different types of activities and tasks, a collaborative learning environment, the teacher's presence as an assistant rather than only the teacher. All these factors have an influence on their desire to attend classes besides the flipped learning approach. In comparison with the intervention group, it was observed that the control group had a lower desire for and actual attendance in their grammar classes due to a general sense of demotivation, and they expressed dissatisfaction with the teaching instructions.

The pedagogical intervention classes in this study were found to be influential in increasing the desire to attend class and higher attendance records. In their voice messages, learners in the intervention group demonstrated their strong desire to attend classes, as they described the

intervention classes as being different to others and noted changes from one class to another, and this indicates that the intervention went beyond just a flipped content, therefore, it was more an interactive pedagogy (refer to Fayez's comments in section 6.1.3). Conversely, Jaber and other learners who enrolled in the control group reflected that grammar classes were normal and not even attractive, saying, "… *very normal, …I don't see anything different…. There is nothing in it attracting me…."*.

Furthermore, the intervention group interviews further highlighted that the desire to attend classes was attributed to their eagerness to explore more of their knowledge of the topic, given that the pre-class online activities only provided them with the key points, as described by participant Fahad, "… *and my curiosity about the lesson increased, and I want to attend the next class*…" (see section 6.1.3 for more details). Additionally, their preparedness prior to class, resulting from reviewing online materials, contributed to their desire to attend classes (Choe & Seong, 2016; O'Flaherty & Philips, 2015) (as described by Mo, Suhail, and Fahad in section 6. 1.3.) This was not found in the control group, where preparedness upon arrival was not observed even though they were asked to review the topic in their textbooks before classes. It was exceptional that Hamzah and Yousef consistently displayed a remarkable eagerness to attend classes and consistently arrived well-prepared. Their enthusiasm and enjoyment of the grammar classes were consistently observed throughout the study, which linked to their learning preferences and personalities, which are highlighted in section 6.5.3 below. It can be concluded that the interactive pedagogy, including a flipping content approach, had positively influenced learners' attendance in classes, indicating an element of their behavioural engagement (McLaughlin et al., 2013; Smallhorn, 2017), as this study showed in its findings.

6.5.1.1.3 Movement in classrooms

The flipped teaching approach has been recognised for its ability to enhance learner responsibility and promote autonomy (Challob, 2021), which is associated with learning achievement (Lee, 2016). Autonomy, in this context, refers to the ability and desire of learners to decide which way is appropriate for them to control their learning environment within and outside classrooms (Challob, 2021). Flipped classes have been widely recognised for providing learners with flexibility in terms of time and place for their learning (Li & Li, 2022; Lo & Hew, 2021). Kassem (2017) emphasises that integrating technology in language learning fosters learners' autonomy since it encourages learners to be involved in learning activities at any time and place. Therefore, a flipped teaching approach affords learners a greater opportunity to experience their autonomy in

learning by taking responsibility for their learning, making decisions, and being eager to extend their learning of English (Challob, 2021; Cheo & Seong, 2016).

The findings of the current study revealed that learners in the intervention classes exhibited a heightened sense of responsibility for their learning in the classes. This was attributed to the nature of the intervention classes, where learners had more opportunities to interact and collaborate with their classmates. For example, the tasks they were given in their classes encouraged them to request clarifications from peers, leading to more movements or changes in their seating positions to discuss information with groupmates or communicate with other groups. In many situations, learners were observed to have more incidents of movement within classes and during group work. This has not been observed in previous studies, that examined flipped learning approach in relation to EFL learner engagement. However, other variables of this present study, not just a flipping learning context, contributed to the increased incidents of movement demonstrated by learners in their classes. The findings indicated that learners were more behaviourally engaged in classes by moving from one group to another without explicit guidance from the teacher. This implicated the fact that group work in the intervention group seemed to be different compared to other classes. This was because learners had more control over what they could do in their groups. They were found to show more initiative in making conversations and offering assistance to groupmates and other groups. This was attributed to the fact that the interactive pedagogy provided more space for learners to choose their learning preferences with fewer teacher instructions (O'Flaherty & Philips, 2015). For instance, one learner was observed moving between two groups during one task without being instructed to do so (refer to section 6.1.4 for more details). Through their interviews, learners acknowledged their mobility within the classrooms and praised it as an advantage in their classes as it facilitates collaboration with peers and exposure to other opinions. Conversely, the findings from the control group revealed that learners were less likely to move within their classes, even when not explicitly instructed to remain seated. It appeared that learners in the control group awaited the teacher to request them to move from one place to another, as exemplified by participant Ibrahim, who expressed tiredness and boredom resulting from long periods of sitting without mobility during class time, stating, "… *sometimes I feel tired and bored because I am always sitting all the time, and I think this made me tired in the class time…."*. Consequentially, this lack of movement led to disengagement and disconnection among learners, as some were hesitant to offer assistance to their peers (refer to section 6.1.4 for more details). It can be concluded that learners from the intervention group demonstrated stronger indications of behavioural engagement through their participation, attendance, paying attention, and movement in classes.

The following section will discuss the findings of learners' emotional engagement in the flipped classroom in relation to the literature on this teaching approach.

6.5.1.2 Emotional engagement

The literature and the findings in this present study have consistently emphasised the effect of the intervention teaching to enhance learners' emotional engagement (Hiver & Al-Hoorie, 2021; Jamaludin & Osman, 2014; McLaughlin et al., 2013; Tran and Nguyen, 2020) (please refer to section 6.2 for findings). Importantly, a study by Jamaludin and Osman (2014), which examined the impact of the flipped classroom on learner engagement, showed that emotional engagement exceeds other dimensions of engagement in terms of its importance for promoting effective and meaningful learning experiences. However, a study conducted by Li and Li (2022) presented contradictory findings to some of the results observed in the current study. Li and Li's study revealed that there were no notable distinctions in learners' emotional engagement between traditional and flipped classes in contrast to behavioural and cognitive engagement, which were found to be significantly different in favour of flipped classes. Li and Li (2022) commented on this by claiming that learners may not experience changes in emotional engagement through intervention in such a short time, say eight weeks, or maybe learners require more time to be emotionally ready for this new teaching method. Li and Li's findings underscore the importance of the current study's findings, indicating that not only can a flipped content approach contribute to increased emotional engagement, but other variables of the intervention teaching, such as entertaining and interesting tasks, a collaboration that encourages the building of relationships between learners and with their teacher, and interactivity in classes (refer to section 4.2.4) facilitated learners to become more emotionally engaged in their classes. However, other studies, such as the comprehensive investigation of studies between the years 2011 and 2020 conducted by Lo and Hew (2021), investigated the use of flipped classrooms in relation to learner engagement. They observed that the majority of these studies reported the positive effectiveness of the flipped classroom approach in relation to emotional engagement. Nevertheless, a small number of studies reported that there were no significant differences in learners' emotional engagement.

Emotional engagement, as outlined in the literature, encompasses various indicators such as positive relationships with peers and teachers, a sense of belonging, interest, enjoyment, self-confidence, and identification with the subject (Fredricks, 2004; Christenson et al., 2012; Jimerson & Chen, 2022; Reeve & Jang, 2012). Furthermore, the findings in this current study indicated that the new feelings due to the new experience would contribute to other indicators pertaining to learners' emotional engagement in the intervention classes. In other words, the interactive

pedagogy that learners experienced led to the emergence of feelings of excitement due to the new experience. The present study findings contradicted the claim made by Li and Li (2022) that the short duration of the intervention might reduce learners' emotional engagement due to its newness to them. The findings here contributed to the efficacy of the intervention teaching in fostering emotional engagement among learners. This can be attributed to the fact that learners had the opportunity to experience the pedagogical intervention for six weeks before the study took place, allowing them sufficient time to become emotionally ready for the new learning approach.

6.5.1.2.1 New feelings due to new experience

The positive feelings or new feelings towards the intervention learning experience can be attributed to the fact that when learners are exposed to this instructional method for the first time, they are likely to be attracted to the novelty. The findings in this study indicated that learners felt differently and were impressed by involving in various types of activities and tasks, such as watching videos before class for the first time in learning (Barlow et al., 2016) and participating in interactive and collaborative activities with their peers during class time that went beyond only a flipped content (Challob, 2021; Smallhorn, 2017; Vitta & Al-Hoorie, 2020), resulted in the emergence of novel emotional experiences. These positive feelings associated with new learning experiences contribute to their emotional engagement within classrooms. For instance, Mo, during an interview, expressed his different emotions towards watching videos before classes and working with peers in groups in class, stating, "….*My feeling was different in terms of the method of the lesson, and it was different from others, for example, the video clips before the class… The other example is the way the groups work inside the class in terms of interaction and making friendships with other students…*" (refer to Section *6.2.2* for further details.) Mo and others found that the intervention classes brought them joy and stimulated their imaginations for upcoming classes, as these classes displayed innovative and distinct approaches. This concurred with Bond's (2020) synthesis of literature published between 2012 and 2018. Bond found that the majority of studies reported learners' enjoyment during flipped classes, particularly when working with peers, using online tools, engaging in teaching self and peers, and participating in classroom activities. Thus, the majority of the learners in the intervention classes in this study enjoyed their classes, and this contributed to enhancing their emotional engagement as they described it as new and distinct from other classes.

Furthermore, a feature in a comprehensive flipping class is recognised to offer a greater opportunity for learners to engage in a wider range of activities compared to traditional classrooms (Amiryousefi, 2019), which this study provided during the intervention. Thus, the

learners in the present study perceived the intervention as providing a greater variety of activities, which they described as new and unique from others. For instance, they used their phones to involve themselves in game activities that were both entertaining and competitive based on their descriptions and their involvement in interactive groups that were different from other classes (see Section 6.2.2 for more details).

6.5.1.2.2 Their positive relationships

Emotional engagement can be fostered through the establishment of positive relationships between peers and their teacher in classrooms (Christenson, Reschly, & Appleton, 2012; Reschly, Pohl, & Christenson, 2020). In the current study, the intervention pedagogy for the experimental group provided more active learning, including various kinds of tasks and different natures of group work activities. Thus, learners reported that they had benefited from working collaboratively within their group during class activities. They expressed that this collaborative effort was unprecedented, leading to the establishment of a positive and robust relationship. In their classes, learners worked collaboratively with peers and the teacher, giving advantages to the interactive pedagogy as it always provides a flexible learning space that provides a more active and cooperative learning environment (Li & Li, 2022; Yang, 2023). Based on these advantages, learners in the intervention group demonstrated a positive attitude towards their teacher, which encouraged them to establish a good relationship with him. The learners described their teacher as kind and approachable, creating a safe environment where learners felt comfortable expressing their opinions and ideas without feeling pressured (refer to Mo in Section 6.2.1 for further details). As learners cultivated a good relationship with their teachers, they also made positive relationships with each other (Hutchings & Quinney, 2015). They described their relationships as closer to each other and caused them not to feel lonely. For example, Fayez commented on this by saying, "*Honestly, it was fun and... very interesting; I did not feel alone, and we were closer, to the point that the relationship between us as students was very strong, as if we had known each other for a long time, even though we only met at the start of working in the group.*"

The design of the intervention to become more than only a flipped approach of this present study was effectively helpful in encouraging learners to engage in group discussion, which in turn fostered friendly and collaborative interaction (Challob, 2021). Considering the Vygotskian sociocultural theory of language learning (refer to section 2.8.1 for further details), which places more emphasis on individual collaboration and social interactions in the learning process. It has put its emphasis on the fact that language and cognitive processes are interrelated, which means that learning takes place primarily through social interactions with other individuals as this

approach helped learners making strong relationship between each other and their teacher. This kind of collaboration can enable learners to receive support and '*scaffolding'* (Wood et al., 1976) from their peers, which positively influences their relationships and learning (see Ahmed in section 6.2.1 for further details).

Such close relationships or friendships in classes within the intervention pedagogy provided learners with a sense of support and confidence, thereby promoting an increase in their emotional engagement, which included their enjoyment through learning (Knifsend, 2012, 2022). Conversely, the lack of positive relationships is associated with lower emotional engagement in learners (Knifsend, 2012; Christenson et al., 2012; Fredricks et al., 2019). Thus, this was notable through the observation of the control group during class time, wherein the absence of strong relationships between them affected their collaboration in classes. Furthermore, certain learners within this group exhibited limits in their ability to consult or seek assistance from other classmates, even though they had opportunities for peer collaboration similar to the intervention group. However, the tasks and activities given to the intervention group differed; they were more varied, while the control group had traditional exercises from their textbooks. The participant Shaie, for example, reported his struggle to engage in collaborative interactions due to the absence of established relationships (refer to Shaie in section 6.2.1 for further details). This is consistent with some findings of Touchton's (2015) study, which examined the problem-solving performance and satisfaction of learners in flipped classrooms compared to those in traditional classrooms. Touchton's study findings emphasised the lack of friendships and collaboration opportunities in traditional classrooms in contrast to the flipped classroom contexts. Touchton's study not only focused on flipped content but also, similar to the current study's design, included various interactive tasks and emphasised a learning centre environment.

6.5.1.2.3 Their confidence and comfort

In the present study, learners who involved in the intervention group reported feeling more confidence and comfort in their classes (refer to section 6.2.3.). This increased confidence was attributed to the interactive and communicative learning experiences learners encountered, which included more interactive learning tasks and activities. Interestingly the flipped learning approach has been identified as a contributing factor to learners' confidence (Amiryousefi, 2019; Challob, 2021; Strayer, 2012; Jiao et al., 2017). Confidence is known as an indicator of learners' emotional engagement (Christenson et al., 2012; Fredricks, 2004) and is fostered by positive relationships among peers and teachers, as described above (Knifsend, 2018).

Interviews conducted with learners in the intervention group revealed the impact of reviewing the pre-class online materials on their confidence during their engagement in class activities

(Cheo, Seong, 2016; Hung, 2015). For instance, Ahmed emphasised the significance of pre-class online review in fostering his confidence, saying, "…. *in this class, I watch a clip before the lecture and come to the class with confidence…"* (see section 6.2.3 for further details). This corresponds with Hung's (2015) study, which found that learners, throughout their online review, looked up words, learned new concepts, and explored more for other sources, leading to increased confidence before coming to class (Dove & Dove, 2017).

Furthermore, Fayez attributed the increase in confidence for himself and others to the instructional approach applied in their classrooms. He highlighted the opportunities that he and his peers had to collaborate and work together. The classroom interactivity implemented for the intervention group encouraged learners to consult each other for clarifications rather than relying solely on their teacher, resulting in boosting their confidence and their ability to discuss the topic with peers in classes. Based on their description, requesting clarifications from the teacher was often perceived as stressful, which resulted in decreasing their confidence (see section *6.2.3* for detailed findings). This aspect is an important characteristic of the flipped classroom, which allows learners greater autonomy over their learning and class work. However, the increased confidence between learners was not solely limited to the use of the flipped learning approach. It was also influenced by other variables, such as the interactivity in their classes, the nature of group work, and the different kinds of classroom tasks, including digital and entertaining activities. Other studies studies have supported this. For example, Mclaughlin (2014) conducted a study using interactive flipped learning classrooms in health education and found that it helped make learning meaningful. Mclaughlin's study findings reported that learners were more confident in their learning, which facilitated their ability to engage in discussions with their peers and share knowledge.

In the present study, the majority of the control group learners reported that they were less confident in their grammar classes. Their lack of confidence was anticipated to have a negative impact on their emotional engagement in these classes (Christenson et al., 2012). This was reflected in their interviews when learners attributed their decreased confidence to the way they were taught, noting their classes lacked the interactivity and the variety of tasks compared to the intervention group. Jaber was one of those from the control group who expressed dissatisfaction and increased anxiety in his classes, describing them as difficult to understand. He believed that the difficulty was not due to the topics but rather to the teaching approach in classes (see Jaber's interview in section 6.2.3). Observations also revealed that many learners were hesitant to be involved in classroom discussions in different classes.

6.5.1.2.4 Learners' enjoyment in the flipped classes

Learners revealed that in the intervention classes, they learned more and enjoyed their lessons (Amiryousefi, 2019; Lee & Wallace, 2018; Touchton, 2015). Enjoyment is associated with the increased emotional engagement of the learners (Reeve, 2012). In the current study, the enjoyment among learners in the intervention group was evident through my observation of them, interviews, and their voice messages after classes. Responses from interviews reflected their fun in classes and enjoyment of reviewing online content before class. The design of pre-class materials included entertaining videos and interesting activities rather than only a flipped content. As an example, Sari expressed his feelings towards his classes by describing them as enjoyable. He mentioned finding enjoyment in working with his groupmates in classes and the online activities before classes. The interactive activities in classrooms, along with the creative videos and warmup activities before each class, which went beyond only flipped content, led to more instances of enjoyable learning experiences between learners.

Furthermore, their voice messages after each class revealed further evidence of their enjoyment by attributing this to the difference in the instructional approach, and this can be seen in their descriptions. Faris, as an example, expressed his happiness with classes when he described them as providing varied activities, such as digital learning activities that brought more quality and variety to the learning atmosphere than usual (see section 6.2.4). Learners in this study were delighted with the change in the learning environment from their usual educational experiences. This new teaching context left a positive impact on them, as they expressed their enjoyment and excitement in learning in these classes.

These findings are consistent with the findings of Murphy's (2016) study, which examined the effect of using a flipped learning approach in mathematics classes. The study found that learners enjoyed their classes as they described their experience as new and learned a lot from reviewing video resources and different problem-solving activities that they encountered during class time. Similarly, Amiryousefi (2019) conducted a study in the context of English as a foreign language. He found that learners enjoyed their experience of learning in both online and class tasks.

On the other hand, the majority of the control group learners in the present study, felt bored and dissatisfied in their grammar classes, evidenced by what they said in their voice messages and their talks in the interviews. Their dissatisfaction was blamed on the teaching instructions, as the teacher spent most of the class time explaining the target grammar. This limited their opportunity to engage more in their classes to share or discuss ideas (Alrabai, 2016; Alqahtani, 2018; Storch & Aldosery, 2013), which led to discouragement and boredom in their classes and resulted in emotional disengagement (Christenson et al., 2012; Fredricks, 2004).

6.5.1.3 Cognitive engagement

The literature and the findings in this present study have consistently emphasised the effect of the pedagogical intervention to enhance learners' cognitive engagement, especially using a flipped learning context (refer to section 6.3 for cognitive findings) (Hiver & Al-Hoorie, 2021; Jamaludin & Osman, 2014; McLaughlin et al., 2013; Tran & Nguyen, 2020). Cognitive engagement, as outlined in the literature, includes various indicators such as the use of deep learning strategies, being thoughtful, self-regulated, or the exerted effort necessary to comprehend difficult or complex ideas (Appleton et al., 2008; Fredricks et al., 2004; Mahatmya et al., 2012; Reschly & Christenson, 2012; Wang et al., 2019). Furthermore, the findings in this current study indicated that pre-class cognitive engagement, the learners' ability to explain to each other, make connections between grammar topics, and invest time exploring beyond required tasks, would contribute to additional indicators relating to learners' cognitive engagement in flipped classes, as will be described in the following sections.

6.5.1.3.1 Their pre-class cognitive engagement

Interestingly, even though this was the first time the learners had experienced the interactive pedagogical intervention, including a flipped learning context, the majority of them praised the review of online materials, particularly videos posted on Blackboard before each class. In comparison with the control group, who were requested also to review the grammar topic in their textbooks before each class, learners in the intervention group demonstrated enhanced cognitive engagement. This was evident as they were more thoughtful during practical sessions in classrooms.

Learners in this present study revealed that they come to class with note-taking and thoughtful questions after reviewing the online content to discuss further in class with their peers and teacher, suggesting evidence of their pre-class cognitive engagement (refer to section 6.3.1 for further details). The findings suggested that the significant feature of the flipped learning approach using pre-class online videos of enhancing learners' cognitive engagement. This was achieved by encouraging learners to actively engage in online activities prior to class, which stimulated their curiosity and prompted them to ask questions, leading to more learning during class time (Li & Li, 2022). Simply put, the content of the online materials before class consisted only of key points of the topic, which encouraged learners to come to class with many questions to seek clarification and explore more in-depth in their classes (Yang et al., 2018). These behaviours that learners demonstrated before class allowed for more cognitive engagement (Kahu, 2013). These findings are consistent with the study of Tran and Nguyen (2020),who found that learners were cognitively invested in watching videos by repeating videos, note-taking,

checking dictionaries and translations, sharing notes with peers, and linking what they learned with prior knowledge. Similarly, Gasmi conducted a study (2016) to examine the impact of utilising the flipped learning approach on English learners' performance in writing skills. Gasmi's study findings showed that learners helped each other identify the important points of the online content they reviewed, indicating their cognitive engagement with the materials before class.

Furthermore, observation in this present study revealed that learners in the intervention group raised questions at the beginning of each class compared to the control group, which indicated their cognitive engagement throughout their review of the pre-class online materials (see section 6.3.1 for details). Similarly, the findings in this present study were compatible with Tran and Nguyen's (2018) study, which examined the effect of the flipped classroom model on EFL students' speaking performance. The findings added that learners were adept at mastering conversations and discussions in their classes after they reviewed the online materials compared to non-flipped classrooms. Interestingly, the findings in this present study added that learners mentioned that they were thoughtful about what they reviewed online during the whole day or the time before class, which was not observed in other research. For instance, Ahmed commented on this by stating, *"... As for me, I had questions and was thinking about it all day before the class…"* (see Ahmed in section 5.2.3.1 for further details).

6.5.1.3.2 Explaining to each other

The nature of the interactive learning in the intervention group provided learners with more opportunities to do tasks in groups. Nonetheless, the design of tasks encouraged learners to explain or ask each other during lessons, resulting in fostering more instances of collaborative teamwork. Moreover, when learners in the intervention classrooms came to class with some questions about what they had viewed in the online phase, the possibility of their cognitive engagement increased through interactions with peers and teacher. A study by Li and Li (2022) emphasised that learners who participated in flipped classrooms demonstrated more communication between themselves and the teacher and tended to ask more questions during lessons. Similarly, according to the findings in this current study, learners were observed to be asking more questions and explaining to each other in class (refer to section 6.3.2 for further details of an example of an interaction between me and students). Furthermore, learners revealed during their interviews and in their voice messages that they requested that peers explain to them grammar rules by engaging in active discussions with them (Gasmi, 2016), which reflected to their comprehension of the grammar. As an example, Rayan mentioned that he was always requesting help from peers to explain grammar rules he encountered difficulties understanding. He and others also reported their benefits even when they offered help to others

by explaining to them (see section 6.3.2), which aligned with the Vygotskian theory of the ZPD that asserted comprehension of knowledge can be made when learners receive assistance from other peers who are more knowledgeable at that moment.

The notable increase in peers' explanations in the intervention group could relate to the nature of its affordances of tasks and activities where learners can have more opportunities to cognitively engage in their classes (Tran & Nguyen, 2020). In contrast, learners in the control group were observed to be relying on asking their teacher factual questions in order to complete tasks or check their answers rather than asking why questions (refer to section 6.3.2 for further details). This was attributed to the nature of traditional teaching classes, where learners had less opportunity to be involved as much as with peers, due to the teacher's explanation of the topic and task completion in textbooks.

6.5.1.3.3 Making connections of the target grammar

Even though connection in engagement is widely linked to emotional engagement in the literature, such as learners' connection to school, teacher, peers, etc (Christenson & Pohl, 2020), I would argue that learners in this present study were found to be making more connections of grammar topics, such as connecting new ones with previous lessons, indicating increased cognitive engagement. This took place when learners were exposed to the pre-class online content before class and then actively engaged in class time. In other words, their review of the online content showed that they made connections between what they had learned before class and what they did in class with their peers and the teacher. This was notable when some learners reported that they comprehended the grammar lesson after engaging in discussions with peers in class, indicating they made connections between their review of the online content and face-to-face learning in class (see participant Sultan in section 6.3.3). This was comparable with what Jamaludin and Osman (2014) found in their study when they examined learner engagement for undergraduate TESOL students by implementing flipped classroom instruction. Their findings showed that learners were more cognitively engaged by attempting to make connections with their own experiences, connect ideas to what had already been learned, combine ideas to make sense of them, and finally create their examples to comprehend concepts.

Additionally, along with their ability to make connections between self-paced learning and the classroom, the findings from interviews in the present study showed that they also made connections between the grammar topics from lesson to lesson. As an example, Raied expressed his admiration of the flipped classes when he stated that the classes helped him understand the grammar topics and made him able to connect the new grammar topics with the previous ones. Raied also indicated that he would be aware of the upcoming grammar topics by questioning the

connection between the current grammar topic and future lessons (see section 6.3.3). This indicated another connection that he made between the new topics and the next ones. The interactive pedagogy's incorporation of varied activities and tasks between lessons increases learners' curiosity about upcoming topics, potentially leading learners like Raied to make connections and become more curious about what will happen next. Conversely, learners in the control group did not demonstrate any evidence of making connections, except for one learner who revealed his ability to make connections between grammar lessons. He attributed his ability to his admiration for different experiences in the role of the teacher in his classes, as described below in section 6.4.1, which made it easier for him to connect his new grammar learning with previous ones (see Zamil in section 6.3.3).

6.5.1.3.4 Learners' comprehension

The findings in the present study revealed that learners reported that the intervention classes helped them gain a deeper understanding of the grammar topics compared to the control group (Cheo, Seong, 2016; Lee & Wallace, 2018; Murphy, 2016; Gasmi, 2016), thus indicating their increase of cognitive engagement (Fredricks, 2004). It is noteworthy that their comprehension ability contradicted their improved performance scores in the posttests, suggesting that they demonstrated a higher level of understanding during their classes, but they did not perform higher on the formal assessments (Touchton, 2015; Challob, 2021). Learners attributed their ability to understand their grammar lessons to the new teaching approach, emphasising its effectively compared to the traditional teaching in other subjects. For instance, Ahmed from the intervention group exhibited its advantages in the grammar classes, as he had no questions after each class, which indicated its help in making him understand the lesson topics (see Ahmed in section 6.3.4). This suggests that the review of the online content before class and the collaborative work within the practical tasks during class time improved learners' comprehension of their grammar lessons (Hung, 2015). Conversely, the majority of the control group showed that they encountered difficulty understanding grammar in classes, attributing this to their inability to grasp grammar topics, which were always difficult for them and were above their proficiency levels (see Salem in section 6.3.4).

According to interviews and voice messages, learners in the intervention classes in this study were more strategic in their learning. They arrived at class with notes and questions after reviewing the online content. They effectively utilised the class time to enhance their understanding through discussions with both the teacher and peers (see section 6.3.4 for further details). The findings of this current study are consistent with the findings of Gasmi's (2016) study, which found that learners in flipped classes exhibited more strategic learning behaviours, such as identifying key

information, making summaries of it, taking notes on it, and remembering information for future use. Only three learners in the control group reported that they were being strategic in their grammar learning. They relied on the textbook for task completion, where they could go back and forth to check the grammar rules and then apply them to tasks. Interestingly, those learners who demonstrated that they were more strategic in their learning were observed to be more motivated to learn grammar and the English language. This heightened motivation could potentially have a positive influence on their cognitive engagement in grammar classes, as it is addressed in section 6.5.1.3 below.

6.5.1.3.5 Investing more time beyond the required tasks

Learners from the intervention group exhibited more effort and were more actively trying to comprehend grammar topics and extend their learning (refer to section 6.3.5). They took the initiative to do extra tasks, which may indicate their cognitive engagement through learning grammar, which resulted in increased grammar comprehension. This corresponds to what Fredricks (2004) and Wang et al. (2019a) stated: learners are more cognitively engaged when they show a high level of desire to go beyond the required tasks, which includes their willingness to expand their learning to do high-quality work.

The findings in this present study showed that learners from the intervention group displayed awareness when watching videos to develop other language skills, such as listening and pronunciation. Additionally, they sought out additional videos on grammar topics on YouTube channels to expand their grammar knowledge (refer to section 6.3.5 for further findings). This may be due to the nature of flipped content in classes, which provides learners with the confidence to explore more knowledge online (Amiryousefi, 2019; Challob, 2021; Strayer, 2012; Jiao et al., 2017). Another finding revealed that learners repeated videos as many times as they would like, which indicated their cognitive engagement while watching videos (Lo & Hew, 2017; Yu & Wang, 2016). These findings in the present study align with the study by Tran and Nguyen (2018), which showed that the prior class preparation and posted videos provided opportunities for learners to master conversational strategies, vocabulary, pronunciation, and other communication skills.

Increased engagement can play an important role in improving learning outcomes for learners. When learners are cognitively engaged, they are better equipped to overcome complex grammar topics, encourage more critical thinking skills, and become more aware of their learning strategies, thereby becoming more strategic learners. In the context of interactive pedagogy in relation to sociocultural theory, which emphasises the need for social interactions between learners in shaping their cognitive development, group work becomes important. In the present

study, group work in the intervention group allowed learners to support each other collaboratively, which is consistent with the ZPD theory that learners assisted each other when they felt confident or knowledgeable in a task. Thus, they acted as scaffolds for each other, offering explanations, feedback, and guidance. Doing these was helpful in overcoming challenging tasks and increasing their cognitive engagement, which led to better grammar learning outcomes.

6.5.2 The intervention and its impact on the state of Flow among learners

When in Flow, learners are intensely involved in learning with a high degree of concentration, there should be a perceived balance between challenges and skills, feel interested and have a sense of control (Csikszentmihalyi, 1975, 1990).The present study utilised the Flow Theory as a theoretical framework to guide the design of the intervention teaching approach (see chapter Chapter 4 for further details), with the primary focus not only on measuring learners' engagement. Rather, the study aimed to examine the extent to which the intervention prompted a state of Flow in learners and subsequently affected their engagement.

Thus, the following sections present a discussion of the research question, '*How does the intervention induce the state of Flow of Saudi EFL learners which then affected their engagement?'* The overall findings in this study indicate that the use of the intervention induced the state of Flow in learners compared to the control group who experienced the 'antiFlow' in their classes (refer to Chapter 5 in findings). The anti-flow represents a state of being disengaged, a lack of concentration, and a sense of frustration, anxiety, or boredom. It is the state in which learners feel disconnected from the task, resulting in lacked motivation, decreased performance, and overall negative experiences. Unlike previous studies that primarily used Flow Theory as a measure of learner engagement (e.g., Aubrey, 2017; Czimmermann & Piniel 2016; Eccles, 2016; Egbert, 2003; Shernoff et al., 2016) The current study integrated Flow Theory into the design of the intervention but did not apply it to the control group design. This is because the materials of the control group were provided by the English language department where the study was conducted. Therefore, the aim was to examine how the intervention induced the experience of Flow among learners in the intervention group and subsequently affected their engagement in classes.

6.5.2.1 A sense of control

The essential elements or conditions of Flow Theory are quite similar to the principles and practices of the interactive pedagogy approach used in this current study. Beginning with *a sense of control* is an important condition of this theory, the design of online resources as a way of delivering the content can enable learners to have control in their review of the content, as the

findings in the present study revealed (refer to Chapter 5 in findings). Consequently, this flexibility enhances a state of Flow among learners, as they are able to engage with the content at their own choice and time (behavioural engagement). Sari, as an example, expressed a sense of autonomy when reporting the advantages of utilising online content in his own preferred time, stating, *"Also, do not forget that when you watch the video, you are at home, and in your comfort zone, and you can watch it at any time you wish, and you can repeat it more than once, and you can return to any point that you did not understand in the video and hear it again."* This flexibility allows learners to extend their learning outside of class time and place and to help them understand the target grammar (cognitive engagement), thereby promoting greater autonomy in learning (Challob, 2021). Therefore, it is argued that their feeling of control enhances the experience of Flow (Nakamura & Csikszentmihalyi, 2014) and leads to an increase in engagement among learners (Lambert et al., 2017).

Furthermore, the findings revealed that learners in the intervention group had more opportunities to choose their learning preferences during class time. For instance, the ability to choose their seating arrangement or move between different groups within the classroom contributed to an enhancement of their state of Flow, as they take more responsibility for their behaviour in classes (see my observation field note of week 4 in section 6.1.4). This, in turn, increased their behavioural engagement, which positively influenced their learning of grammar. The findings in this current study are consistent with the findings of Egbert's (2003) study, which found that when learners felt that they were more able to make their choices in learning, such as choosing their way of doing tasks, they had a better chance of experiencing Flow through their sense of control, which then contributed to an increase in their engagement in classrooms.

Additionally, the findings in the present study revealed that learners' autonomy in the intervention classes played an important role in reducing their anxiety and discomfort associated with classwork (emotional engagement), which are characterised as anti-flow indicators. For instance, and notably, Raied expressed that the new environment of grammar classes made him choose certain peers that he felt more comfortable working with rather than being assigned to work with unfamiliar individuals, which may reduce his engagement in learning. He described himself as not a social person, and this made him not engage in other classes as much as he did in grammar classes. The autonomy that learners experienced in determining their work in class appears to induce their state of Flow, subsequently reflecting on their overall engagement in learning. This concurred with the claim made by Abbot (2000) that an individual's perception of control includes not only making choices about what and how to do a task but also serving to decrease anxiety and mitigate the fear of failing to do a task (anti-Flow indicators). In contrast, learners in the control group had less freedom of control during class time, and that was

obviously observed and reported by learners. For instance, Ibrahim complained that he was tired due to sitting all the time in class (see Ibrahim's voice message in week 2, section 6.1.4). This implies that he lacked the opportunity to experience a sense of control in selecting his preferred learning styles, as he had to always follow the teacher's instructions in class. Consequently, his lack of autonomy impacted his ability to experience a state of Flow and hindered his engagement in class work.

6.5.2.2 A perceived skills-challenges balance

A perceived skills-challenges balance is another condition of Flow. The theory of Flow emphasises that when the challenge of an activity or task exceeds a person's abilities, the feelings of being overwhelmed and anxious are evident, and these feelings were observed more in learners in the control group (refer to the findings Chapter 6 for further details). Conversely when the person's skill exceeds the challenge or opportunity of an activity, the result is boredom and apathy (Csikszentmihalyi, 1990; 1996). Therefore, the balance of a person's skill and the challenge of an activity leads to the optimal experience or the state of being in Flow. This then results in success at the task and encourages the person to master more tasks at higher levels of cognitive challenge by using skills gained previously (Egbert, 2003, Kirchhoff, 2013). English learners in foreign countries, similar to this study context, have few opportunities to use language skills outside learning institutions or schools, so the demand for prerequisite skills is needed to accomplish language tasks in classroom. Thus, the flipped teaching approach increases the opportunity for learners to receive more language input outside the classrooms. They receive online resources before class time (Lee & Wallace, 2018) and this perhaps reflects positively on their state of Flow and then affects their overall of engagement, when they meet face-to-face in classrooms.

The findings in this present study showed that the majority of learners in the intervention classrooms experienced a state of Flow when they perceived that there was a balance between the tasks' challenges and their skills. For instance, Ahmed from the intervention group was more likely to be in a moderate state of Flow while engaging in online content, such as reviewing a video. This occurred when he mentioned that he had questions, brought notes to the class, and thought about them before the class began. By doing this, he was trying to enhance his skills in the target grammar to overcome the challenges that he faced on the task. Once these questions and inquiries became meaningful and relevant to him during his learning in class, his abilities (skills) improved to match the challenge of the grammar tasks. After his skills matched the challenges of the task, the opportunity to experience the Flow in class increased (see Ahmed in section 6.3.1 for further details). Then it reflected in the increase of his cognitive engagement during class time and before class. This aligns with what Nakamura and Csikszentmihalyi (2002)

claimed that: when individuals master challenges within a task, they acquire greater levels of skill, resulting in increased engagement with the task. To ensure Flow consistency, learners in the intervention classes in the present study engaged progressively in more complex challenges as these challenges could stretch their existing skills, and this concurred with the 'ZPD' theory developed by Vygotsky (1978) when learners received assistance beyond their skill level (see Vygotsky, 1978, of the 'ZPD' theory in section 2.8.1). Thus, learners were able to engage in tasks that were challenging enough to enhance their skill development and maintain a state of Flow in the intervention classes. Conversely, learners in the control group reported challenges during grammar classes. They complained about the exercises in their textbooks, describing them as difficult to do in classes. According to their descriptions, this led to boredom and feeling overwhelmed, which negatively affected their state of flow and their overall engagement during lessons.

6.5.2.3 Attention

Attention or concentration is another factor related to enhancing Flow for individuals (Csikszentmihalyi, 1990). The findings of this study showed that learners in the intervention group reported paying more attention during their grammar classes. For instance, Sari stated that he paid more attention in his grammar classes compared to his other classes this semester. This suggests that he was actively engaged and experiencing a state of Flow, as he remained focused on classwork and avoided getting distracted. In contrast, Sari reported being distracted and unable to pay attention or maintain focus during his other classes, as detailed in Sari's interview (refer to section 6.1.2). This complies with Csikszentmihalyi's (1990) claim that the greater an individual focuses on or pays attention to a task, the more he/she gets rid of unnecessary things that inhabit the mind and cause anti-Flow.

Since the pedagogic intervention was new to learners, the chance of them being in Flow increased, as Aubrey (2017) claimed that the involvement in a new experience can sustain the attention of learners, and this reflects on their state of Flow. Therefore, the asynchronous and synchronous tasks in the intervention classes were consecutive and varied, which helped learners remain focused during their lessons. For example, Fayez experienced the Flow and engaged in tasks as he was able to remain focused in classes during his engagement in different tasks, stating, "….*and my attention was constantly focused on it. I did not remember that I thought outside the class because there were many things and different events…*" Csikszentmihalyi (1994) suggests that task features may encourage individuals' ability to remain focused, and this was given careful consideration in the design of the intervention classes in the current study. The tasks were designed to be engaging and interesting, aiming to ensure learners' concentration and minimise

distractions. This happened to some when they reported that they perceived the time as passing quickly, which helped them to sustain their concentration during class time (see Sultan's comments in section 6.1.2 for further details). Remaining focused encourages the increased likelihood of the learners to be in Flow during tasks, and this is reflected in their behavioural and cognitive engagement in classes (Shernoff, 2016).

6.5.2.4 Interest

Finally, *interest, or enjoyment,* is an important component of Flow enhancement. The findings in the current study revealed that learners in the intervention group valued and enjoyed their grammar lessons, which suggests that they may have experienced the Flow state, which then resulted in more emotional engagement (see section 6.2 for the findings). Thus, in Flow Theory, the chance of being in Flow increases when the person sees the value of a task and feels it is important and meaningful (Mitchel, 1998). This impacts learners' attitudes towards tasks, their readiness to do tasks, and their sense of enjoyment in doing them, which might result in more emotional engagement (Egbert, 2003; Aubrey, 2017). Additionally, it may also go beyond their emotional engagement, as they become more ambitious and curious to know more about the task, which results in deep thinking for solving the problem (cognitive engagement) (Hidi & Renninger, 2006; as cited in Aubrey, 2017).

Based on their descriptions during interviews and voice messages, learners in the intervention classes were more optimistic, and it appeared that they were satisfied with the new learning experience that it might increase their chances of being in Flow (see Mo and Sari's descriptions of their classes in section 6.2.2). Sari, as an example, described his grammar lessons as fun both outside the classroom when he reviewed the online content and inside the classroom by describing them as interesting and enjoyable by saying, "*It was interesting because there were changes in lessons and tasks, such as in the last class, we had digital game activities, which I honestly liked more*." This aligns with other studies in flipped learning contexts that found that ESL learners both enjoyed and were satisfied when they experienced this teaching approach (e.g., Butts, 2014; Hung, 2015; Touchton, 2015; Yin & Wang, 2018). The fact was that the task design of the intervention was created to pique learners' interests in order to encourage their Flow state and result in an improvement in their engagement in tasks. Therefore, learners in the intervention classes (see section 6.2.4) seemed to be having fun in their classes, and this suggests that they were in a state of Flow (Czimmermann & Piniel, 2016; Egbert, 2003). On the other hand, the majority of the learners in the control group expressed their dissatisfaction with their grammar classes, which suggests a lower chance of the Flow state experience (see Shaie as an example in section 6.2.4). This corresponds with Czimmermann and Piniel's (2016) claim that feelings of

boredom may hinder the attainment of Flow, leading to an anti-flow experience for learners, and subsequently, the feelings of boredom cause disengagement.

6.5.3 Additional factors influencing learner engagement beyond the intervention

The findings of the present study have shown that some learners from both groups were engaged in their grammar classes, which can be attributed to their individual differences and their different experiences in the role of teacher. These individual differences were their motivation to learn grammar and the English language, and their learning styles and personalities. The following sections present a discussion of the research question, "*What other factors, in addition to the intervention in grammar teaching, influence engagement among Saudi EFL learners in a Saudi University?".*

6.5.3.1 The different experiences in the role of teacher

Teacher support is claimed to be an important factor that encourages learners to engage in their learning process (Lietaert et al., 2015). The findings of the present study showed that learners in the intervention group acknowledged their teacher's support during their grammar lessons. The teacher's attention to the learning preferences and needs of learners was found to be more evident in the intervention classes, such as by giving them the freedom in classes to choose their learning preferences and needs, including the option to collaborate with peers in groups of their choice (see section 6.1.4 for further details). The teacher's flexibility in the intervention classes in this study might help learners be more self-directed, such as when not specifying a certain time for online tasks of completion and providing them with their choices on how to do a task in classrooms (Alamri et al., 2020). This helps the intervention group learners feel more engaged in their learning and develop a sense of control over their learning process (Csikszentmihalyi et al., 2017). Thus, the teacher's support for autonomy can contribute to their emotional engagement as they reported their enjoyment in classes (Reeve, 2013), more attentive, and showed better time management, as they reported their flexibility in reviewing online content and their ability to choose their learning preferences in classrooms (behavioural engagement). Additionally, they reported that they extended their online learning and engaged in deep discussions with their teacher and peers, which contributed to their cognitive engagement (Alamri, 2020).

Learners enrolled in the intervention classes of the current study reported that their teacher provided them with emotional support. This was exemplified through Mo's voice message, where he expressed that the teacher's treatment and care played a significant role in creating an encouraging learning environment, enabling them to freely engage in classroom discussions while experiencing a sense of relaxation. Mo continued his expression by stating that:

> **"….***the way the teacher treated us; he is the one who works to ensure that the teaching instruction is very suitable for us, and that was very rare in other classes. I saw this in these classes: the students talked with the teacher without feeling pressure, and they felt relaxed. In fact, I enjoy the lecture when it is in the grammar subject with the teacher, and I also do not forget the teacher's role in taking our opinion into consideration a lot inside the lecture, so thanks to him."*

In addition to all the support that this interactive pedagogical intervention used in this study, the results correspond with the emphasis by Bergmann and Sams (2012) that flipped classrooms facilitate a transition from teacher to learner, fostering active participation and active learning. According to Pettis (2014), in flipped classrooms, the teacher acts as a guide, supporting learners as they engage with the content. Therefore, the teacher's role becomes monitoring and facilitating learners learning.

The majority of the control group reported that they felt excluded by the teacher as only those with better English skills were given opportunities to participate, resulting in hindering their engagement (see appendix G for the script of Lami's interview below when he mentioned other examples of other teachers helped him to learn and engaged in their classes). However, the present study found that a minority of learners in the control group expressed that their teacher was different from other teachers in different classes even though the teaching approaches were the same, but in their grammar classes, the teacher was very helpful, and that helped them to understand the grammar lesson, indicating to their engagement in classes. This indicates that the different experiences in the role of teacher in English classes influence learner engagement. For instance, Khalid mentioned that the teacher was different in grammar classes compared to other subjects by stating, "*The explanation method was very clear. Some other teachers did not explain well or rushed through the explanation. in my experience in the grammar classes, on the contrary, the teacher gave each point its due attention, and everyone, I believe, understood the topics."* This complies with Lietaert and colleagues' (2015) claim that teacher support and role are an important factor in learners' engagement in classes. It can be concluded that traditional classrooms can be interesting or encourage engagement if a teacher becomes more supportive and skilled in his teaching method. Thus, engaging teachers in classes can create a more stimulating learning environment, which positively reflects learner engagement in classes. Even though the flipped learning approach was found to be more effective in increasing learner engagement in the present study and previous studies, a skilled teacher, no matter what method of teaching they use, can still foster learner engagement.

6.5.3.2 Motivation

Motivation is an additional construct that represents potential overlap with the engagement construct or even intertwines with its dimensions. Thus, this belief influences the perception that motivation and engagement are related yet separate constructs (Ainley, 2012; Christenson et al., 2012; Fredricks et al., 2019; Martin, 2007). The findings in the present study exhibited more evidence of some learners who were engaged in classes due to their motivation to learn grammar or the English language in general (see, as an example, Hamzah in Chapter Five in Section 5.2). Youssef, a participant in the control group, was observed in the grammar classes as being consistently engaged and motivated to learn grammar. He showed more desire to attend classes and came to class prepared (behavioural engagement) (see section 6.1.3). Youssef stated many times during his interview and voice messages that he was always interested in and enjoyed learning grammar more than other subjects, which made him not notice the time as it went so fast compared to other different classes (emotional engagement) (see section 6.2.4). His motivation to learn grammar made him use the Internet to extend his grammar learning, such as by watching videos about grammar topics when he had trouble understanding the grammar lessons in his classes (cognitive engagement) (see section 6.3.5). Such findings in the present study contradict other studies that showed that traditional teaching or teacher-fronted learning approaches hinder learners' motivation and engagement in language learning (Al-Khairy, 2013; Alrabai, 2014b; Aljohani, 2009; Fareh, 2010; Khan, 2011). A recent study conducted by Alharbi (2021) showed that Saudi English learners were less motivated to learn English, which affected their engagement in classes. However, the findings in the present study showed that some learners in the control group, who received a traditional teaching method, were motivated to learn the English language, thereby resulting in enhanced engagement in their classes.

Similarly, the findings in the intervention group showed that some learners expressed their motivation for learning English besides their enjoyment of the new teaching approach, which may affect their engagement in classes. For instance, Mahmoud expressed at the beginning of his interview that he liked the English language and enjoyed learning the second language by saying, "*Overall, I felt good, and personally, I love the English language. I enjoy studying English, so it is natural for me to be very engaged in all the classes and feel very happy.*" This aligns with the Li and Li study (2022) that showed that the flipped learning approach did not necessarily impact learner engagement, but other factors may have more influence on their engagement, such as their motivation to learn a language and the different experiences in the role of teacher aforementioned above. Motivation affected learner engagement and plays a crucial role of enhancing engagement of some motivated learners in this study for both groups.

6.5.3.3 Personality and learning styles

The findings in the present study indicated that some learners displayed different preferences in their learning styles and personalities, which consequently influenced their engagement in classes. Notably, a few learners established a preference for exclusive talk with the teacher during class time rather than talking with peers. These learners thought working with their teacher instead of working with peers helped them remain focused in class and have more critical thinking in classes. Hamzah, in the control group, as an example, mentioned that he preferred learning in class only from the teacher because he attributed this to the teacher being the best source of information, as he is qualified and more trusted than his peers. He can understand better from the teacher through his interaction with him (cognitive engagement) than when he engages in discussions with his peers. Additionally, Hamzah acknowledged that he became distracted when collaborating with peers, thus resulting in disengagement for him in class (see Hamzah's interview transcript below). This may contradict other studies and the assumption of the present study that a teacher-centred learning approach may hinder learner engagement in their classes (e.g., Alrabia, 2014; Al-Hoorie et al., 2021).

The findings also revealed that some learners preferred participating in open discussions with their peers in grammar classes rather than working individually. For instance, Aziz, a learner in the control group, expressed his wish that his grammar classes would have more peer discussion, asserting that such debates with peers would enhance grammar comprehension rather than relying on direct instruction from the teacher. Aziz commented on this by saying, "*Honestly, I need these arguments and loud talks with peers in class in order to understand and remember the information for a longer period of time. It also helps solidify the knowledge in my mind.*"

Certain findings in the control group showed that some preferred receiving extensive explanations and instruction from the teacher, even though the majority of learners attributed their disengagement to the teacher's dominance in their classes. Those who preferred the teacher's long explanations of grammar were found to be engaged in classes, as they were accustomed to and comfortable with working independently (Tran & Nguyen, 2020). For instance, Lami from the control group expressed his admiration for receiving extensive explanations from the teacher, and he thought this helped him understand the grammar lessons and be active in class. Additionally, He also expressed his preference for working individually in class rather than in groups with peers (see Lami's interview script in appendix G below for further details). Lami, in his classes, seemed to be an introverted learner as his preference in learning was not to be involved in social contact but rather to work alone (Oxford, 1990), and his learning style preference impacted his engagement in class (Shernoff, 2013). Similarly, another learner in the control group

displayed active engagement in class activities while expressing his preference for individual work. The learner attributed that working alone made him rely on himself rather than depending on others, such as groupmates. He believed that made him focused and improved his understanding of grammar lessons, indicating an increase in his behavioural and cognitive engagement.

6.5.4 Summary of the discussion of qualitative findings

The qualitative findings of the current study indicate that the pedagogical intervention in grammar classes, which includes more than just flipped classrooms and encompasses active and collaborative learning, led to a notable increase in learner engagement across all its dimensions: behavioural, emotional, and cognitive engagement. Therefore, the nature of classroom interactivity, the structure of group work, the design of tasks and activities, and the teacher's role in classes were most identified as important variables impacting learner engagement, in addition to the use of flipping content approach, such as the review of the pre-class online materials. These findings are consistent with previous studies that found the interactive pedagogical intervention using a flipped learning approach enhanced learner engagement in different English learning contexts (e.g., Amiryousefi, 2019; Lee & Wallace, 2018; Tran & Nguyen, 2020). However, the findings in the present study indicated that learners in the intervention group had more incidents regarding their movement in class to carry out tasks with their peers; this can be seen as an example of behavioural engagement. This kind of physical engagement has not been observed in previous studies. This distinctive pattern of behaviour may be attributed to the aim of considering the Flow Theory condition such as '*the sense of control*' in the protocol of the intervention content design. This was reflected by enabling learners to be more autonomous in their learning inside the class, with a limit on the teacher's guidance (Challob, 2021). The teacher became more of a facilitator, monitoring class work where learners mostly guided their work on a task, such as moving from one group to another to seek clarification. The new feelings due to the new experience were found to be a distinct finding in this study, which may contribute to additional evidence of the learner's emotional engagement. This evidence contradicts the claim of Li and Li (2022) that short pedagogical interventions, such as a flipped learning approach, may hinder learners' emotional engagement in classrooms. Regarding cognitive engagement, the findings in the present study consistently emphasised that interactive pedagogy enhanced learner cognitive engagement (McLaughlin et al., 2013; Tran & Nguyen, 2020; Wang et al., 2019). Furthermore, the study contributed to the exploration of additional cognitive engagement, including pre-class cognitive engagement, such as bringing notes or thinking of the topic all the day before, increased questioning and discussions in classes, and the ability to connect grammar

rules for comprehension. These findings played a significant role in answering the second research question, which examined how the pedagogical intervention impacted learner engagement.

Regarding its potential impact on learning, interactive pedagogy was found to be effective. When considering the Vygotskian sociocultural theory of language learning (refer to section 2.8.1 for further details), it places more emphasis on individual collaboration and social interactions in the learning process. The theory has put its emphasis on the fact that language and cognitive processes are interrelated, which means that learning takes place primarily through social interactions with other individuals. In the flipped learning context, learners are exposed to the pre-class content and extend their learning in class through meaningful interactions and discussions. Through these collaborative interactions in groups, learners can comprehend grammar knowledge better, and that aligns with the Vygotskian theory of the Zone of Proximal Development (ZPD), which states that learners can advance their understanding of the knowledge with the assistance of more knowledgeable peers. Thus, peer assistance in the intervention classes was observed and reported many times by learners in this study, in which the assistance could be provided by each student where a learner sometimes became more knowledgeable of something, so he assisted to other peers or felt less knowledgeable to receive assistance from others.

Furthermore, the findings in the present study revealed that the pedagogical intervention induced the state of Flow for learners compared to the control group, who had fewer chances of experiencing the state of Flow. This helped answer my third research question on how the intervention approach induced the Flow state among learners and subsequently affected their engagement. Their state of Flow was attributed to the increased control learners had over their learning within the intervention classes, which affected their engagement and led to more active learning in grammar. The learners in the intervention classes were found to be engaged progressively in more complex challenges, beginning with the pre-class content review as the flipped content included. These challenges provided more opportunities for learners to stretch their existing skills to be in balance with those challenges, which then resulted in the experience of the state of Flow and subsequently affected their cognitive engagement. The learners also in the intervention classes were found to be more focussed in their classes, less distracted (behavioural and cognitive engagement), and enjoying their classes (emotional engagement), which suggests they had experienced the Flow state. The findings above contributed to the understanding of Flow Theory by demonstrating that the interactive pedagogy used in this study induced the experience of Flow among learners. Unlike previous studies that primarily used Flow Theory as a measure of learner engagement (e.g., Aubrey, 2017; Czimmermann & Piniel, 2016; Egbert, 2003), this study integrated Flow Theory into the design of the intervention. The focus of

using Flow Theory was to examine how the intervention induced the experience of Flow among learners and subsequently affected their engagement in classes. By incorporating Flow Theory into the intervention design, this study highlighted the relationship between the pedagogical intervention including flipped content, the experience of Flow, and learner engagement. It provided a comprehensive understanding of the mechanisms through which learner engagement is fostered and enhanced within the use of interactive pedagogy in grammar classes. Additionally, this implies the importance of considering Flow Theory as a guiding framework for designing the teaching interventions that may have impacted learner engagement and learners' experiences of Flow.

Another key finding of this study is the increased awareness of how individual differences among learners impact their engagement in grammar classes. The findings indicated that some learners from both groups were engaged in their grammar classes, which can be attributed to their individual differences and their different experiences in the role of teacher. Motivation played an important role in learner engagement (Ainley, 2012; Christenson et al., 2012; Fredricks et al., 2019; Martin, 2007); thus, some learners were motivated to learn grammar and the English language, which positively impacted their engagement and learning in classes. The presence of some motivated learners in both groups suggests that motivation can increase learner engagement regardless of the intervention of teaching. Additionally, learning styles were also observed to be another individual difference that enhanced learner engagement. Learners demonstrated diverse preferences for how to learn grammar. Some preferred, as an example, to work individually and receive extensive explanations from the teacher to comprehend grammar, in contrast to others who preferred collaborative learning with peers. Furthermore, learners' personalities were found to be an additional factor that impacted learner engagement. For instance, extroverted learners may succeed in interactive classroom activities, while introverted learners may prefer independent learning experiences (Shernoff, 2013). The present study suggests that teachers should be aware of individual differences among learners, which could lead to better levels of engagement in classes. The study also showed that the different experiences of the teacher role played an important factor in influencing learner engagement and learning. For instance, in the intervention classes, the teacher was different from the other classes. He was found to be more supportive of learners and became a facilitator to them rather than lecturing them, and learners acknowledged that through their interviews and voice messages, which affected their engagement and learning. In regard to the control group, some learners acknowledged their teacher's support in their grammar classes, which indicated the importance of the teacher's role in classes to enhance learner engagement and facilitate learning, irrespective of the pedagogical approach taken.

Chapter 7 Conclusion

7.1 Introduction

This mixed-methods study aimed to investigate and gain a comprehensive understanding of learner engagement during the implementation of an interactive pedagogical intervention, including a flipped content approach. The study also incorporated Flow Theory (developed by Csikszentmihalyi, 1975, 1990) as the theoretical framework during the design phase of the intervention. The aim of using Flow Theory was to examine how the intervention induced the experience of Flow among learners and subsequently affected their engagement in classes. This chapter provides a concise summary of the main findings of this study and their relevance in addressing the research questions. The chapter then outlines the significant contributions made by the study, including the contributions to the field of enquiry, theoretical contributions, methodological contributions, and both empirical and practical implications. It then addresses the limitations of the study and offers recommendations for future research.

7.2 Synthesis of the main findings

The present study revealed several important findings. Firstly, it highlighted the significant influence of the pedagogical interactive intervention, including flipped content, on learner engagement in grammar classes. It was found that the pedagogic intervention effectively increased learner engagement in the EFL learning context. These results, based on the quantitative data, answered the first research question, which aimed to determine the impact of the pedagogic intervention on learner engagement. However, the posttest results indicated that there was no significant improvement in learners' performance between the two groups.

Additional noteworthy qualitative findings in the present study indicated that learners in the intervention classes were found to be more engaged in their grammar lessons. Specifically, they showed increased participation in their lessons, displayed their ability to complete the given tasks, showed greater attention during their lessons, expressed a strong desire to attend classes, and demonstrated greater physical movement in their classes, specifically between work groups. From the findings, the intervention approach effectively increased behavioural engagement among learners compared to the traditional teaching method. This was due to the nature of interactivity in classes and the way learners were involved and worked with peers in groups. Furthermore, the findings also reveal that the learners in the intervention classes showed greater improvements in regard to the emotional engagement dimension compared to the learners in the control group.

The learners felt differently as they found the new experience enjoyable, which helped them to become more involved in classroom tasks. From the findings, learners in the intervention group were observed and also demonstrated more positive relationships with peers and their teacher. They also were found to be more collaborative in their learning, providing more opportunities for friendships and relationships. This was due to the kind of tasks and activities in which they were involved in their classes, which required more interactions and collaboration between them. In addition, they were found to be more confident in their classes, indicating trust in their peers, a sense of comfort with group and class activities, and a feeling of enjoyment in their learning environment. Another interesting finding is that the learners felt excited due to the new experience of the intervention, which caused them to be more curious about what to learn in classes. This then led to greater improvements in their learning of grammar as they reported an increased comprehension of grammar, even though the post-test results showed no significant improvement in performance between the two groups.

With regard to cognitive engagement, the learners from the intervention classes demonstrated a notable increase in their cognitive engagement during their grammar lessons. This was clear when the learners engaged in reviewing the online content before the class, as evidenced by bringing notes and questions to the class, indicating their pre-class cognitive engagement. During class time, they were found to be asking more questions to overcome complex grammar and engaged in open discussions. Additionally, they were more able to make connections between grammar rules, demonstrated improved comprehension of the grammar topics, and showed the ability to extend their learning of grammar and other language skills. These qualitative findings effectively answered my second research question in relation to the impact of the pedagogic intervention on improving learner engagement among Saudi EFL learners (see the Findings Chapter, section 5.2 for more details).

Another major finding of the present study was the increased understanding of the relationship between the Flow Theory and the design of the pedagogical intervention, including its flipped content, resulting in an enhancement of the Flow state experiences among learners within the intervention classes in the study. The learners' experiences of flow state were attributed to the increased control they had over their learning within classes, which affected their engagement and led to more active learning in grammar. Furthermore, the learners in the intervention classes were found to be engaged progressively in more complex challenges, beginning with the pre-class content review. These challenges provided more opportunities for them to stretch their existing skills to be in balance with those challenges. Consequently, this experience of approaching a state of Flow positively impacted their cognitive engagement during the learning process. Additionally, the learners in the intervention classes showed increased levels of focus and a decrease in

distractions affecting both behavioural and cognitive engagement. They were also found to have a sense of enjoyment during their classes, which impacted their emotional engagement. The findings above contributed to the understanding of Flow Theory by demonstrating that the pedagogical intervention effectively induced the experiences of Flow state among learners, which helped answer the third research question of this study.

Another important finding in the present study was that it identified other factors that might influence learner engagement, irrespective of the intervention teaching approach. This finding answered the last research question of the study by showing that the individual differences and the different experiences in the role of the teacher also influenced the engagement among learners for both groups. These individual differences were the learners' motivation to learn grammar and the English language, the learning styles, and the learners' personalities. This suggests that learner engagement is influenced by other factors (Shernoff ,2013; Eccles 2016). Therefore, when designing interventions aimed at enhancing learner engagement, it is essential to consider the individual differences among learners and the roles of teachers. This may involve creating intervention content that is attractive and motivating, accommodating diverse learning preferences, and supplying to the unique personalities of learners. Such considerations can significantly contribute to the effectiveness of interventions in promoting learner engagement.

7.3 The contribution of the study

This study constitutes a significant step towards the integration of the interactive pedagogic intervention including a flipped classroom model into EFL teaching practises, either through the use of the design or by considering the findings of the study (refer to section 7.3.3 below). The findings of the present study thus make different contributions, including those to the body of literature on the use of the flipped learning approach in an EFL context; these are the contributions to knowledge, theory, methodology, and the empirical and pedagogical implications.

7.3.1 Contributions to knowledge in the field

The contribution of the current study lies in its findings, which indicate that the implementation of an interactive pedagogical intervention resulted in an improvement of learner engagement in all three dimensions: behavioural, emotional, and cognitive engagement. In addition to a flipping approach for the intervention (which went beyond just flipping the content), other variables such as interactivity, the teacher's role in class, the innovative tasks and activities learners experienced in classes, the increase of collaboration in group work, and the individual differences played a role

in increasing learner engagement in classes. This highlights the success of the intervention in this context of the study as a valuable pedagogical strategy to promote all the dimensions of engagement among learners in the EFL learning context as it aligned with the call for further studies needed to examine learner engagement (Li & Li, 2022). Therefore, the study's findings provide empirical evidence and insights that can inform English teachers and researchers seeking to improve learner engagement in the different EFL learning contexts.

Regarding behavioural engagement, the study findings revealed that learners in the intervention group demonstrated more instances of movement within the classroom as they collaborated with their peers to complete tasks. This aspect of physical engagement, as a form of behavioural engagement, has not been previously observed or extensively documented in existing studies. This finding expands our understanding of learner engagement and enriches the knowledge base concerning the effectiveness of pedagogical intervention in fostering different instances of engagement among learners. The new feelings due to the new experience were found to be a distinct finding in this study, which may contribute to additional evidence of the learner's emotional engagement. Furthermore, the study contributed to the exploration of additional cognitive engagement, including pre-class cognitive engagement, such as bringing notes or thinking of the topic all day before, increased questioning and discussions in classes, and the ability to connect grammar rules for comprehension. The study also made a valuable contribution to the existing knowledge by highlighting the impact of individual differences, such as motivation, learning styles, and personalities on learner engagement. Furthermore, the different experiences in the roles of the teacher were shown to significantly influence learner engagement, highlighting the importance of the teacher's role in enhancing engagement within the classroom setting.

Regarding the contributions of learning of this study. Firstly, the study proves the effectiveness of the interactive pedagogical approach in promoting learning outcomes. Drawing upon the Vygotskian sociocultural theory of language learning (Lee & Wallace, 2018), which highlights the importance of collaborative and social interactions in the learning process, the study reveals that the intervention facilitates meaningful interactions and discussions among learners. Through these collaborative exchanges, learners are able to gain a deeper understanding of grammar knowledge, aligning with the Vygotskian theory's (1978) notion of the Zone of Proximal Development (ZPD). This theory posits that learners can enhance their comprehension by receiving support from more knowledgeable peers. Consequently, the study's findings provide empirical evidence that peer assistance was observed and reported multiple times in the intervention classes. Learners actively engaged in assisting one another, either by sharing their expertise or seeking support from their peers when encountering challenges. This aspect of peer collaboration in the intervention contributes to the increase of instances of engagement among

learners, highlighting its potential to foster a supportive and interactive learning environment that aligns with the principles of Vygotskian sociocultural theory.

7.3.2 Contributions to understanding of the Flow Theory

From a theoretical perspective, the present study contributed to existing literature by investigating the applicability of Flow Theory in the pedagogical intervention in EFL learning contexts, where it was found to be very beneficial in the design of the intervention using a flipping content approach and was helpful in understanding learner engagement. The theory has been widely studied in various fields such as education, sports, and arts and has been applied even to measure learner engagement in the EFL learning context, but its application in the present study aimed to investigate how the intervention may induce learners' state Flow and then affected their engagement in classes which has not been examined before. By incorporating Flow Theory into the intervention design, this study highlighted the increased understanding of the relationship between the pedagogical intervention, the experience of Flow, and learner engagement. Furthermore, the study underscored the relevance of considering Flow Theory as a guiding principle when designing pedagogical interventions aimed at enhancing learner engagement and positive learning outcomes among learners.

The present study showed that Flow Theory can be a complement to interactive teaching as Flow Theory always highlights the importance of learners being fully immersed and absorbed in tasks. This can be achieved in the intervention classes as they encourage active learning, such as collaborative discussion and problem-solving tasks. Additionally, Flow Theory in the present study was found to be very helpful for making alignments between learners' skills and task challenges which is highly relevant to a flipping content approach. This occurred when learners were exposed both to the online content and to interactive learning inside classes; in both contexts, they engaged in a challenging learning environment. Since they found tasks both manageable and interesting, they were more likely to experience a Flow state in their classes, and these experiences of Flow contributed to an impact on their engagement. The use of Flow in this study was therefore found to be beneficial to the design of the intervention. This resulted in an improvement in Flow state experiences among learners, consequently impacting their engagement in their classes.

7.3.3 Empirical and pedagogical contributions

In the existing literature, the flipped teaching approach has been shown to have a positive impact on EFL learners (O'Flaherty & Phillips, 2015) but has not been deeply examined in terms of learner

engagement (Basel, 2015; Bond, 2020; Lee & Wallace, 2018). In addition, very few studies have treated learner engagement as a multidimensional construct when it comes to measuring the concept in a flipped learning context. Therefore, this highlights the need for a comprehensive study when examining learner engagement in the flipped learning context. A more complete approach is necessary, involving active and collaborative teamwork, which the present study has considered. Therefore, the present study used more than just flipping content. The intervention included different tasks, both digital and worksheets, intensive collaborative group work, a different role of the teacher, and increased interactivity in classes. These variables contributed to the observed increase in learner engagement. Even though the literature cites some of the recent empirical studies that have looked into the concept of engagement as a multidimensional construct in flipped learning classrooms in different EFL contexts (e.g., Amiryousefi, 2019; Bond, 2020; Li & Li, 2022; Tran & Nguyen, 2020), this suggests that this was only the beginning of exploring this concept. Therefore, it indicates that more research is required to have a comprehensive understanding of the impact of the flipped learning approach on learner engagement in the EFL context and, more specifically, in the English-Saudi context. This current study, therefore, helped to fill the gap in the pedagogical literature by providing an interactive teaching approach using a flipped content design for EFL context, informed by theory, and found to be effective in enhancing learner engagement.

In alignment with the sociocultural theory (Vygotsky, 1978) of language learning, the present study provided empirical evidence of the appropriateness of the pedagogical intervention to be used in EFL classes and, more specifically, in grammar courses, which require more collaboration and practice in classes. This approach contributed to more instances of individual collaboration and social interactions in the learning process, which implies the significance of meaningful collaborative interactions that are consistent with the Vygotskian sociocultural theory of language learning. Furthermore, the interactive pedagogy used in the present study aligned with the emphasis of the Vygotskian theory of the ZPD, which states that learners can gain a better understanding when they receive assistance from more knowledgeable peers. This contribution supports the value of peer assistance and collaboration within the context of EFL grammar teaching. Nevertheless, the positive impact on learner engagement in an interactive intervention context remains open for further empirical work to investigate its efficacy in different EFL contexts and different language skills.

7.3.4 Contributions to research methodology

The current study has also contributed to methodological considerations, as it has used a novel methodology which could be implemented in future research on engagement during pedagogical

interventions. The majority of research on learner engagement, employing the flipped content approach as an intervention in teaching, has mainly used quantitative research method design (Li & Li, 2022). Few studies have used mixed-methods research designs to examine learner engagement within EFL contexts. The limitations of using only a quantitative research method have become apparent in the present study as the questionnaires failed to accurately measure the significance of each component of engagement due to inadequate reliability coefficients (Plonsky and Derrick, 2016). Therefore, the current study has acknowledged the challenges faced in measuring learner engagement, as addressed by scholars such as Fredricks, Reschly, and Christenson (2019). By considering these challenges before the study took place, the study was better equipped to address them effectively. This design permitted an in-depth investigation of learner engagement and the impact of using Flow Theory in the intervention design.

By employing a combination of quantitative and qualitative data, the study heightened the reliability and validity of the participants' responses across both groups. Thus, the triangulation of data from multiple sources enhances and strengthens the trustworthiness and excellence of a study. Therefore, it is thought that the present study may provide a fuller understanding of learner engagement measurements and the methodology used in this study could be used in future investigations of learner engagement in different EFL contexts and different language skills. Furthermore, the inclusion of multiple analysis tools (t-tests and thematic analysis) helped to understand better learner engagement and the experiences of the Flow state in the present study, which may be beneficial for future studies.

7.4 The limitations of the study

This research has considered the implementation of an innovative instructional approach, which remains relatively novel and has yet to be extensively used in the context of the current study. Additionally, its application in grammar courses is rare in the existing literature in EFL contexts. In the current study, the learners were exposed to the new interactive approach of teaching for a short period before the study began, which helped reduce some limitations. However, due to the limited six-week course duration for data collection, there were time constraints that restricted the in-depth examination of learner engagement and their experiences of the Flow state. Furthermore, certain learners were still needed to be more comfortable with using the online review, even after receiving training sessions. It, therefore, took them a few weeks during the study period to become confident and familiar with the Blackboard online use.

Another area for improvement was the absence of pre-existing designs for the implementation of the effectiveness of the flipped content for the intervention. Therefore, I had to create each step

of the intervention from scratch, considering the grammar textbook topics assigned by the English Department to match the course objectives. This began with the creation of instructional videos without the advantage of prior validated templates or established methodologies. While efforts were made to ensure the quality and accuracy of the content by seeking validation from a primary instructor specialized in TESOL, the lack of established designs may have introduced potential biases or limitations in the intervention's implementation that may have affected the examination of the study objectives. Another constraint arose from the necessity to cover exercises from the textbooks, which added a substantial workload in conjunction with the design of the intervention tasks. This increased workload has the potential to impact the learners' engagement and Flow state, as they might feel overwhelmed by the combined demands.

The implementation of the flipped classroom is likely to impose an increased workload on teachers and necessitates a high level of technological use. Regarding the used tools, even though they were previously established in the literature for examining learner engagement, I had to modify them to suit the specific context, considering the learners' cultural background and levels of comprehension. Another limitation was that I had to shorten the number of questionnaire questions from the existing literature to ensure ease of completion for the learners, as they were given the questionnaires six times during the study. Given the use of multiple tools alongside the intervention, an extensive set of questions could have resulted in respondent fatigue. Not being given consent to record the classes posed another constraint that made classroom observations harder during the teaching process, which potentially led to missing important data. Additionally, conducting the study during the university term meant that learners were busy with other subject commitments, such as assignments and exams, which could have impacted their responses during the study period. Taking these into consideration, learners were individually interviewed online via Teams at different times according to their availability, with each interview lasting less than half an hour. Another limitation was the teaching while doing the research, which might cause a potential conflict between time commitments. Trying to make a balance between the demands of teaching responsibilities, such as the preparation of the lessons, preparing and grading exams and assignments, and teaching in classes, and the need to dedicate time and focus to the study objectives can be challenging. Therefore, investing time in teaching may restrict the ability to focus on the research objectives. In addition, an obvious limitation of the present study relates to the small number of participants and the inclusion of only male participants. This raises issues regarding the representativeness of the findings for a larger EFL context, consequentlyaffecting drawing robust conclusions.

7.5 Recommendations for future research

The present study suggests the potential effectiveness of the application of the pedagogical intervention in EFL grammar courses. It examined the influence of this intervention on learner engagement and the experience of Flow state among learners. This study proved the effectiveness of using the short period of the teaching intervention in enhancing learner engagement and the Flow state among learners. In future studies, it can be useful to examine learner engagement within the flipped learning approach within the same content. This study went beyond only a flipped content but rather included more interactivity in classes, an increase of collaboration among learners, and different types of tasks and activities. In addition, it can be useful to examine the intervention over a longer period to provide deeper insights into the improvement of learner engagement and the experience of Flow state. Furthermore, future research should expand the participant population to encompass a more diverse and balanced representation of genders. This would support the generalizability of the study's findings to a larger EFL context, thereby facilitating the ability to draw more robust conclusions on learner engagement. Furthermore, researchers may consider conducting comparative studies with mixed-gender samples to gain further insights into potential gender-based variations in learner engagement and experiences. By addressing these recommendations, future studies can overcome the limitations of the current study and contribute to a more comprehensive understanding of learner engagement in EFL learning contexts.

Another recommendation is to consider another approach to teaching, such as the Communicative Language Teaching Approach, to examine learner engagement and the experiences of Flow state compared within the pedagogic intervention used in this study. Such a comparative investigation could yield distinct perspectives on learner engagement, contributing valuable insights to the existing body of knowledge on learner engagement and enhancing our understanding of the Flow Theory in the context of language learning. In future research, it would be advantageous to examine learner engagement in alternative language skills and different EFL learning contexts. This research would facilitate the examination of potential variations in learner engagement and provide a deeper understanding of the application of the Flow Theory in language learning. By exploring various language skills and contexts, researchers can enrich the knowledge base and gain more comprehensive insights into the concept of learner engagement and the application of Flow Theory in designing the intervention materials.

Appendix A Questionnaire

Please think about the grammar class you attended today. How did you feel during the classes? Please tick in the box to indicate how much the statement is true in your case. There are no right or wrong answers; we are interested in your experiences.

		Strongly disagree	**Disagree**	**Neither**	**Agree**	**Strongly agree**
	Questions	**1**	**2**	**3**	**4**	**5**
1	In the class today, I worked carefully to make sure it was done right.					
2	In the class today, I thought about different ways to solve problems in my work.					
3	In the class today, I tried to connect new learning to the things that I already learned before.					
4	In the class today, I tried to understand my mistakes when I got something wrong.					
5	In the class today, I stayed focused even when it was difficult to understand.					
6	I participated in all the activities during the class today.					
7	During the class today, I paid attention and listened carefully.					
8	In the class today, I continued working until completed my work.					
9	The class today was interesting and enjoyable.					
10	Because of the class today, I would attend similar other grammar classes					
11	I felt good in the class today.					
12	In the class today, I wanted to understand what I was learning.					

Appendix B Participant information sheet (intervention Group

Participant Information Sheet (Intervention group)

Study Title: **Investigating Saudi English EFL Learner Engagement in a Flipped Learning Context Using the Flow Theory**

Researcher: Khalid Albahouth

ERGO number: 62258

You are being invited to take part in the above research study. To help you decide whether you would like to take part or not, it is important that you understand why the research is being done and what it will involve. Please read the information below carefully and ask questions if anything is not clear or you would like more information before you decide to take part in this research. You may like to discuss it with others but it is up to you to decide whether or not to take part. If you are happy to participate you will be asked to sign a consent form.

What is the research about?

The research will be part of my work towards obtaining my doctoral degree at the University of Southampton. This research is exploring the English Learners' engagement who are studying English language at a Saudi University. The main objective of the study is to understand the changes in student engagement as a result of the use of a pedagogic intervention in language teaching.

Why have I been asked to participate?

You are being invited to participate in this research as you are a student studying English at a Saudi University and have registered on the grammar 1 course this term. The number of students who might be asked to participate in this study is all students who have registered on the grammar 1 course.

What will happen to me if I take part?

If you are interested in taking part in this study, there are no extra classes to attend, however, you will be asked to: 1) to complete a questionnaire after each class; 2) to send a voice message to reflect on your experience after each class; and 3) to be informally interviewed during the study. your participation will last for one semester (once a week).

you will be taught in a different way in which you will be asked to review specific online sources in Blackboard before you come to the class and do some work either in groups or individually. The teacher will train you in how to do the the online procedures.

I will attend the classes and access to your work on the course and in the Blackboard. I will take notes while you are participating in the lesson. I will record the lessons. These recording lessons will help me learn more about your engagement in the classes and help me to recall any important information relating to my research.

Are there any benefits in my taking part?

There may be no direct benefit to you other than the sense of helping the public and contributing to the knowledge in the area of understanding learners' engagement and the development of teaching English for Saudi Higher Education, particularly for those who are studying English as a second language. Your participation is highly appreciated.

Are there any risks involved?

The study involves minimal risk to participants (e.g. a psychological discomfort you may feel having me in your class as an observer). All your comments, personal information, and your names will be made anonymous.

What data will be collected?

I will collect from you frequent questionnaires after each class, you voice messages after each class, and some data from the interviews. I will not record your names to in my notes. I will not share any data collected from you or any of the recordings with anyone except my thesis supervisor. Your names and images will not appear in this study. All data collected in association with this study will be stored in a locked file cabinet and/or on a password protected computer

Will my participation be confidential?

Your participation and the information we collect about you during the course of the research will be kept strictly confidential. All data and classes recordings will be stored on the secure University of Southampton OneDrive System accessed via university email and on external hard drive that is password-protected and on encrypted computer. Your names and any details that you mention will be coded and anonymized so it cannot be identified. Recorded sessions will be transcribed and will be destroyed when the study is finished and no longer needed.

Only members of the research team and responsible members of the University of Southampton may be given access to data about you for monitoring purposes and/or to carry out an audit of the study to ensure that the research is complying with applicable

regulations. Individuals from regulatory authorities (people who check that we are carrying out the study correctly) may require access to your data. All of these people have a duty to keep your information, as a research participant, strictly confidential.

Do I have to take part?

No, it is entirely up to you to decide whether or not to take part. If you decide you want to take part, you will need to sign a consent form to show you have agreed to take part.

What happens if I change my mind?

You have the right to change your mind and withdraw at any time without giving a reason and without your participant rights (or routine care if a patient) being affected. You can contact me in person or at kaa1n19@soton.ac.uk to inform me of your withdrawal and in the event that you do withdraw from this study, the information you have already provided will be kept in a confidential manner and still will be used for the purposes of achieving the objectives of the study only.

Your participation or non-participation in this study does not jeopardize your grades, nor does it affect your present or future relationships with the faculty or university relationships.

What will happen to the results of the research?

Your personal details will remain strictly confidential. Research findings made available in any reports or publications will not include information that can directly identify you without your specific consent.

Where can I get more information?

If you have further questions about this study or would like to have a copy of the thesis, you may contact me Khalid Albahouth at kaa1n19@soton.ac.uk.

What happens if there is a problem?

If you have a concern about any aspect of this study, you should speak to the researchers who will do their best to answer your questions.
If you remain unhappy or have a complaint about any aspect of this study, please contact the University of Southampton Research Integrity and Governance Manager (023 8059 5058, rgoinfo@soton.ac.uk). Or contact the main researcher at (0569210007, kaa1n19@soton.ac.uk).

Data Protection Privacy Notice

The University of Southampton conducts research to the highest standards of research integrity. As a publicly-funded organisation, the University has to ensure that it is in the public interest when we use personally-identifiable information about people who have agreed to take part in research. This means that when you agree to take part in a research study, we will use information about you in the ways needed, and for the purposes specified, to conduct and complete the research project. Under data protection law, 'Personal data' means any information that relates to and is capable of identifying a living individual. The University's data protection policy governing the use of personal data by the University can be found on its website (https://www.southampton.ac.uk/legalservices/what-we-do/data-protection-and-foi.page).

This Participant Information Sheet tells you what data will be collected for this project and whether this includes any personal data. Please ask the research team if you have any questions or are unclear what data is being collected about you.

Our privacy notice for research participants provides more information on how the University of Southampton collects and uses your personal data when you take part in one of our research projects and can be found at http://www.southampton.ac.uk/assets/sharepoint/intranet/ls/Public/Research%20and%20Integrity%20Privacy%20Notice/Privacy%20Notice%20for%20Research%20Participants.pdf

Any personal data we collect in this study will be used only for the purposes of carrying out our research and will be handled according to the University's policies in line with data protection law. If any personal data is used from which you can be identified directly, it will not be disclosed to anyone else without your consent unless the University of Southampton is required by law to disclose it.

Data protection law requires us to have a valid legal reason ('lawful basis') to process and use your Personal data. The lawful basis for processing personal information in this research study is for the performance of a task carried out in the public interest. Personal data collected for research will not be used for any other purpose.

For the purposes of data protection law, the University of Southampton is the 'Data Controller' for this study, which means that we are responsible for looking after your information and using it properly. The University of Southampton will keep identifiable information about you for ten years after the study has finished after which time any link between you and your information will be removed.

Thank you.

Your participation is very appreciated and welcomed.

Appendix C Participant information sheet (control group)

Participant Information Sheet (Control Group)

Study Title: **Investigating Saudi English EFL learner Engagement in a Flipped Learning Context Using the Flow Theory**

Researcher: Khalid Albahouth

ERGO number: 62258

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What is the research about?

The research will be part of my work towards obtaining my doctoral degree at the University of Southampton. This research is exploring the English Learners' engagement who are studying English language at a Saudi University. The main objective of the study is to understand the changes in student engagement as a result of the use of a pedagogic intervention in language teaching.

Why have I been asked to participate?

You are being invited to participate in this research as you are a student studying English at a Saudi University and have registered on the grammar 1 course this term. The number of students who might be asked to participate in this study is all students who have registered on the grammar 1 course.

What will happen to me if I take part?

If you are interested in taking part in this study, there are no extra classes to attend, however, you will be asked to: 1) to complete a questionnaire after each class; 2) to send a voice message to reflect on your experience after each class; and 3) to be informally interviewed during the study. your participation will last for one semester (once a week). There will be no change of the way you are being taught in this course.

I will attend the classes and access to your work on the course. I will take notes while you are participating in the lesson. I will record the lessons. These recording lessons will help me learn more about your engagement in the classes and help me to recall any important information relating to my research.

Are there any benefits in my taking part?

There may be no direct benefit to you other than the sense of helping the public and contributing to the knowledge in the area of understanding learners' engagement and the development of teaching English for Saudi Higher Education, particularly for those who are studying English as a second language. Your participation is highly appreciated.

Are there any risks involved?

The study involves minimal risk to participants (e.g. a psychological discomfort you may feel having me in your class as an observer). All your comments, personal information, and your names will be made anonymous.

What data will be collected?

I will collect from you frequent questionnaires after each class, you voice messages after each class, and some data from the interviews. I will not record your names to in my notes. I will not share any data collected from you or any of the recordings with anyone except my thesis supervisor. Your names and images will not appear in this study. All data collected in association with this study will be stored in a locked file cabinet and/or on a password protected computer.

Will my participation be confidential?

Your participation and the information we collect about you during the course of the research will be kept strictly confidential. All data and classes recordings will be stored on the secure University of Southampton OneDrive System accessed via university email and on external hard drive that is password-protected and on encrypted computer. Your names and any details that you mention will be coded and anonymized so it cannot be identified. Recorded sessions will be transcribed and will be destroyed when the study is finished and no longer needed.

Only members of the research team and responsible members of the University of Southampton may be given access to data about you for monitoring purposes and/or to carry out an audit of the study to ensure that the research is complying with applicable regulations. Individuals from regulatory authorities (people who check that we are carrying out the study correctly) may require access to your data. All of these people have a duty to keep your information, as a research participant, strictly confidential.

Do I have to take part?

No, it is entirely up to you to decide whether or not to take part. If you decide you want to take part, you will need to sign a consent form to show you have agreed to take part.

What happens if I change my mind?

You have the right to change your mind and withdraw at any time without giving a reason and without your participant rights (or routine care if a patient) being affected. You can contact me in person or at kaa1n19@soton.ac.uk to inform me of your withdrawal and in the event that you do withdraw from this study, the information you have already provided will be kept in a confidential manner and still will be used for the purposes of achieving the objectives of the study only.

Your participation or non-participation in this study does not jeopardize your grades, nor does it affect your present or future relationships with the faculty or university relationships.

What will happen to the results of the research?

Your personal details will remain strictly confidential. Research findings made available in any reports or publications will not include information that can directly identify you without your specific consent.

Where can I get more information?

If you have further questions about this study or would like to have a copy of the thesis, you may contact me Khalid Albahouth at kaa1n19@soton.ac.uk.

What happens if there is a problem?

If you have a concern about any aspect of this study, you should speak to the researchers who will do their best to answer your questions.
If you remain unhappy or have a complaint about any aspect of this study, please contact the University of Southampton Research Integrity and Governance Manager (023 8059 5058, rgoinfo@soton.ac.uk). Or contact the main researcher at (0569210007, kaa1n19@soton.ac.uk).

Data Protection Privacy Notice

The University of Southampton conducts research to the highest standards of research integrity. As a publicly-funded organisation, the University has to ensure that it is in the public interest when we use personally-identifiable information about people who have agreed to take part in research. This means that when you agree to take part in a research study, we will use information about you in the ways needed, and for the

purposes specified, to conduct and complete the research project. Under data protection law, 'Personal data' means any information that relates to and is capable of identifying a living individual. The University's data protection policy governing the use of personal data by the University can be found on its website (https://www.southampton.ac.uk/legalservices/what-we-do/data-protection-and-foi.page).

This Participant Information Sheet tells you what data will be collected for this project and whether this includes any personal data. Please ask the research team if you have any questions or are unclear what data is being collected about you.

Our privacy notice for research participants provides more information on how the University of Southampton collects and uses your personal data when you take part in one of our research projects and can be found at http://www.southampton.ac.uk/assets/sharepoint/intranet/ls/Public/Research%20and%20Integrity%20Privacy%20Notice/Privacy%20Notice%20for%20Research%20Participants.pdf

Any personal data we collect in this study will be used only for the purposes of carrying out our research and will be handled according to the University's policies in line with data protection law. If any personal data is used from which you can be identified directly, it will not be disclosed to anyone else without your consent unless the University of Southampton is required by law to disclose it.

Data protection law requires us to have a valid legal reason ('lawful basis') to process and use your Personal data. The lawful basis for processing personal information in this research study is for the performance of a task carried out in the public interest. Personal data collected for research will not be used for any other purpose.

For the purposes of data protection law, the University of Southampton is the 'Data Controller' for this study, which means that we are responsible for looking after your information and using it properly. The University of Southampton will keep identifiable information about you for ten years after the study has finished after which time any link between you and your information will be removed.

Thank you.

Your participation is very appreciated and welcomed.

Appendix D Consent form

CONSENT FORM

Study title: **Investigating Saudi English EFL Learner Engagement in a Flipped Learning Context Using the Flow Theory**

Researcher name: **Khalid Albahouth**

ERGO number: **62258**

Participant Identification Number (if applicable*):*

Please initial the box(es) if you agree with the statement(s):

I have read and understood the information sheet in the previous sections 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 used for the purpose of this study.	
I understand my participation is voluntary and I may withdraw (at any time) for any reason without my participation rights being affected.	
I understand that should I withdraw from the study then the information collected about me up to this point may still be used for the purposes of achieving the objectives of the study only.	
I understand that taking part in the study involves recordings for the classes and interviews and that these will be used for the purposes set out in the participation information sheet.	
I agree to to take part in this research project and agree for my data to be used for the purpose of this study.	
I understand that I will not be directly identified in any reports of the research.	

Name of participant (print name)……

Signature of participant ……

Date……

Name of researcher (print name)…. Khalid Albahouth ……

Signature of researcher ……Khalid……

Date……

Appendix E My teaching reflections

My reflections made after each class for both groups to document all the procedures that occurred in the grammar classes. The aim was to figure out how well the design and lesson plans worked by comparing them to what actually happened in the classes and then going back to look at the responses the participants gave in questionnaires, observations, interviews, and voice messages to see if they matched up. The reflections were written in an unstructured format in Arabic for more clarity and ease of expression, and each reflection for a class was a maximum of two pages long.

In my reflections for the intervention group, I regularly evaluated the design of the flipped learning context with regards to flow theory conditions to see if the teaching approach induced the flow state among learners and then affected their engagement in grammar lessons. I started by analysing the online materials, specifically the videos on Blackboard. I considered the design of the videos and the learners' reactions to them when they viewed them online, as expressed through their feedback at the beginning of each class. Some of the videos depicted grammar lessons through scenarios, while others featured a teacher explaining grammar structures (refer to Chapter 4 in section 4.3 for further details). This different of videos design was tailored to the learners' preferences by including a combination of story-based elements and clear instructions to satisfy both preferred styles as the feedback of the video preferences provided by learenrs before the study took place. Based on my reflections of the students' responses to the videos, they reported finding the videos entertaining. They also found them interesting and challenging at the same time, which led to some re-watching them multiple times. This aligns with what they said in the interviews and voice messages, indicating their behavioural, emotional, and cognitive engagement with the online materials. This also supports the flow conditions, as the students enjoyed the videos, tried to meet their challenges, and felt a sense of control over the process of reviewing the online materials, indicating their experiences of flow state during their online reviews.

My reflections during class time revealed a rise in interactions and discussions among the learners, indicating an improvement in their cognitive engagement. The design of the flipped learning environment was meant to promote this, and the group work within this context was different from the group work in the control group. This was due to the nature of the tasks and the teacher's role in the flipped learning context. For instance, the warm-up activities in the intervention group were designed either as entertaining activities that allowed learners to use their mobile phones to participate in a competition or as activities to place missing words in sentences. My explanation of the lessons was short with mostly sharing with the leaners’ ideas

and thoughts. As the learners became more aware of the target grammar, the tasks gradually became more challenging, resulting in a balance between their abilities and the difficulty level of the tasks. This balance supports the condition of the Flow theory, which states that a person can experience flow when their skills are matched with the level of challenge. I always monitored the classes work and avoiding giving instructions as I mostly offered the space for learners to work in groups by giving them the choices to choose their groupmates and let them feel free to move between the other groups. Because of this, my reflection was that the learners were more responsible to their learnings as they were always asked questions to peers or me for clarifications or for extended learnings. Many examples such as in the interview or voice messages demonstrated that students were more frequently asking each other or asking their teacher for clarifications or for extended discussions, which corresponded to my reflections to their classes

For the control group, the lesson plans and designs were provided by the English department at the university with limited room for modifications. Finishing the textbook exercises for each unit was mandatory, leaving limited options for alternative activities. Even the slideshows used for teaching instructions were based on screenshots of textbook pages for learners' convenience to follow in the textbook. In the control group classes, I usually started by revisiting the previous week's grammar lesson to refresh the students' memories. During this time, students were given the opportunity to ask questions about previous lessons, although few actually did so. This aligned with what learners in the control group reported in their interviews or voice messages, stating that they lacked collaboration and discussions in their classes, leading to a lower level of emotional and cognitive engagement in their classes.

After this, I introduced the new grammar lesson on the board by presenting the topic and providing a brief overview. I then walked the students through the slides, explaining each one while they followed along in their textbooks. After each slide, there was a related exercise in the book, which I requested that the students work on individually or sometimes in groups. I then checked their answers. This process of showing slides, explaining grammar structures, and completing exercises in the textbook continued until the end of class. My comments were that there was a decrease in class discussions, even when students were working in groups, indicating a few instances of cognitive engagement. Most students seemed focused on completing the tasks and checking their answers rather than asking questions how questions that may indicate less cognitive engagement within their grammar lessons. Only a few students initiated discussions with me to ask critical questions, while the majority simply sought information to complete the tasks. While the majority of students demonstrated behavioural engagement through their participation in the exercises and sharing of answers, they appeared to be less emotionally and cognitively engaged in classes. Only a few exhibiting more cognitive engagement through

discussions or asking "why" questions as opposed to mostly asking "what" questions to seek information. The majority of my reflections corresponded with the experiences reported by the participants in the control group regarding student engagement in grammar classes.

Appendix F Hamzah's Interview

Me: at the beginning, I'd like you to talk about the previous lecture and your overall experience within the classroom so far.

Hamzah: Regarding the previous lectures, I was mentally engaged, but as I was previously studying remotely, there was a significant difference. In the remote setting, I was merely following along, but not fully engaged mentally. However, when we were physically present in the classroom before the lecture, I would be prepared and mentally focused on the lesson. In my view, the classroom environment was good, despite some complexities or challenges in the grammatical rules, there were moments of confusion. Nevertheless, the teaching approach, as I mentioned in previous voice messages, was excellent. I find that I understand the explanations quite well, and your teaching style, in my opinion, ranges from good to very excellent. I comprehend grammar because of your teaching in classes, and it suits me. It takes time between each example, and I appreciated this way of teaching approach.

Me: You mentioned that the teaching method was suitable for you based on your description, there was a kind of interactive between learners and teacher because of there was no collaborative group work. Could you explain more on this, and do you find this approach more interesting, and if so, why?

Hamzah: Yes, indeed, I prefer having more direct interaction between me and the teacher rather than the teacher being less talkative and relying on student discussions or team work.

Me: Is there a specific reason for this preference from your perspective?

Hamzah: I feel that when I communicate directly with the teacher, the source of the information is more reliable and differs from when it comes from another student. The teacher has a deeper understanding of the subject, and I can comprehend the topic better when explained by the teacher. Additionally, I believe that when interacting with another student, I may diverge to other topics instead of addressing the specific question they intended to ask. However, when I'm with the teacher, I become more serious, more focused and prepared to get the information rather when I spoke to a classmate which I think the conversation becomes useless.

Me: Could the teacher always answer all your questions, meaning if is there enough time to ask the teacher for everything within the class?

Hamzah: For me, yes, if you mean the participation and task completion, I'm satisfied and happy with my performance, and I looking for improvement.

Me: Would this be the same if you were with another student in the class?

Hamzah: When I'm with another student, it's possible that I might not understand certain points as well because I won't be as attentive. For instance, if the teacher is explaining a topic, I'm more likely to understand it compared to being with another student as I think my performance become less.

Me: It seems that the source of information is essential for you, based on your opinion?

Hamzah: Yes, yes, indeed, it is very important when the source of information from someone who expert of the the topic as you, I consider that source to be very reliable.

Me: Does this mean that you would refrain from working with another student inside the classroom?

Hamzah: No, for me, if it's an optional task that requires working with another student, I have no issue collaborating with them.

Me: However, you prefer and choose to work directly with the teacher?

Hamzah: Yes, that's correct. It's either working by myself or directly with the teacher, and I feel more comfortable and focused this way. You might notice in the classroom that I don't speak or turn around to observe the students because that's my style, and I prefer working independently. I feel more centered, know what is expected from me, and I'm aware of both the positive and negative aspects. When there's a classmate with me, it might distract my focus, and I may lose the sense of being in the classroom, which results in a decreased level of concentration, or I may even mentally disengage. Therefore, I often find myself less active when working in a group.

Me: But if there is no group work, and the teacher mostly talks or explains, do you find this approach suitable for you personally?

Hamzah: No, for me, usually, when I don't understand a specific point, I go online or open the internet, browse, and search for information. Sometimes, I watch a video or refer back to the textbook. This happens daily, not just in the grammar subject but in all subjects.

Me: So, you prefer self-learning and relying on yourself?

Hamzah: Yes, exactly.

Me: Alright, now let's move on to the next question. Tell me about the time inside the classroom, in terms of explanations and task completion. Do you think it's sufficient?

Hamzah: Regarding the time, for the lecture itself, I don't notice the passing of time, unlike in other subjects where I looked at my watch from time to time, just wanting the time to end due to the way of teaching in that class. I don't want to be off-topic because of what's happening in the classroom. As for the grammar class, at the beginning of the lecture, I look at the clock, and suddenly I realize that the time is up. Therefore, I feel like I'm enjoying it to the point that I don't feel the passage of time.

Me: When you mentioned that some lectures are very long, does this mean that there's more group work compared to individual work inside the classroom?

Hamzah: Yes, that's true. There was indeed group work and teamwork activities. The teacher was giving us tasks that took a long time to complete, and I don't think they deserved that much time. So, I feel that more time was wasted.

Me: Is this possibly helpful for you since it extends the learning time?

Hamzah: No, No, I don't think this is beneficial. It's more like a waste of time, and it can lead to boredom in the classroom. When I finish the required part, the other students are also finishing their part, so I don't like this kind of work. Sometimes, we finished our work in our group, and the teacher waited for the other groups. This waiting time makes me feel bored, and afterward, my focus decreases, or I might even disconnect from the classroom atmosphere. So, I often find myself distracted when working in a group.

خ. في البداية أريد منك أن تتكلم عن المحاضرة الماضية والمحاضرات السابقة الصف لي تجربتك داخل المحاضرة بشكل عام؟

حواس. بالنسبة المحاضرات الماضية كنت حاضر ذهنيا وأنا كنت سابقا في الدراسة عن بعد كان هناك فرق شاسع لانه الدراسة عن بعد حضوري لا يتجاوز إنني فقط متابع ولكن ذهنيا غير حاضر ولكن تحضر او أراجع الدرس قبل ولكن عندما كنا حاضرين في الكلاس قبل المحاضرة أكون أنا جاهز ومحضر إلى الدرس نظرة بسيطة حضوري باعتقادي انه كان جيد بالرغم أن هناك معوقات وأشياء معقدة أو كان في وزن في القواعد يكون فيها لخبطة ولكن من ناحية طريقة التدريس أنا بالنسبة الي كما ذكرت في الرسائل الصوتية السابقة أنها ممتازة وأشوف نفسي إني افهم فيها بشكل ممتاز و أنت أيضا لا أنساك في الشرح تعتبر جيد إلى ممتاز جدا افهم منك طريقة شرحه أيضا مناسبة لي تأخذ وقت بين كل مثال ومثال آخر وهذا الشيء نال إعجابي وأنا كما ذكرت شخص صريح جدا لو هناك أشياء سلبيه ذكرتها لك الآن وأنا كل شخصية معروفه لأني لا أجامل احد فأنا معجب جدا في حضورك أنت في الكلاس واشرح لك الواضح بالنسبة لي.

خ. أنت ذكرت انه طريقة تدريس كانت مناسبة لك حسب وصفك أنا هناك تفاعل بين الطالب والمعلم ولا يوجد فيها عمل جماعي كثير ممكن توضح لي اكثر و هل هذا الشيء أنت معجب فيه اكثر ولماذا؟

حواس. صحيح نعم أنا أحب أن يكون الاتصال بين المعلم الطالب اكثر من كونه أن يكون المعلم غير متكلم كثير ويعتمد على نقاش الطلاب فيما بينهم أو تيم وورك.

خ. هل هناك سبب معين من وجهة نظرك؟

حواس. لانه احس بالنسبة الي انه لما اكلم المدرس يكون مصدر المعلومة نقي تختلف عن طالب لانه ممكن افهم منه اكثر وهو متوغل في هذا العلم اكثر من الطالب ممكن أيضا لو أكون مع طالب آخر ربما اذهب إلى موضوع آخر غير السؤال الذي يريده ولكن لما يكون الوضع مع المدرس أكون في وضع جدي اكثر ومستعد اكثر لكسب المعلومات و أكثر من كونه فرند لي مع طالب ثاني.

خ. هل هنا ممكن أن المعلم يجيب على جميع أسئلتك أقصد بأن الوقت يسمح لك بأن تستفسر عن كل شيء داخل الصف ؟

حواس. بالنسبة لي نعم إذا أنت تقصد المشاركات وحل التمارين اشوف أنا راضي وراضي عن ادايئ و أطمح للأفضل.

خ. وهل هذا الشيء لو كان مع طالب آخر معك في الصف هل سيكون نفس الشيء؟

حواس. لما أكون مع طالب ممكن يقل بالنسبة لي لأني لن أكون فاهم او مستوعب مثلا لما يكون مثلا شارح لي المدرس لذلك ربما يكون الأداء اقل بقليل.

خ. إذا مصدر المعلومة مهم بالنسبة لك حسب رأيك؟

حواس. نعم نعم مهم جدا ويكون مصدر المعلومة من شخص فاهم بهذا الشكل أكون أنا شخص جدي لما يكون مصدر المعلومة شخص ثقة.

خ. هل هذا الشيء اللي فهمته منك إنك تمتنع عن العمل مع طالب آخر داخل الصف؟

حواس. لا بالنسبة لي لما يكون في تمرين وهو اختياري لانه يعمل مع طالب ليس هناك مشكلة لدي بالعمل معه

خ. ولكن أنت فضلت وتفضل العمل مع المعلم مباشرة؟

حواس. نعم صحيح اما مع نفسي او المعلم مباشرة وهذا الشيء بالنسبة لي أفضل هو وارتاح ودائما ربما تشاهدني داخل الصف لا أتكلم او التفت إلى الخلف لمشاهدة الطلاب لانه هذا الشيء صفي عندي وأفضل أن اعمل به وحدي احس إني أكون مرة مركز وأعرف المطلوب مني وأعرف الأشياء السلبية والإيجابية أما لما يكون معي كلاس ميت ربما يشتت لي أفكاري لذلك ربما لا يكون هناك نتيجه أما أنا ما أكون أنا أعرف نفسي أكثر و انجز اكثر.

خ. طيب هذا الشيء داخل الكلاس ماذا عن أشياء خارج الكلاس لو كان عندك سؤال أو استفسار هل رح تسأل الطالب او تنتظر إلى أن تسأل المدرس مرة أخرى؟

حواس. لا بالنسبة لي غالبا لما أكون ماني فاهم نقطة معينة اذهب إلى او افتح النت و اتصفح وأبحث عن المعلومة أو ربما اشاهد مقطع فيديو او ارجع إلى الكتاب وهذا الشيء يحصل معي يوميا وليس فقط في مادة القواعد هذا الشيء في جميع المواد.

خ. إذا أنت تفضل التعليم الذاتي والاعتماد على نفسك؟

حواس. نعم بالضبط

خ. طيب الآن انتقل للسؤال الآخر حدثني عن الوقت داخل الفصل أقصد من ناحية الشرح وحل التمارين هل باعتقادي انه كافي؟

حواس. بالنسبة من ناحية الوقت لما كانت المحاضرة عن بوعد صراحة آمل من المحاضرة ولكن عندما كان حضوري لا احس بالوقت إطلاقا بعكس المواد الأخرى إني انظر إلى ساعتي من فترة إلى فترة فقط أريد أن ينتهي الوقت بسبب طريقة التدريس ولا أريد أن اخرج على السياق أي بسبب الشيء الذي يحصل داخل الكلاس أما بالنسبة لي في مادة القمر لا احس في الوقت إطلاقا بداية المحاضرة انظر إلى الساعة وفجاءة وشاهد أن الوقت قد انتهى لذلك احس إني مستمتع لدرجة إنني لا احس بمرور الوقت

خ. عندما ذكرت لي انه بعض المحاضرات يكون الوقت طويل جدا هل هذا يعني أن هناك كان عمل جماعي أكثر من العمل الفردي داخل الصف؟

حواس. نعم هذا صحيح كان هناك عمل جماعي وتيم وورك وكان المعلم يعطينا نشاط وأن طول في حله ولا أعتقد انه هو يستحق هذا الوقت الطويل لذلك احس أن هناك ضيع في الوقت أكثر.

خ. هل ربما هذا الشيء مفيد لك حيث إنك تأخذ وقت التعلم أطول؟

حواس. لا لا أعتقد أن هذا الشيء مفيد وأعتقد انه مضيعة للوقت وهذا الشيء سبب لي ملل داخل الصف لانه إذا أنهيت الجزئية المطلوبة مني الطالب الآخر أيضا إنهاء المطلوب منه لذلك لا يعجبني هذا العمل وأيضا أحيانا ننتهي من العمل في مجموعتنا والمعلم ينتظر المجموعات الأخرى لذلك في هذا الوقت احس في الملل من الانتظار وبعدها تركيزا يكون أقل أو ربما اخرج عن جو الكلاس لذلك دائما أنا اتشتت ذهنيا لما اعمل في المجموعة

خ. لكن ربما إذا لا يوجد عمل في المجموعات من الأنشطة والتمرين يا ربما المعلم يتكلم او يشرح معظم الوقت هل تعتقد أن هذا الشيء مناسب لك شخصيا؟

حواس. بالنسبة الي نعم أفضل أن يتكلم المعلم طول الوقت خصوصا لما يكون لما يكون كلامه وطريقة شرحه جدا متناسقة ومرتبه أما إذا كان يتكلم بطريقة عشوائية وشرح غير مرتب هنا ممكن تكون في إشكالية أما إذا المعلم كان مرتب وعنده طريقة الشرح مناسبة حتى لو اخذ معظم الوقت هذا الشيء يناسبني أنا شخصيا اكثر.

Appendix G Lami's Interview

Me. First of all, could you talk about your experience in the grammar subject in the previous lecture or in other lectures? could you describe your experience to me I these classes?

Lami: Of course. For me, this week I have the grammar, writing, and listening subject. I'm not prepared to study everything or focus entirely on every lesson, except I might do so in the grammar subject because there were things I learn from while other classes lacked organisation. However, in the grammar subject, I see that it was organised in balancing the information and it is better structured.

Me: Can you describe your feeling inside the classroom?

Lami: my feeling was better, especially when I attended grammar classes.

.

Me: What do you mean by "balance" as you mentioned earlier?

Lami: Yes, because sometimes the teacher only explains a simple thing, some students understand, and others don't, and the rest of the time, we do exercises, activities, and technical work. This can be tiring. For example, today's lecture on listening skills, the teacher didn't explain things any better, the whole session was about note-taking, even though we covered the same thing in the previous lecture, and this repetition is negative for classes.

Me: At this moment, how was your feeling?

Honestly, I felt bored, to the point where I wanted to not complete the entire class and just wait for it to end. Teaching should be better and more enjoyable because I have an example from my high school days where there was a teacher who made the subject very interesting. I was in a conservative school where most students weren't interested in English, but with this teacher, I was surprised to see that most students were engaged, following along, and participating in solving exercises. After the term ended and we got a different teacher, the participation and interest from students dropped significantly. Only a few continued to actively participate, while the majority stopped engaging. This shows the impact of teachers at this stage.

Me: Let's talk now about the previous lessons in the grammar subject this semester. From what I understand, for you, when there's more explanation, the method or lesson becomes more enjoyable. Is that what I got from you, or did I misunderstand?

Lami: Yes, actually, if there's more explanation, I believe it's better because we can understand the grammar rules, for example, with 60% explanation, and the rest is doing exercises and activities.

Me: Since you mentioned working in the classroom, can you explain how was it and what do you prefer working with?

Lami: Personally, I prefer working alone, to be honest, but sometimes I am okay to work with my classmates because it might be beneficial.

Me: Is there a specific reason for this preference?

Lami: For me, it's because I've become accustomed to working alone most of the time, and perhaps this could be a negative thing. However, if I'm asked to work with other students, it might not always result in good collaboration among us.

Me: From what I understood, there was a lack of cooperation among students within the grammar classes?

Lami: That's correct, and it's rare to see group work with actual collaboration among us.

Me: Could you explain why?

Sure, for example, if the teacher assigns a specific task to be done in a group, some students might collaborate and work on it together, while others may remain silent and not participate in the group. Some might simply ask for the answers, and only a few engage in active collaboration. In my opinion, this cooperation among us is important and should be taken seriously, especially for the near future, as in the workplace, teamwork is crucial.

Me: Does this mean that you weren't happy or comfortable when working in a group?

Lami: Honestly, I can't give you a right answer because my experience with working in groups is very limited. If I had more experience working in groups, perhaps I could give you a better answer to this question, but right now, I'm not able to provide a clear response.

Me: Do you think there's a specific reason why your experience with group work is limited?

Lami: I'm not sure of the exact reason, but as is often said, some students might look to their personal benefits when it comes to grades. For example, there was a classmate from a different section who had a story where he knew all the answers and shared them with the group during discussions. The other students in the group didn't actively participate; they simply took the answers. When the teacher asked the non-participating students about the answers, they got them from this particular student. After that, this person seems to prefer not to work with other students within the classroom. So, it might be a result of such experiences where some students hesitate to work with their classmates.

Me: Do you think that the issue with group work or collaboration might not necessarily be with the classmates, but perhaps there's something that needs improvement?

Lami: I think it's a problem with organisation because some teachers handle it excellently. They ask the whole group about the answers, and if the group provides the correct answer, it encourages everyone within the group. However, in some cases, the instructor might only give the grade or recognition to the individual who is responsible within the group.

Me: If you don't understand a specific grammar rule or if you want clarification on something, do you sometimes turn to classmates and ask them to help, where you ask them about a certain point and want them to explain it to you?

Lami: Sometimes I might need assistance, and I ask another person for help. However, personally, I don't like to ask for help from others, and perhaps that's a personal reason. Therefore, you might find me either solving the exercise on my own or leaving it without a solution, and it's better for me to ask one of my classmates.

(*Here I noticed that he was not happy with talk in this point, so I changed to another questions)*

Me: Now, let me ask you about another point, which is about the time within the classes. Do you consider yourself satisfied or content with your time in class because you've taken your time fully?

Lami: No, not at all. Honestly, I believe that sometimes the teacher, or in some other subjects as well, there are subjects I don't particularly prefer, but the teacher has an impact on how we perceive the subject. For example, in writing classes, few students might actually prefer the subject, but the way the teacher explains and their teaching style can make us like the subject and not noticing the passage of time.

Me: Can you describe the relationships between students within the grammar classes?

Well, I think I see many students who prefer working alone and don't talk with others, and there's a small number who enjoy working together.

Me: Personally, do you feel that you're close to other students, or perhaps there's a gap between you and them?

Lami: Honestly, I mostly see myself as somewhat isolated. I remember our first lecture when we were asked to work in groups; there was a sense of closeness, and the idea was nice.

Me: Does this, I mean, when you mentioned the issues with group work, have an inverse effect on you personally?

Lami: No, it doesn't have a personal effect on me.

Me: Is there anything else you'd like to add, suggest, or any topic I might have missed asking about?

Lami: In my opinion, if the teachere were to provide more examples from outside the textbook during explanations and make the lessons more engaging, it would be beneficial. I mean, adding entertainment to the lesson. For example, in the writing class, sometimes the teacher gives us an

interesting topic, like a soccer team, and asks us to write about it. Everyone gets involved and is interested in the topic. Sometimes it's related to TV series or anime, making the lecture enjoyable. I remember when he asked us to write about a city in the world, and one of the students talked about Tokyo. The teacher then asked if any of us were currently watching any Japanese shows or anime. So, the class became engaging, and we had a lot of discussions within the room.

Me: Was this feeling of engagement different in other subjects?

Lami: Exactly, the feeling was much better. Sometimes, certain teachers focus solely on the content in the textbook, and the topics may not be relevant or interesting to us, leading to a diminished sense of engagement in those subjects. Occasionally, the topics can be outdated or not aligned with our interests, causing a similar feeling. However, when a teacher presents a captivating topic that's suitable for us, you'll see increased participation and discussion within the classroom. The enthusiasm is higher, especially when the topic is intriguing, like a movie or TV series. Students tend to be more enthusiastic. Personally, I enjoy listening to English podcasts, and sometimes I listen to certain lectures or classes, but some of them are old, which doesn't interest me as much as new and relevant topics. For example, today, as I was coming to the university, I played a podcast, and the topic was engaging for me personally because it was about pets. I really enjoy it when the topic is suitable for me, or it's something that captures my interest. In those cases, I find myself not forgetting the content, unlike with videos, especially if the podcast is old and not aligned with my interests.

خ. في البداية ممكن تتكلم عن تجربتك في مادة القواعد المحاضرة الماضية المحاضرات الأخرى أو بشكل آخر اوصفلي تجربتك بشكل عام؟

لميع. أنا بالنسبة لي هذا الأسبوع عندي مادة القواعد والكتابه والاستماع ما عندي استعداد إني ادرس او أحط كل تركيزه على الدرس الا ممكن في مادة القواعد لانه فيها أشياء اتعلم منها مرة وبعض الحصص فيها عدم ترتيب ولكن في مادة القواعد اشوف أنها كانت منظمة في موازنة بين المعلومات وتكون بشكل أفضل

خ. صف لي شعورك داخل الصف؟

الميع. طبعا شعوري كان أفضل بالذات عند ال حضوري.

خ. ماذا تقصد في الموازنة عندما ذكرتها قبل قليل؟

الميع. أي نعم لأنه عند البعض يشرح فقط شي بسيط البعض يفهم والبعض الاخر لا يفهم وباقي الوقت كله يكون عمل الطلاب من حل تمارين وأنشطة وسوي تيكنوس ما يكون هذا الشيء متعب يعني مثل اليوم محاضرات الاستماع الدكتور ما شرح بشكل افضل الحصة كلها كانت عبارة عن تدوين الملاحظات مع أن المحاضرة الماضية اخذنا نفس الشيء وتدوين ملاحظات هذا الشيء سلبي.

خ. في هذه اللحظة كيف كان الشعور عندك؟

الميع. بصراحة كان ملل حتى إني كان ودي إني ما اكمل الحصة كاملة وانتظر الوقت يخلص والمفروض يكون تعليم أفضل وممتع لانه أنا عندي مثال كان في دراستي في الثانوية كان هناك مدرس كان كان تدريس جميل جدا كنت أنا في مدرسة محافظة الأغلب لا يرغبون في اللغة الإنجليزية وهذا مدرس أنا انصدمت نفسي لأني شفت انه اغلب الطلاب يشاركون يتابعون معه حلول التمارين لذلك انصدمت بعد ما خلص الترم جانا مدرس آخر وقلة المشاركة والاهتمام للطلاب معاد صار احد يحل الواجبات والتمارين فقط عدد قليل كان متابع معه اما البقية لا يشاركون ذلك لذلك نشوف تأثير المدارس مهم في هذه المرحلة.

خ. خلينا الآن نتكلم عن الدروس الماضية في مادة القواعد في هذا الترم واللي فهمته من منك انه كل ما كان هناك شرح اكثر كانت الطريقة او درس محبب إليك، أو أنا فهمتك بشكل خاطئ؟

الميع. هو في الحقيقة لو يكون في شرح اكثر اعتقادي انه أفضل بسبب أننا نفهم القاعدة على سبيل المثال 60% شرح والبقية عمل نحل التمارين والأنشطة.

خ. بما إنك ذكرت العمل داخل الفصل من حل تمارين وأنشطة هل أنت تفضل العمل لوحدك أو العمل مع بقية زملائك في الفصل؟

الميع. عن نفسي أنا أفضل العمل لوحدي بكل صراحة ولكن بعض الأحيان لا مانع في العمل مع زملائي الطلاب لانه ربما تكون مفيدة.

خ. هل هناك سبب معين؟

الميع. بالنسبة لي أنا تعودت على هذا الشيء لانه أغلب الوقت اعمل مع نفسي فقط وربما هذا الشيء يكون سلبي وربما مع الوقت لو طلب من العمل مع البقية الطلاب ممكن لا يكون في هناك توافق بيننا الطلاب

خ. بحسب فهمي لما ذكرت انه لا يوجد تعاون بين الطلاب داخل الفصل؟

الميع. هذا الشيء صحيح ونادرا ما اشوف عمل في المجموعة ويكون في تعاون بيننا

خ. ممكن توضح لي اكثر؟

الميع. يعني تقسيم الجروب مثلا هذا المعلم طلب منه حل اكسر سايز معين تعاون بينكم وحلها التمرين وبعضهم ربما يكون ساكت ولا يتكلم يعني ما يشارك في المجموعة وبعضهم فقط يطلب الإجابات فقط والعدد القليل يكون بينهم تعاون بشكل قليل في اعتقادي أن هذا الشيء او تعاون بيننا مهم في المستقبل القريب خصوصا عند الوظيفة يجب أن يكون فريق واحد.

خ. هل هذا يعني أنك لم تكون سعيد او مرتاح عندما تعمل في المجموعة؟

اللميع. صراحة لا استطيع أن أعطيك إجابة لأنها تجربة قليلة جدا في العمل في المجموعات جربت العمل في مجموعات أكثر ربما أعطيك إجابة على هذا السؤال لذلك ما أقدر أعطيك إجابة.

خ. هل تعتقد انه في سبب معين لماذا تجربتك في العمل الجماعي قليلة؟

الميع. لا اعلم ما هو السبب ولكن لكن الأغلب مثل ما يقولون فقدت هم مصلحتها الشخصية للحصول على درجات مثلا احد الزملاء يدرس في شعبة أخرى صارت له قصة عندما كانوا شاوروني في الأجوبة مع المجموعة لانه كان يعلم الإجابات كلها وكان يشاور الزملاء الزملاء الآخرين معه في المجموعة لا يشاركون فقط ياخذون الإجابات وعندما سالهم المدرس عن الإجابات الزملاء الذين كانوا لا يعملون في المجموعة اخذ الإجابة من هذا الشخص لذلك ذلك الشخص من بعدها لا يفضل العمل مع الطلاب الآخرين داخل الصف.

خ. هل تعتقد أن الخلل في المجموعة أو العمل الجماعي ليس من الزملاء ولكن ربما شيء ما يحتاج إلى تطوير؟

الميع. أعتقد انه مشكلة في التنظيم لانه بعض الدكاتره يعملون حركة ممتازة يسأل المجموعة كلها عن الإجابات وإذا المجموعة إجابة يكون تحفيز الجميع على المجموعة وهم البعض فهو فقط يعطي الدرجة أو التحفيز للشخص الذي يجب له داخل المجموعة

خ. هل إذا لم تفهم قاعدة معينة أو تريد توضيح شيء اما هل ربما تلجأ إلى الطالب بأن يساعدك حيث إنك تسأله عن نقطة معينة وتريد منه إضافتها أو شرحها لك؟

الميع. أحيانا ممكن أحتاج مساعدة وأطلب من شخص آخر ولكنني أنا شخصيا لا أحب أن أطلب المساعدة من الآخرين وربما هذا يكون السبب الشخصي لذلك تجدني إما أن احل هذا التمرين بنفسه أو اتركه بدون حل أفضل لي بسؤال أحد زملائي.

خ. والآن دعني اسألك عن نقطة ثانية هي مسألة الوقت داخل الفصل هل أنت تعتبر نفسك أو أنت راضي عن نفسك داخل الفصل لأنك اخذت وقتك كاملا؟

الميع. لا لا أبدا بصراحة أنا يعني بصراحة اشوف انه مدرس أو في مواد أخرى أيضا تكون مواد لا افضلها ولكن المعلم له تأثير على المادة نفسها على سبيل المثال مادة الكتابة القليل من الطلاب يفضلون هذه المادة ولكن المدرس طريقة شرح وأسلوبه تجعلنا أحب المادة ولا نحس بالوقت.

خ. ممكن توصف لي العلاقة بين الطلاب داخل الصف؟

الميع. يعني أعتقد لأني اشوف كم طالب يفضل أن يكون يعمل مع نفسه ولا يتكلم مع احد ويعني في عدد بسيط يحب أن يعمل مع بعض.

خ. لك أنت شخصيا هل تحس إنك قريب للطلاب أو ربما تكون هناك فجوة بينك وبينهم؟

الميع. صراحة تقريبا أرى نفسي منعزل وأتذكر أول محاضرة لنا عندما طلبت منه العمل في المجموعات كان فيه نوعا ما تقارب كانت الفكرة جميلة.

خ. هل هذا الشيء أقصد عندما ذكرت مشاكل العمل الجماعي هل هذا الشيء له تأثير عكسي عليك أنت شخصيا؟

الميع. لا هذا الشيء لا يؤثر علي أنا شخصيا

خ. هل لديك أي إضافة او اقتراح او أي شيء تريد أن تضيفة أو ربما أنا لم أسألك عنه؟

الميع. في اعتقادي لو مثلا المدرس يزيد من الأمثلة من خارج الكتاب على الشرح وأن يكون اكثر أقصد الدرس يكون فيه إنترتينمنت أي تسلية على سبيل المثال في مادة الكتابة المدرس أحيانا يعطينا موضوع شيق مثال عن فريق كرة قدم ويسال منها ويطلب من الكتابة عنه وتجد الجميع يشارك ومهتم في الموضوع وأحيانا يكون في مسلسلات او أنمي لذلك تكون المحاضرة ممتعة. حتى يذكر عندما طلب منه كتابة او تعبير عن مدينة في العالم على سبيل المثال احد الطلاب تكلم عن مدينة طوكيو لذلك المعلم سألنا ما إذا كنا نشاهد الآن مميز او مسلسلات يابانية لذلك درس كان ممتع وتكلمنا كثير داخل القاعة.

خ. هل هنا كان الشعر مختلف المواد الثانية فصل لي اكثر؟

الميع. بالضبط كان الشعور جدا جميل لانه أحيانا بعض المعلمين يركز على فقط المحتوى الموجود في الكتاب وأحيانا المواضيع تكون غير مناسبة لنا وليست من اهتماماتنا لذلك تجد أن الشعور اقل في هذه المواد أحيانا المواضيع تكون قديمة وليست من اهتمامات هنا أيضا فتجد أن المدرس يطرح موضوع شيق ويكون مناسب لنا مناسب لي الوقت الذي نتعلم فيه اما لما يتكون مواضيع من خارج الكتاب وتكون من اهتمامات هنا تشاهد أن الجميع يشارك ويتكلم داخل الفصل لا يكون هناك حماس اكثر على سبيل المثال لما يكون الموضوع عن فيلم أو مسلسل لذلك تجد الطالب متحمس اكثر.

أنا شخصيا أحب استمع إلى البودكاست في اللغة الإنجليزية وأحيانا اسمع بعض الحصص او المحاضرات ولكن بعض تلك القديمة لذلك لا تثير اهتمامي مثل المواضيع الجديدة على سبيل المثال اليوم وأنا جاي للجامعة فتحت البودكاست وفي الموضوع كان شيق بالنسبة لي شخص كان يتكلم عن الحيوانات الأليفة ذلك أنا استمتع كثيرا عندما يكون الموضوع مناسب لي او من اهتمامات لا تجدني لا أنسى المحتوى الذي فيه بعكس الفيديو أول بودكاست الذي يكون قديم وليس من اهتمامي

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