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University of Southampton

Faculty of Humanities

Modern Languages and Linguistics

Investigating Teaching Presence in Blended Learning Environments: an institutional case study at a university in Northwest Mexico.

by

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Thesis for the degree of Doctor of Philosophy in Applied Linguistics/ELT

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Abstract

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Blended learning has emerged in the context of new learning environments and pedagogies offering its potential for maximising the effectiveness of contemporary teaching and learning. If full advantage is taken of technology, there are opportunities to trigger new relationships among the teacher, the learner and the educational context. However, to achieve this, the use of technology must be re-thought in terms of how teachers handle their teaching time and pedagogy (Laurillard, 2002).

The focus and interest of this study are on the role of teachers and how they work to develop concrete skills and strategies for teaching effectively. It looks at how they attempt to bridge the distance between teachers and learners and to establish their presence in blended learning environments in both face-to-face and online contexts. Teaching in blended learning environments requires specific pedagogical approaches; and how educators prepare to teach in these environments will potentially impact the quality of the learning experience they provide (Kim et al, 2015).

Given the importance of teaching presence and based on the assumption that teachers are key if learners are to achieve appropriate learning outcomes, this study sets out to examine the role of the teacher and the perceptions of their learners through an analysis of teaching presence (Garrison et al, 2000) in both environments, face-to-face and online, and understand how teachers and learners make sense of that blend. The data was collected at a university in Northwest Mexico over three years between 2016 and 2019 from four undergraduate-level blended learning courses in the field of English Language Teaching, Software Engineering, and International Commerce.

Findings suggest that teaching presence can enhance the learners' educational experience as it emphasises the organisation of instructional design in their courses. Evidence showed that learners feel a disconnection between the face-to-face and the online components if their teachers lack ownership of their blended course. Thus, there seems to be a need to further integrate both environments so that they become a real blend. In addition, the study reported lower levels of perceived teaching presence in the online component. Teacher immediacy is experienced by learners only in the classroom which does little to encourage their engagement as online learners.

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Research Thesis: Declaration of Authorship

Print name: Emma Lilia Fierros Pesqueira

Title of thesis: Investigating Teaching Presence in Blended Learning Environments: an institutional case study at a university in Northwest Mexico.

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

I confirm that:

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

Signature:

Date: November 24th, 2021

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Definitions and abbreviations

The terms found in this study are defined in this subsection to assist readers who are not familiar with them:

Blended course: A course that combines face-to-face and online settings for collaborative learning activities and instruction.

The following figure illustrates the spectrum of the blend.

Figure 1. A spectrum of technology- enhanced teaching and learning



Source: Stein (2014, p. 23)

According to the criteria dictated by Asociación Nacional de Universidades e Instituciones de Educación Superior, ANUIES, the blend should not exceed 35 percent in the online component, otherwise, the programmes would be considered online instead of blended. In the institution where this study is held, the blend appears in line with the division of class time provided by ANUIES.

Blended learning: A mode of teaching with a learner-centred approach that eliminates time, place and situational barriers (Kanuka et al, 2009) combining the strengths of face-to- face and online settings to optimally blend collaborative and reflexive learning activities (Sorden, 2011).

Blended learning environment: An environment in which blended learning structures and activities are delivered.

Blended learning definition for the purpose of this study: The blend of online educational platforms with face-to-face teaching to improve and facilitate higher education learning where both modalities are delivered by the same teacher.

Collaborative learning: Learners working together to build common meaning and knowledge.

Computer mediated communication (CMC): Communication that is conducted asynchronous or synchronous in a computer-based environment.

Definitions and abbreviations

Community of inquiry: group of individuals involved in a process of empirical or conceptual inquiry into problematic situations.

Community of Inquiry model (CoI): Theoretical framework that represents the process of creating a meaningful and deep learning experience through the development of three primary and interdependent elements: social presence, cognitive presence and teaching presence (Garrison, Anderson & Archer, 2001).

Three primary elements of the CoI:

1. Social Presence: Ability of the learners to project their individual personalities and develop inter-personal relationships (Garrison, 2009).

2. Cognitive Presence: Extent to which learners are able to construct and confirm meaning through sustain reflection and discourse (Garrison, Anderson, & Archer, 2001).

3. Teaching Presence: Design, facilitation, and direction of cognitive and social processes to develop learning outcomes (Anderson, Rourke, Garrison, & Archer, 2001).

ELT: English Language Teaching

Immediacy: Psychological distance that is felt between learners and their teacher.

Interaction in blended learning environments: The combined or reciprocal action between learner to content, learner to teacher, teacher to learner, learner to learner, and learner to teacher to technological systems.

Learner: The term learner according to Stein (2014) refers to a student in regards of the ways people develop knowledge.

Learning Management System (LMS): A software used to plan, implement and assess a learning process. In the context of this study the LMS used is *its Learning*.

Modality: Means by which the educational materials are taught. For the purpose of this study, the modality is limited to face-to-face and online learning.

Online learning: Synchronous (real time) or asynchronous activities taking place in the World Wide Web or via Internet Technologies (Stein, 2014).

Face-to-face learning: Activities or session held face-to-face in the traditional classroom setting (Stein, 2014). Learners in this setting receive learning from the direct and personal communication of the teacher.

Presence: Sense of being there; the perceived degree to which a person is on the other side of the screen (Gunawardena & Zittle, 1997).

Teacher: The instructor facilitator, course designer, course developer (Stein, 2014). In the context of the present study, the teacher is all of the above.

VLE: Virtual Learning Environments.

Chapter 1 Introduction of the study

This study sets out to examine the role of the teacher and the perceptions of the learners through an analysis of teaching presence (Garrison et al, 2000) in blended learning environments, both face-to-face and online, and understand how teachers and learners make sense of that blend. Data is collected over three years from four undergraduate-level blended learning courses in the field of English language teaching, Software Engineering, and International Commerce.

This mixed methods institutional case study focuses on the role of the teacher in blended learning contexts, both face-to-face and online environments. The adoption of digital technologies, specifically a blended learning approach, as part of the strategic plan proposed by the administration at the research site during the period 2011-2015, stimulated the researcher's interest in investigating blended learning environments. The research is carried out in a public university in Northwest Mexico that, in 2012, made the decision to embrace digital technologies and include them in the learning and teaching process by developing and implementing a policy to introduce blended learning in all its courses. Classes from 2012 were to be restructured using a blended approach so that teaching and learning would take place both face-to-face in the classroom and online using a virtual learning environment.

This chapter first introduces the rationale for this study. Next, it presents an overview of the conceptual framework, which underpins it. The research is framed using the Community of Inquiry model (see 2.3) and with a particular focus on the concept of teaching presence (see 2.3.3) in language teaching and learning. Following this, the research questions are articulated together with the significance of their context and its contribution to the existing literature.

1.1 Rationale for this study

I became interested in investigating blended learning environments in 2012 when I was invited to join the institutional planning team at the same university where this study was held. The university set out to adopt a blended learning approach and adapted all of its five campuses in order to set up the appropriate technological infrastructure. At this time, although we were clear about our goals, we knew very little about the research in the area or about how to prepare teachers for their new roles. I wish we had used the Community of Inquiry model to guide the planning and implementation of the online policy, so as to help teachers build a reflective teaching presence and the development of their teaching skills in blended learning environments. I wish I knew then what I know now about teaching presence in blended learning environments.

Chapter 1

As Garrison and Vaughan (2008) assert, traditional face-to-face education must be transformed in ground-breaking ways in order to meet learners' needs as they change. The introduction and use of modern technology in the educational field has resulted in new learning environments, which are said to positively impact education (Alebaikan & Troudi, 2010; and Gomez & Igado, 2008; Graham, 2007 and Garrison & Kanuka, 2004). These learning environments have resulted in innovative higher education models that use digital resources and internet tools to increase the number of students, reduce costs, improve learning and engagement, increase flexibility for teachers and learners, and prepare independent learners among others (Graham, 2006; Lee, 2000; Moskal et al, 2013; Norberg et al, 2011; Smith et al, 2012; Smith & Hill, 2018). In this new educational context, blended learning has emerged as a seemingly more effective and efficient option for teaching, because it is said to improve pedagogy, learner participation, engagement, and flexibility (Means et al, 2013). Blended learning is an approach to learning that has received increased attention as online teaching and learning opportunities have grown along with developments in technology (Jeffrey et al, 2014; Garrison and Vaughan, 2008). It sets out to blend the best of the online component and the best of the face-to-face component (Lynch, 2010). Moskal et al (2013) and other researchers (e.g. Norberg et al, 2011) have argued that blended learning (see 2.2), an approach which combines face-to-face and online learning, can result in a positive educational transformation.

However, there is still very little empirical research which has set out to look at the real impact of these approaches and although, there may be plenty of opportunities, they also offer many challenges that are well reported: lack of teachers' skills to engage with blended learning (Mirriahi et al, 2015); resistance to innovation and change (Salmon, 2005); lack of theoretical models to support institutional adoption (Porter & Graham, 2016), and absence of institutional definition (Mirriahi et al, 2015).

This study draws on work by Garrison (2001) and others, which sees advanced teaching and learning online taking place in communities of inquiry where the learning experience occurs at the confluence of three independent constructs (Social, Cognitive, and Teaching Presence see 2.3). It uses the construct of teaching presence to examine the role of the teacher in the learning process, not just online but also in the classroom, in an attempt to address the lack of empirical research at the interface between online and face-to-face learning and teaching. By investigating face-to-face and online teaching presence in blended learning environments, the researcher hopes to develop insight into, and a clear understanding of the complex learning phenomenon that blended learning entails, and the challenge it represents for academics and learners.

Teaching and learning in higher education has the possibility of moving into a new era if full advantage is taken of technology, claims Laurillard (2002). Digital technologies have the potential to activate different kinds of relationships among the teacher, the learners, and the content to be learned (ibid). Despite the fact that Laurillard calls technology “an exciting prospect”, she also contends that the use of technology must be re-thought in terms of how teachers manage their teaching time and handle pedagogy. In this sense, the focus and interest of this research is the teacher and how they work with digital technologies.

As online higher education began to grow, new learning environments have emerged (Moskal et al, 2013) offering potential for maximizing the effectiveness of contemporary teaching and learning. Among these new environments and pedagogies, blended learning has rapidly emerged as a domain of practice and of research (Halverson et al, 2014). However, as Blouin et al (2007) contended, there seemed to be no one single delivery mode which has the potential to provide sufficient learner and teacher engagement, adequate choice and relevance, and even social contact to produce effective and successful learning.

1.2 Background

This study is grounded on a broad research base, the Community of Inquiry model (Garrison et al, 2000), a theoretical framework that sets out to provide a comprehensive model of online teaching and learning in higher education where the learning experience occurs at the confluence of three different presences.

Some years after its development, the model has now been extended to blended learning as shown in Akyol et al. (2009), Shea et al (2006), and Vaughan (2010). It is in this spirit that the main objective of the present study is to achieve a better understanding of teaching presence as a whole and to establish evidence of the Community of Inquiry (CoI) conceptualization of teaching presence within face-to-face and online learning environments.

This exploratory mixed methods case study gathers quantitative and qualitative data from four teachers and 114 learners. Quantitative data was collected from surveys applied to learners and teachers and qualitative data was collected from classroom observations online and offline and from learners’ interviews and focus groups, teachers’ and the researcher’s journals and interviews.

From these findings, the researcher intends to contribute to the body of academic research regarding the teaching presence construct studied under the CoI framework. It seeks to identify

and synthesize practical ways in which instructors might improve their teaching, teaching presence and sense of community in both online and face-to-face instruction. It reflects on what blended learning and teaching presence might mean for the language teacher and learner.

1.2.1 Blended learning and the Community of Inquiry model

Given the growth of blended learning, it is crucial to understand how people learn online, how their learning increases and may be improved, and if it should continue to grow in today's prevailing method (asynchronous, Internet-based). Barkley (2010) and other researchers as Bryson & Hand (2007) established that learners have more possibilities to engage in a course if they are supported by teachers who have established appealing learning environments, demanded high results, and challenged them to use higher order thinking skills.

Blouin et al (2009) argue that educators should not jump into digital technologies that offer potential for learning without understanding first how to use the instructional method and technology to support learning outcomes. However, a number of researchers like Moskal et al (2013) have found that blended learning can result in a positive educational transformation. Nonetheless, the question now is how can teachers adapt their teaching practices in order to be effective in both online and face-to-face environments. Many teachers do not have sufficient guidance and/or training to develop a significant presence in the online component, another situation portrayed in the research context. As reported in a study by Allen & Seaman (2010), a significant number of teaching staff delivering blended courses do not receive any training, not even informal mentoring prior to the usage of blended learning courses. This lack of training leaves teachers without any knowledge about how to transfer their own classroom teaching practice to the online environment, which has different teaching and learning characteristics and needs.

For this purpose, it is important to frame these issues within a model that allows for more coherent description and explanation. Shea and Bidjerano (2012) posit that two existing theories provide this framing, the Community of Inquiry (CoI) model and the Self-Regulated Learning (SRL) theory. After the examination of alternative models of online and blended learning (see 2.2.3), the researcher has framed her study in the Community of Inquiry model in order to better investigate the role of the teacher in a blended learning environment (see 2.3).

For the researcher, the Community of Inquiry model has been considered the appropriate theoretical framework for the analysis of this study for several reasons. According to a number of researchers like Garrison & Anderson (2003) and Rourke & Kanuka (2009), the CoI is around the

three main aspects present in a quality learning experience teaching, social, and cognitive aspects. In addition, the model is accepted by a large number of researchers such as Shea and Bidjerano (2009), Kozan & Richardson (2014), and Hamza-Lup & Stanesco (2010) who consider it a leading teaching model to be used in blended learning environments (Aykol et al, 2009; Halverson et al, 2012). It is the researcher's keen interest in the teaching in blended learning environments, where the teaching is crucial because of the influence it has upon the learning experience (Ma et al, 2015), and the Community of Inquiry identifies the teaching as a determinant piece in the learning process since it guides the cognitive and social elements. In addition, the Col has been used as a guide for online learning in research and in practice worldwide, since it proposes a practical inquiry model with a list of indicators (Ice et al, 2007; Ozturk, 2012 cited in Gunbatar, 2017).

The Community of Inquiry framework sets to create a model for learning based on educational experiences (Tolu, 2010) that take place within a learning community through the interaction of its three core elements or fundamental dimensions (Garrison, 2000). This social interaction among students and teachers is said to contribute to the creation of deep and meaningful learning environments in higher education, either online or face-to-face (Shin, 2008).

The developers of the Col model have provided evidence that a meaningful teaching presence potentially reduces the impact of the challenges that blended learning represents, as the model focuses mostly on how learning happens and the process of learning instead of concentrating on the outcomes (Akyol et al, 2009; Swan et al, 2009; Garrison et al, 2000; Swan, 2002). In addition, Benbunan-Fich et al (2005, p. 27) report that real evidence of teaching presence in the online environment provides observable proof for students of "how present the instructor is in the virtual classroom".

Teaching presence, one of the three presences of the model, is broken into three categories that instructors use online: "the design, facilitation, and direction of cognitive and social processes for the purpose of realizing personally meaningful and educationally worthwhile learning outcomes" (Arbaugh and Hwang, 2006, p. 10).

The Col framework despite having attracted a great deal of attention for its ability to explain online learning (Bektashi, 2018, Shea et al, 2003; Swan, 2003; Wallace, 2002) is still lacking empirical research to consider whether there are relevant relationships between any of the dimension of the framework and course outcomes (Ho & Swan, 2007). Garrison (2011) has claimed that there are a large number of case studies and personal descriptions and prescriptions, but few rigorous research-based constructs that guide a deep understanding of e-learning in higher education. Moreover, teaching presence is the least researched and conceptually

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developed presence of the model despite its importance in creating and developing online learning communities according to Baker (2010) and Garrison et al (2000).

Investigating teaching presence in blended learning environments with an institutional case study methodology will provide a better understanding of how teachers manage their teaching presence both in the classroom and online, and how teachers and learners make sense of that blend. In addition, it will provide significant empirical evidence for the development of a pedagogy of teaching skills in a blended learning context.

1.2.2 Significance of the study

The findings of this study will contribute to the existing knowledge on the literature of the Community of Inquiry constructs. Theoretical frameworks such the Col depend on empirical evidence to provide validity and reliability, since theories impact both, research and practice. The existing research into blended learning environments has not been sufficiently extended to look at both components delivered by the same teacher: the face-to-face learning as well as the online environment. Additionally, there is a need for more cross-disciplinary studies to generalise the framework into a number of disciplines. This study looks at blended learning in several different disciplines in a single institution but has particular focus on language learning and teaching where it hopes to make a real impact. Lastly, the study will help the researcher to explore future collaborations among other researchers and teachers who have an interest in blended learning research.

From the three presences of the Col, the construct teaching presence is the focus of the present study. The researcher has a keen interest in teaching presence due to its importance in the process of learning. Empirical research has provided evidence that there is a solid correlation between the quality of teaching presence and student satisfaction and learning (Elia et al, 2019; Agudo-Peregrina, et al, 2014; An et al, 2014; Bangert, 2008; Shea et al, 2003; Picciano, 2002). Teaching presence triggers collaborative learning that sets the climate to critical discourse and reflection for achieving personal meaning and mutual understanding within a community of inquiry.

The abilities that teachers develop to work online and face-to-face transferring their teaching presence between classroom and online environments are crucial if learners are to receive a sound educational experience. As a result, the findings of this study will help educators to adapt their teaching practice to the challenges of today's educational context and of advancing technology to meet learners' needs. And for managers and senior administrators, it will serve as a

basis to plan teaching training opportunities to assist teachers in their process of transferring successfully and effectively their teaching presence to blended learning environments.

In sum, data from this study will provide a better understanding of the complex phenomenon of teaching presence in blended learning environments, not just face-to-face, not just online but as a whole blended learning experience; and will also give this construct the value and special care it deserves, since it fosters skills and aptitudes necessary for learners to meaningfully complete blended learning courses.

1.3 Context of the study

UNESCO 2009 World Conference on Higher Education has suggested that for living in a complex information-rich society based on knowledge, learners and teachers should use digital technology effectively to be able to work and learn. García et al (2013) and Torres-Gastelú (2015) state that in a solid educational context where learners and teachers take advantage of the didactic resources, knowing how to use Information and Communication Technologies (ICT) effectively helps to improve the learning process. Pareja-Lora et al (2016) state that international changes in education have created new learning programmes and policies. Thus, new environments for teaching and learning such as blended learning have emerged, and it seems that the easiest way of implementing these new approaches is the use of ICT (Pareja-Lora et al, 2016).

Despite the fact that different opinions are discussed in regards to the usefulness of ICT in education, they are seen as agents of change that can improve the quality of education as de Aldama and Pozo (2016) state. Additionally, since education has been transformed from a teacher-centred to learner-centred approach, the key goal of ICT is to facilitate the learning and teaching process, as said by Rabah (2015). ICT can become powerful pedagogical tools proceeding from the premise that there are many ways to use them into teaching and learning. The challenge is how to integrate them into teaching and learning, and which are the key factors for the adoption and use of ICT (Tonui et al, 2016).

To set the educational context where this study takes place, this section presents an overview of the actions and efforts taken in Mexico to foster the use of ICT in education; next, a subsection about the research on ICT conducted at the university research site is presented.

1.3.1 E-learning in Mexico and in the research site

In Mexico, action has been taken (e.g. the Integral Reform of Basic Education, SEP 2012) to develop competencies in the use of ICT. The objectives are to offer Mexican youth appropriate

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training according to their level of development, educational needs, and the expectations of Mexican society. This reform is a result of the National Development Plan 2007-2012 (Mexico, 2007), and the objectives laid down in the Sectoral Education Programme for 2007-2012 (Ministry of Public Education, 2006, p.187) which specifically stresses “promoting the development and utilization of ICT in the educational system in order to support students’ learning, deepen their competencies for life and favour their insertion into the society of knowledge”. The National Development Plan 2013-2018 (México, 2013) states in goal three on education that for Mexican people to achieve an integral development, it is necessary to improve the quality of education along with a higher investment in science and technology. As a result of these efforts, in 2017 the National Institute of Statistics, Geography and Informatics, INEGI, reported that in the second quarter of 2016, nine out of ten graduate or undergraduate have incorporated the use of the internet (INEGI, 2017).

The National Association of Universities and Institutions of Higher Education, *ANUIES*, has endorsed the use of ICT in teaching and learning in order to increase the quality of higher education (ANUIES, 1999) for the last twenty years or so. Furthermore, the National Development Plan for Mexico 2019-2024 states in goal two, which concerns education that technology is needed to improve the quality of education and in order to achieve an integrated development plan. There are also federal programmes that promote and support the use of ICT in higher education and provide the technological infrastructure.

For these reasons and following its own Institutional Development Programme (2010-2015), the university which is at the heart of this case study, supported a group of International Commerce teachers to incorporate the use of ICT in their courses to explore how learners’ accepted and used the open source e-learning system Moodle. These teachers attempted to supplement and increase the quality of their courses by adding work online using the electronic platform. The results obtained showed a high level of satisfaction and acceptance by its users, both teachers and learners. At this time, however, the concept of blended learning was neither known nor used.

It is within this context of using new delivery modes, that three years later, an institution-wide, blended learning approach (*Modalidad 2012*) was proposed. The project aimed to provide quality education through embedding the use of ICT within courses in order to enhance the students’ learning experience. More specifically it would “improve the operation of the current educational model giving special emphasis to aspects such as **mastery of second language**; the use of the information and communication technologies; and the mastery of generic skills by students” (Institutional Development Plan 2009-2015). The project aimed to expand access to resources for learners, cutting the expenses of building new facilities, while still meeting the core mission of

providing the same learning opportunities to all learners of the five university campuses. It would also provide access to the new generation of pedagogies and learning technologies.

When *Modalidad 2012* was launched, the researcher was part of the team that supported and designed the plan. When the Rector announced the institutional operation of *Modalidad 2012*, the principal barrier was found to lie in the attitude of the teachers, who were in total confusion and despair thinking that the educational model of the university was being changed and that we were migrating to a completely online delivery mode. Long meetings were held to explain to the staff the processes to be carried out to develop the plan and the policies that would support the use of the blended learning approach. In particular, it was found essential for the university senior management to define and support course design processes and for teachers training in the use and management of the educational platform to work on the online component to be provided. The administration was also concerned about the learners that did not own a computer with an internet connection at home. This was the reason why it was crucial to provide all learners regardless of the geographical location of their campus with refurbished computer labs and increased Internet connectivity and bandwidth so that they would receive an appropriate learning experience both online and face-to-face. Since two of the five campuses are located in rural areas, which makes the internet access complicated, the institutional commitment was and still is, to guarantee each learner access to computers connected to the internet for at least ten hours a week in the computer lab of each campus.

The definition of blended learning for the university at the heart of this research is that face-to-face classes should be accompanied by an online component accessed through an LMS, and that both modalities are delivered by the same teacher. When classes changed from a more traditional view of static education to blended learning, the syllabus of each course was redesigned and adapted in order to integrate the online work. The curricula were modified to divide the number of hours of each subject into face-to-face and online work, with no more than a total of 35% of the whole to be offered through online work. The practical content of each course ended up being handled face-to-face and the theoretical content was to be delivered online using electronic documents, videos and audios. In any one semester, which consists of 15 weeks of study, the majority of the online instruction will occur asynchronously when the teacher and the learner are separated by time and space.

The institutional LMS is a licensed software called *its Learning*. The university defined *its Learning* as "It is a software application developed in Norway, which is designed to improve teaching and offers our students the digital tools, information and resources needed to learn together; in short, it allows the unification of theory and practice, technology and content. Improves the quality of

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teaching. It allows monitoring of learning, promotes autonomous learning, provides an international trend, and integrates the best of technology”.

(“Es una aplicación de software desarrollada en Noruega, que está diseñada para mejorar la enseñanza y ofrecer a los alumnos de la Universidad las herramientas digitales, la información y los recursos necesarios para aprender juntos, en pocas palabras permite la unificación de la educación teórica y práctica, la tecnología y el contenido. Mejora la calidad de la enseñanza, permite el seguimiento del aprendizaje, propicia el aprendizaje autónomo, brinda una tendencia internacional e integra lo mejor de la tecnología”).

The general perception from the users has always been positive; they considered this LMS intuitive and an efficient way of delivering their online courses. Teachers found several attractive options that helped them to teach online such as the audio and video features. One of the affordances of *its Learning* that fascinated teachers was the internal email communication system since the institution has not been able to give each learner an institutional email account.

This LMS provides several technological affordances to assist online teaching and learning through sophisticated functionality tools. In the research site, the most common tools that faculty members use to support their instructional strategies are condensed in the following chart:

Tool	Functionality
Pages	Text, embed video, embed audio, hyperlinks, images, links to other <i>its Learning</i> tools
Discussion	Class discussion space where faculty creates topics and learners post answers and respond to peers
Course	Arrange course content by elements of competence, phases and activities
Assignments	Individual or group setting to work and grade activities
Syllabus	Embed chronological listing of assignments, events, and a calendar

Face-to-face classroom and online activities are indicated in each course document, which is made available on the web site of the institution (see Appendix A). The design of the online component for each course was a major activity, which had to be organised centrally as part of the blended learning project. In the design process, a team approach was adopted in which central course designers worked closely with a subject lead designer who was the most

experienced teacher in a subject. He or she was supported by an educational designer, and a technological assistant if the course design process required it. In each campus, the course design staff organised face-to-face workshops with the subject lead designers to provide support and to involve teachers in a “teaching community” (Laurillard, 2008, p.1). It was presumed that this would help them to develop their knowledge about teaching with technology in blended learning environments.

During the design of the core courses, teaching staff provided feedback to the designers through remote interviews and discussion boards. These courses needed to include all the items on an agreed checklist which would then be accepted and uploaded to the LMS. The principal elements which needed to be explicit in the online courses were: the learning activities, resources, evaluation criteria for each activity, formative evaluation, references, and course regulations. The educational designer that supported the core course designers was an expert in the use of Moodle, and was also a promoter of the use of the ICT in Mexican state universities. During the workshops he delivered as part of the teachers’ training at the university, he tried to encourage teachers to exploit their creativity by using a variety of resources and materials to make the learning experience meaningful. He provided examples of activities and resources to be used in the courses for all the disciplines of the university. Years after, I understand that the learning objectives of each online course require learners to engage in many different learning experiences according to the nature of the programme. For example, which ICT tools help learning the core knowledge for Nutrition, which other help learners experiencing practical skills for Ecology, which developing analytical skills are suitable for engineering programmes, which others help language learners demonstrating communicative skills for English teaching, and applying theory for programmes like International Commerce.

The Sports Science teachers were reluctant to accept the new modality since they argued that sports subjects like swimming or soccer could not have an online component due to their practical nature. When the educational designer presented them different teaching approaches and activities to be used online, such as videos demonstrating fieldwork skills and tutorials, the faculty completely changed their attitude to blended learning.

The researcher was to work with the teachers to prepare, introduce and encourage them to embrace this approach that was new to them and perceived as threatening. At the outset, it was hard to convince them of the benefits of blending the best of both worlds, the online and the face-to-face. They were reluctant to change their methodologies, which meant in some cases over two decades of delivering classes using the same teaching practices. The researcher and an

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external consultant met with teachers personally once a month for training sessions and held weekly online meetings to ease the process.

An ongoing programme of training and technical support was presented in 2012 before the launching of the blended learning courses. This measure was taken to help the academic community to get involved in the use of the LMS to complement their face-to-face courses.

The institution faced ups and downs as they came through the transition. Teachers were not only afraid of losing their jobs (they believed that the LMS would replace them) but also they only had basic computational skills.

My responsibilities within the project were varied; besides presenting teachers with evidence that attempted to prove the efficacy of blended learning, it was also listening to their doubts that most of the time turned into complaints. My meetings with teachers were long and exhausting where some teachers' attitude demonstrated how reluctant they were to embrace the change. Other teachers expressed their genuine concern for the well-being of learners because the internet was a big issue in the university and they were sceptical that the administration of the university would provide strong connectivity to ensure the online component of the course. The majority worried about the workload they anticipated believing that the online component would double the time they normally spent evaluating. I listened to all they needed to say. I listened respectfully and patiently, trying to empathise with their emotions understanding that they were only expressing their fear of being forced to use technology to teach and leave behind the traditional teaching methods that they have relied on for years. I anticipated that if I reduced their anxiety, their resistance to the change of modality would diminish quicker.

The educational designer and I started to attend meetings together; I attended administrative meetings and he attended the design meetings. Once each core course was satisfactorily completed, the designers were given a letter of recognition that added points to their internal productivity records. The core courses were archived and reused by different faculty members. The faculty users of the core courses had the freedom to add and redesign the activities to fit the learners' needs and their teaching style. The standard components such as the interface, syllabus template, and the items marked on the checklist remained unchanged, however.

While not all the teachers needed significant support to design their course, the delivery of the online component of the course was problematic for the majority of the staff. The teachers needed support to learn the necessary skills to ensure the appropriate use of technology in their teaching. At this point in the project *Modalidad 2012*, I started to feel that we were lacking a theoretical framework that could align and support the project academically. We were not

providing the teachers with consistent information and support to deliver the online component of the course. A number of issues remained.

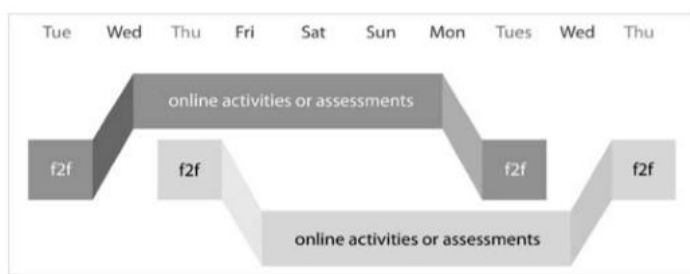
In terms of quality improvement, training in the use and management of the LMS was offered each semester to new teachers and whoever else wanted to attend. The staff that administered the LMS provided technical aid as well.

Modalidad 2012, pursued three main objectives: 1) to follow the national and international educational moves to enhance teaching and learning processes through the use of ICT; 2) to develop and reinforce in learners their self-study ability; and 3) to be able to increase the number of classes once class contact time was reduced by one third through the adoption of the LMS.

Blended learning was introduced in the five campuses with the two most populated programmes, International Commerce and Sports Science, and each year more programmes were added such that at the time of this research all the programmes are delivered through blended. The change in the modality allowed the University to increase its overall student population by maximising its physical classroom space, which meant a significant resource-saving as no extra buildings were needed.

The following figure is useful to illustrate how the classroom scheduling capacity was multiplied. Several blended courses could be held on the same day, hour, and classroom during the available day slot. To reduce the number of face-to-face meetings, the institution replaced 35% of the traditional face-to-face meetings with online activities. As an example, a six-credit course that used to meet four days in a week would now meet for two days, and in the rest of the week, learners may watch online videos, find additional resources, leave a comment on a discussion board, or take a quiz. These are activities rather added to the blended course learners expect to work through each week.

Figure 1. Classroom scheduling capacity



Source: Stein (2014, p. 25)

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The university invested in the necessary technological support at an accelerated pace. To improve the overall learning environment and promote the implementation of the blended learning approach successfully, intensive training in course design was provided to teachers, as well as teaching them how to operate the platform that supported the online component. The management knew and assumed that the better-prepared teachers were, the more chances of success the project would have. However, as I mentioned above, at that time we did not count on any theoretical model to support our teachers' training. We examined case studies of other universities in the state of Sonora that had implemented blended learning courses for some subjects in some programmes, not as an institutional change. The development team understood that teachers needed quality in their practice to foster meaningful learning, which would lead to learner satisfaction as well. Nevertheless, as Allen & Seaman point out (2012, cited in Wisneski et al, 2015) the adoption of a blended learning approach can fill teachers with "more fear than excitement".

After eight years, and the graduation of several cohorts, the university has invested heavily in the necessary technological systems; and has also worked hard to support the development of teaching expertise in blended learning environments in order to continue operating *Modalidad 2012*. Even though only a few teachers of the university had previous experience in blended learning environments, it became the first university in the northeast of Mexico to develop an institution-wide blended learning approach.

The university began teacher education in 2012, and to date, it continues. The challenge of preparing teachers and their eventual learners to be successful and fully participate in today's digital society is faced in all teacher preparation programmes (Watulak, 2016). It is argued that teachers need to learn how to transfer their teaching practices from the classroom context to the online context if the new approach is to be successful (Herrington et al, 2009; Cagiltay et al, 2019). This case study found that a strategic institutional change that involves the uptake of technologies for teaching will happen only if all parts of the organisation share the same vision since teaching and learning are complex and dynamic.

1.4 Research Goals and Research Questions

Given the background to this research detailed above and in the previous subsections, the goal of this study is to determine the practices and processes used by teachers in a blended approach in which the teaching and learning experience takes place both face-to-face in the classroom and online using a virtual learning environment (see above). It looks at the teachers' roles in managing the teaching and learning process, including the organisation of course content and activities. It

examines their awareness of their roles and responsibilities together with their teaching strategies as they struggle to offer a meaningful approach to learning through the integration of technology with the physical classroom. Specifically, I set out to provide a description of how and why teachers display their presence both online through the VLE and face-to-face to understand the phenomenon of teaching presence in blended learning environments, through the lens of the Community of Inquiry.

The overall aim of the study is to have a better understanding of teachers' behaviours, which can be described as attitudes, words, actions, attributes and tools that facilitate or establish closeness and immediacy toward learners with the processes that frame learning (see 2.3.3 B) in blended learning environments and to understand how teachers and learners make sense of that blend.

As a means to fully explore the construct of teaching presence the first three research questions take the teachers' perspective and investigate how their practices and processes lead to a meaningful educational experience and the last two take the learners' perspective on their educational experience.

The aim of the first three questions is to explore the teaching presence that teachers create, display and develop through the design and implementation of a blended course, both online and in the classroom, and the extent to which they also establish and maintain a community of learning.

1. How do teachers design and organise the content of their blended courses both, face-to-face and in the VLE for a meaningful educational experience (DESIGN & ORGANISATION)?
2. How do teachers engage and maintain learners in active learning face-to face and in the VLE for a meaningful educational experience (FACILITATING DISCOURSE)?
3. What are the teachers' roles in managing the teaching and learning process using face-to-face and online teaching strategies to help learners make sense of the course and of the programme objectives for a meaningful approach to learning (DIRECT INSTRUCTION)?

The first question sets out to explore the ways in which teachers carry out the primary teaching presence responsibility (the design and organization of the blended course, face-to-face and on the VLE). This would include setting the curriculum content, learning activities, and timelines. It also attempts to explore if teachers who were involved with the initial design later consider the

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exact blend of face-to-face and in VLE. The second question seeks to determine how teachers set out to monitor and manage the blended course to keep learners actively engaged. It looks at their conception of active engagement too as this is likely to vary. The third question considers how teachers ensure the learning outcomes by organising the course, detecting learners' needs, providing them with opportune feedback and information.

The next two questions focus on the perceptions of their learning experiences.

4. How do learners understand their role in the teaching in blended learning both, face-to-face and in the VLE for a meaningful educational experience?

5. How do learners perceive teaching presence in the VLE as a support for their learning process?

The fourth question attempts to discover the perceptions of learners with regard to the activities and attitudes they are expected to perform in both face-to-face and in VLE. In addition, it seeks to define if they notice any differences in teaching presence between the two learning environments (face-to-face and VLE) and if they adjust their attitudes and behaviours. The fifth research question tries to determine if learners consider the online teaching presence has an impact on their learning.

Modalidad 2012 (see above) applied a blended learning modality as a pedagogical strategy that combined traditional classroom components with online work using Its Learning, the instructional VLE. This modality was implemented for several key practical reasons (see 1.3.1) but also at the heart of this movement was the decision for the University to move towards a more constructivist approach to education (the dominant learning theory supporting blended learning, see 2.2.7) in which new learning opportunities to acquire knowledge would be offered to learners. The leadership of the institution recognised that despite the careful implementation of Modalidad 2012, challenges of poor student performance would continue to be present in the university. However, the core team did not foresee challenges of teachers that do not fully use blended learning for their teaching because of their struggles with the pedagogy required to implement valuable processes and practices involved in integrating a blended learning experience.

Teachers since the implementation of Modalidad 2012 have often failed to use blended learning and integrate technology into their instruction even though the appropriate technologies have been available. Deed & Lesko (2015) affirm that despite the massive opportunities of openness

created by blended learning, its use is still incipient because teachers' practice is shaped by previous experiences, routine, institutional memory and by the teacher's ability to adapt to new trends on education.

The LMS used to support this blended learning program, Its Learning, aided learners to complete their online asynchronous learning activities. The original idea was that teachers using multidisciplinary practices and technologies moved students beyond the restrictions of the classroom into the online so learners could study with flexibility. The core team expected that the digitalisation of the course material would allow teachers to use text, video or audio to address all the learning styles of their learners.

Preliminary results of this study showed that even learners were committed to using Its Learning the issues that troubled learners' learning experience seemed to lie with faculty's inexperience in the use of technology.

Aligned with several factors such as the worldview of quality education and for the flexibility of time and location, the university initiated the usage of VLE nurturing the skills of teachers to ensure that they were prepared to change their methods of teaching. However, as the results of this study show, having the skills to use VLE does not ensure that teachers have the intention to implement VLE as a tool for teaching. Teachers have good skills in using basic ICT. They know how to use Internet browsers, and social networking sites, and they have been implementing VLE in their teaching for quite a while. Despite having these good skills in computer literacy, this study found that teachers still struggle in handling VLE in their classes, and that they do not use all the functions in VLE. More training seems to be needed to make them familiar in using all the tools in VLE in teaching, which can increase learners' interest in constructing knowledge through their learning process (Rashid et al, 2021).

Teachers, as found in the study, still believe that using all the tools of the VLE is not required for teaching that primarily involves face-to-face classes. This is, teaching happens in the classroom neglecting collaborative tools as discussion boards and chatrooms where interactivity also happens online. Currently, the VLE is mostly used as a repository and assignment submission site with little variety of learning resources. Interactivity barely happens in the VLE and the

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affordances of technology to enable online-assignment feedback have not been identified as key means to support learning. When the usage of the VLE and the face-to-face strategies become part of the teachers' teaching practice, blended learning is going to happen.

1.5 Overview of the Chapters

This thesis is divided into the following six chapters:

Chapter 1 has presented an introduction to the study, its rationale and the background to the study, together with the research questions, an overview of the conceptual framework and a presentation of the significance of the study. The definition of blended learning for the university at the heart of this research is provided. Finally, an overview of the six chapters of this thesis are presented below.

Chapter 2 presents a review of the research literature that underpins this study. It begins with the conceptualization of blended learning and how the introduction of technology has reshaped the face of education. The concept of e-learning is presented altogether with the related concept of blended learning. Following this, an extensive review of the literature on blended learning is presented together with a number of theoretical models that were examined. The argument for the choice of conceptual framework that frames this study, the Community of Inquiry (CoI) model is presented next. There is a focal point, the teaching presence component since it is the main focus of this research, as one of the three constructs of the CoI. The intention is for this research to potentially suggest modifications of the CoI (see 6.5 Contributions and implications of this study). It also presents an account of the latest research on the CoI and specifically on the teaching presence construct.

Chapter 3 introduces the development of the research approach: the research paradigm, research design, and the data collection methods. The paradigm, methodology, and data collection instruments of the study are also presented.

Chapter 4 contains six sections in which the results from the analysis of the qualitative and quantitative data are presented. Empirical evidence is presented in support of the description of the online and face-to-face teaching presence construct from the CoI (see 2.3.3).

Chapter 5 provides a summary of the key findings presented along with reflection on the existing research literature in the area in an attempt to discuss and interpret the findings. The answers to the research questions (see 1.4) and the emergent topics give structure to the chapter.

Chapter 6 presents an overarching summary of the findings obtained in this study and shows the contribution to the research field. In addition, it presents the limitations of the study and the suggestions for future research.

Chapter 2 E-learning and Blended Learning

Given the focus of this research on blended learning, seen here as a combination of face-to-face and online learning, this section of the thesis sets out to review research in the general area of e-learning or online learning before moving the focus to the object of this research. The first part of the chapter reviews how e-learning has impacted higher education. The second part presents an account of the conceptualization of blended learning, followed by a review of the development and integration of instructional methodologies such as e-learning and blended learning. A number of theoretical models that support blended learning are reviewed together with the Community of Inquiry (CoI), the model that has been chosen to frame this study. Empirical research that has been carried out using the CoI is also presented. And to finish the chapter, I summarise research concerning teaching presence, one of the three constructs of the CoI model, paving the way to the methodology chapter.

2.1 E-learning and higher education

With the extended development of technology, the internet and the extensive use of computers, the concept of e-learning has emerged (Akkoyunlu & Soylu, 2006) and has produced its own set of challenges for universities implementing changes in the way they deliver their teaching (Shaikh et al, 2019; White, 2006).

The integration of e-learning into the education system is viewed as one way to meet this growing need for high-quality education for increasing number of students (Go et al, 2020). The need for educational change represents a challenge for higher education institutions, and e-learning has emerged as a potential solution since technology offers flexible ways of learning and teaching on and off the campus (Dhawan, 2020). The current health situation in regards to the sudden outbreak of Covid-19 has changed the education system across the world and forced educators to shift to an online mode of teaching overnight (Dhawan, 2020). With the use of technology, instruction is delivered via electronic media like the Internet, intranet, extranet, satellite

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broadcasts, audio/video, interactive TV, and CD-ROM (Nagel and Kotzé, 2010) –although technology moves so quickly that many in this example are obsolescent.

Garrison (2003) and more recently Clark & Mayer (2016) have suggested that there is every reason to believe that e-learning is transforming teaching and learning because it offers better ways to process, make sense, and recreate information. Many higher education institutions have gradually moved towards the incorporation of e-learning in their curricula, because e-learning has been adopted as an approach through which learners acquire the necessary skills to respond to opportunity and uncertainty, think critically, collaborate, communicate, solve problems, create, and continue to learn (Bognar & Ivić, 2016; Kozma, 2008). This has been true of all subject areas and is no less the case in the area of language learning and teaching where there are additional benefits to be seen with flexible access to a range of media which suit the particular needs of the language learner (Floris, 2014; Farr and Murray, 2016).

According to socio-cognitive theories of learning, all learning is social in nature and that knowledge is constructed through social interactions (Stein, 1997). It is argued that online education is particularly well elaborated to support social learning because of its potential for carrying out asynchronous course discussions (Hiltz, 1994). However, online discussion is significantly different from traditional classroom discussion. Discussions face-to-face are usually controlled by a few learners, the strong and extrovert ones (Hall, 2016). Online discussions on the contrary, open the opportunity for all learners to take part of the discussion. Online, learners have time to formulate, read, edit and finally post their contribution.

The goal of online discussions is to engage participants in active learning, which in the end increases the learners' confidence and critical thinking, since the learner has to own their responses and be ready to explain them to the online classroom. Vygotsky (1978), in his sociocultural theory explained how learners make meaning interacting and communicating with other learners in a positive environment.

A more contemporary interpretation of Vygotsky's theory is Lave and Wenger's (1991) theory of situated learning. It sustains that learning is more effective when it is co-constructed in contexts that model real-world tasks. In the present, collaborative learning can also take place in the online environment through many different modes; one of those is online discussion.

Online discussions are one of the most relevant benefits of online education, since they allow learners to use higher order tasks like analysis and evaluation (Seethamraju, 2014; Ho & Swan, 2007; Meyer, 2007). Kayler & Weller (2007) considered online discussions an extension of instructional practices that promote dialogue, reflection, knowledge construction and self-

assessment, while teacher participation in online discussions is considered “critical to maintaining the interest, motivation and engagement of students” (Anderson et al, 2001, p. 7). Moreover, “If online discourse is to be effective, then instructors must take an active role to assist, or guide, the discussions” (Kanuka & Garrison (2004, p. 29).

Other researchers like Arend (2009); Manderlach et al (2006) reported that learners did more critical thinking in courses where the instructors took a more neutral role. Nonetheless, according to Bair & Bair (2011) it appears that additional research is needed on the appropriate role of instructors in online discussions.

2.1.1 E-Learning definitions

In order to situate the concept of blended learning, it is important to examine the concept of e-learning. Despite the fact that e-learning is now largely understood as the use of ICT in learning and teaching (Sangrà et al, 2012; Czerniewicz & Brown, 2009; Salmon, 2005), a number of associated terms are in use and a more precise definitions of e-learning has yet to be agreed (Noesgaard & Orngreen, 2015; Oblinger & Hawkins, 2005). Although, it seems to be commonly acknowledged that the definitions of e-learning focus on the intersection of education, teaching, and learning with ICT (Chiappe & Lee, 2017; Friesen, 2009).

According to Wang et al, (2010, p.167), “E-learning refers to the use of computer network technology, primarily over or through the internet, to deliver information and instructions to individuals”. Urdan and Weggen (2011) define e-learning it as “the delivery of content via electronic media, including internet, intranet, extranet, satellite broadcast, audio/video tape, interactive TV, and CD-ROM”. For Elliott Masie cited in Behera (2013, p. 67) “E-learning as the experience dimension of e-learning, which includes such factors as engagement, curiosity, simulation and practice”. Clark & Mayer (2016) define e-learning as “a training delivered on a digital device such as a smartphone or a laptop computer that is designed to support individual learning or organizational performance goals”.

E-learning according to Narasimhulu et al (2010), "is the delivery of a learning, training or education programme by electronic means". Driscoll (2010) delimits e-learning as “the process of designing, delivering, and managing instructions using computers”. For Garrison (2011), e-learning is an "electronically mediated asynchronous and synchronous communication for [the] purpose of constructing and confirming knowledge".

Likewise, Alkhatabi et al (2011) state that e-learning is "the use of new multimedia technologies and the internet to improve the quality of learning by facilitating access to resources and services

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as well as remote exchange and collaborations". E-learning depends on networks and computers, and is defined in many ways as "the use of new multimedia technologies and the internet to improve the quality of learning by facilitating access to resources and services, as well as remote exchange and collaboration" (EC, 2001).

E-learning is an "innovative approach to education delivery via electronic forms of information that enhance the learner's knowledge, skills, or other performance" (Siritongthaworn et al, 2006). E-learning uses modern information, communications technology, and computers to deliver instruction, information, and learning content (Selim, 2007).

Khan (2005) delimits e-learning as "an innovative approach for delivering well-designed, learner-centred, interactive, and facilitated learning environment to anyone, anyplace, anytime by utilizing the attributes and resources of various digital technologies along with other forms of learning materials suited for open, flexible, and distributed learning environment".

The multiple terminologies of e-learning such as online learning, virtual learning, computer-assisted learning make it difficult to develop a generic definition; they cause confusion and, sometimes, even contradictions, as said by Mason & Rennie (2006), since different concepts have been attributed to e-learning, such as computer-based learning and technology-based training. Moreover, e-learning has also been substituted by other terms such as virtual campus or online courses, which can be part of the e-learning universe but do not to its definition. The technology tools mentioned in the definitions of e-learning play a crucial role in the modern education society. These tools help teachers as well as learners to take responsibility of their personal growth, and to use them effectively, teachers and learners need to acquire technological skills to success in the e-learning environments (Kumar et al, 2018).

Friesen (2009) states that the discussion of the definition of e-learning stems on the intersection of education, teaching, and learning with ICT, preceded by two complex disciplines: educational technology and distance education. According to the conclusions of a study conducted by Sangrá et al in 2012, the difficulty in establishing an inclusive concept of e-learning accepted by the majority of the scientific community is due to its constant motion, and that it is understood from many angles and used with different meanings. In addition, the participant experts of Sangrá et al's study (abid) came to the agreement that e-learning is part of the dynamic of the new educational systems and is composed of a blend of computer science, communication technology, and pedagogy, which results in a definition that contains features of more than one of these disciplines. Therefore, the concept of e-learning can be expected to continue to change according to learning needs.

Al-Qahtani & Higgins (2013), Marc (2002), Al-Musa & Al-Mobark (2005), Akkoyunlu & Soylu (2006), and Hameed et al (2008) claim that, in an e-learning environment, learners might lack social interaction and they might experience a negative impact on the development of their communication skills, thus making the clarification and explanation processes more difficult. However, these same researchers state that e-learning has proved itself as beneficial in many aspects, and it is considered among the best methods of education. Khan (2016) found that e-learning can be effective and useful in the whole educational setting and that it is imperative in most modern institutions across the globe.

2.2 Conceptualisation of blended learning

The growing interest in blended learning has emerged from a focus on the evolving roles of learners in the learning process (Bonk & Graham, 2006). This transformation is said to be taking place as learners move from passive receivers of knowledge to active knowledge constructors. As Guangying (2014) puts forward, the increasing attention paid to blended learning in the educational sphere is due to its flexibility, speed, and accelerated power. Its uptake in higher education has been so popular that researchers like Masie & Massy (2006) predict that the term “blended” will be dropped and it will just be called learning, and Norberg et al (2011) have come to call it the “new normal”.

A number of studies such Akkoyunlu & Soylu (2006), and Hameed et al (2008) evidenced concerns that e-learning is an environment where learners might lack human interaction. According to Allen & Seaman (2003), this issue has caused an increasing movement towards blended learning approaches where learners can have opportunities for both online and offline interactions with their teachers and among other learners. Wang (2010) stated that blended learning does promote social interaction among learners and engagement. Bouilheres et al (2020) pointed out that blended learning is useful and effective in promoting interactions not only among learners and their teachers, but also with course materials.

Similarly, De George-Walker and Keeffe (2010) affirmed that the new generation of learners demand more effective, accessible and flexible learning experiences to fulfil their educational needs, since they have a clear interest in using technology inside and outside their classroom due to the fact that they live in a technology-influenced world. Thus, Roberts (2015) argues that learners will challenge institutions to adapt technology to meet their individual needs, leading to the adoption of blended learning as one of the approaches to learning and teaching in both contexts (Dziuban et al, 2005).

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As reported by Al-Busaidi (2013), institutions are adopting blended learning, online systems with educational platforms, or LMS to support their face-to-face traditional education. In Latin America, according to Torres & Rama (2018), blended learning has been struggling against traditional education facing many challenges that include scarce resources, limited teacher capacities, low social recognition, and a perception of low quality because of its learning outcomes. However, in the first decade of the twenty-first century, with the use of electronic platforms and increased regulation, blended learning started to improve its quality standards while expanding its coverage (Arbaugh, 2010). Since 2010, more and more countries have focused on distance higher education learning creating multi-models in which blended courses are used at different extents along with traditional classroom courses (Torres & Rama, 2018).

Smith and Hill (2019) made a review of ninety-seven articles related to blended learning in higher education that were published between 2012 and 2017, and they sustain that blended learning enables the rethinking and restructuring of pedagogical practices. However, these aims are not easily achieved since blended learning is challenged by a lack of institutional definition and staff capacity to engage with blended learning (Mirriahi et al, 2015); resistance to innovation and change (Salmon, 2005); and a lack of research-informed models to support institutional adoption (Porter & Graham, 2016).

In the field of English Language Teaching (ELT), early definitions of blended learning were provided by researchers such as Neumeier (2005) who describes the term as “a combination of face-to-face and computer assisted learning in a single teaching and learning environment” (p.164). Whittaker (2013) recognises Sharma & Barret (2007) and Dudeney & Hockly (2007) as expert researchers in learning with technology, and they all offer similar definitions of blended learning. Sharma & Barret (2007) refer to blended learning as a language course that combines face-to-face classroom component with an appropriate use of technology. Dudeney & Hockly (2007) consider blended learning as a combination of online and face-to-face course delivery.

Hockly (2018) argues that blended learning has been difficult to define; however she considers that researchers in the field have reached a consensus of what the term means in the area of ELT, which is described as the combination of face-to-face teaching with computer technology, instead of denoting a whole approach to teaching and learning.

2.2.1 The emergence of blended learning

At this point, it is worth looking at how blended learning has developed over time and at how different generations of delivery models have claimed to provide with all the answers to support the learning process. Even so, as stated by Ireland (2007), each system has worked as a platform

providing the foundations for the next generation instead of working as a replacement. These different generations of distance education technologies, which are defined by their delivery mode, date from the early correspondence delivery courses to the emergence of blended learning courses, the learning environment in which this study takes place.

Distance education systems are said to have evolved through three stages of educational, social, and psychological development (Holmberg, 2005). Each stage offered distinct pedagogies, technologies, learning activities, and assessment criteria consistent with the current social worldview but kept the same actors, teachers, students, and content despite the differences.

It is common practice to think of the development of distance education in terms of the technology used. Distance education theorists such as Garrison (1985) and Nipper (1989), have described and defined distance education based on the prevailing technologies employed for delivery.

The first generation of distance education technology utilized a one-way instructional delivery method, including mail, radio, and television. It can be argued that second generation of distance education used a single learning technology such as standalone computer or Internet connected device and was often defined by the use of mass media of television, radio, and film production as in open university distance courses for example the degrees and courses offered by The Open University in the United Kingdom. The third generation (Akuz and Semsu, 2009; Gharacheh, 2016) introduced interactive technologies: first audio, then text and video, and then web and immersive conferencing. Blended learning has emerged in this third generation of distance education which can be characterized as maximizing the best advantages of face-to-face learning and multiple technologies to deliver content.

A fourth generation has been suggested that is linked to flexible learning based on online teaching, and a fifth generation that features “intelligent” digital technologies providing learners with a personalized pedagogical experience at a lower cost than traditional approaches to distance and/or conventional face-to-face education; this is the university of the future (Taylor, 2001).

The progress of satellite technologies and networks in the 1980's, and the expansion of the internet and the World Wide Web in the 1990's enabled online education that fostered student-centred, student-instructor and student-student education. Salmon (2000) called the internet and the World Wide Web technologies '*transformational*' due to the large-scale impact they have caused since they became a central tenet to support readiness and flexibility in the access to

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learning. Before the internet, the learning engagement required a greater degree of physical proximity amongst the members of a learning community (Courville, 2007).

Recently, electronic technologies have changed time and space concepts providing people a new opportunity to collaborate, discover and explore communities, ideas, and resources (Salmon, 2011). These new learning environments have increased the roles of technology in education as well as their levels of complexity. Technology has become a powerful tool to reimagine learning since learners' educational opportunities are not limited to the classroom resources. Technology has enabled learners to access resources and expertise anywhere in the world.

Courville (2007) argues that these technologies increase knowledge and skills through augmented efficiency and effectiveness, where efficiency is defined as the quickness by which knowledge is obtained, and effectiveness is associated with the amount of imparted knowledge that can be mastered. Dempsey & Van Eck (2007) agree that, technologies also contribute to the creation of learning communities outside the educational site, leading to the development of reciprocal teaching and mentorship nets that improve learning through social contexts.

Al-Dabbasi (2003) and more recently Collins & Halverson (2018) point out three perspectives from the learner side; the use of technology in education does not dictate time, place or place, or age constraints, thus creating more educational opportunities. Kruse (2004), Joy-Matthews et al (2004), Salmon (2000) and Williems (2019) state that the cost of education is reduced since the need of staff and the need of more buildings is significantly reduced as well.

Given these claimed advantages, as Greenberg (1998) and Shing & Yuan (2017) affirm, technology has been used to bridge the instructional gap between the teacher and the learner in distance education thus facilitating educational achievement by two main means: by removing physical barriers to learning as well as transferring focus from the retention of knowledge to its use (Courville, 2007).

2.2.2 Blended learning definitions

Following the previous discussion of technology used in higher education, it is important in the context of the current research to make a more precise definition of the concept of blended learning. By the end of this section, after having cited some of the most mentioned definitions established by researchers on the field, the researcher presents her own definition for the purpose of this study.

According to Torraró (2007), the term blended learning was first used in American research and it referred to the blend of traditional teaching and teaching based on technology using a wide variety of pedagogical methods and different forms of technology (Gynther, 2005).

Blended learning has no single, commonly accepted definition since there are no two identical blended learning designs (Garrison & Kanuka, 2004). As a result, practitioners agree their own meaning depending on the needs of their learning contexts (Heinze, 2008). In the words of Picciano (2014), blended learning has no independent definition, rather different definitions exist simultaneously. It is a relatively new concept and as a result, a generic meaning has not been accepted yet. Moreover, the term blended learning reflects the point of view of every researcher that attempts to define what blended learning is (Meier, 2016). It is clear from a review of the research literature that there is a clear difference between the concepts of e-learning and blended learning, and, depending on its use, blended learning is an extension of e-learning or is one of several methods of e-learning (Meier, 2016).

Blended learning evidently comes from the combination of two the words: blend that means to combine, and learning that means gaining knowledge or skill. For Allen et al (2007), blended learning can be simply defined as a course that blends face-to-face and online delivery, where 30–79% of the content is delivered online. For Oliver and Trigwell (2005), it refers to the blend of pedagogic approaches where students' learning involvement is done through experiencing variation in aspects of what their object of study is. For Kerres and DeWitt (2003), it is the blend of didactic methods and delivery formats.

Another conceptualisation provided by Valiathan (2002) describes blend in terms of the focus for learning, or 'intended' learning: (1) skill-driven learning, a combination of self-paced learning with instructor support to develop specific knowledge and skills; (2) attitude-driven learning, a combination of various events and delivery media to develop specific behaviours; and (3) competency-driven learning, a combination of performance support tools with knowledge management resources and mentoring to develop workplace competencies.

Bersin (2005) uses the term blended learning as a programme with traditional instructor-led training being enhanced with other electronic formats of e-learning. Researchers such as Cross (2003) and Alonso et al (2005) Davies, (2003) promote blended learning as a solution because it tackles learning in a mixture of various event-based activities: self-paced learning, live e-learning, and face-to-face classrooms.

There have been multiple variations of the definition of blended learning throughout the years (Charbonneau-Gowdy, 2018; Banditvilai, 2016) and most current definitions of blended learning

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refer to a blend of online and face-to-face instruction. However, Cronje (2020) argues that Marcy Driscoll (2002) has given a more refined definition than other researchers have. She defines blended learning as a particular form of teaching with technology that incorporates: 1) a combination or mix modes of Web-based technology to accomplish an educational goal; 2) a combination of various pedagogical approaches (e.g., constructivism, behaviourism, cognitivism) to produce an optimal learning outcome with or without instructional technology; 3) a combination of any form of instructional technology with face-to-face instructor-led training; and 4) a combination of instructional technology with actual job tasks in order to create a harmonious effect of learning and working. For Driscoll (2002, p.54) “the point is that blended learning means different things to different people, which illustrates its widely untapped potential”.

Fong & Wang (2007) provide another definition: “E-learning and classroom learning into an enhanced teaching method”. Whitelock & Jelfs (2003) opened a journal special issue on this topic with three definitions: (1) the integrated combination of traditional learning with web-based online approaches; (2) the combination of media and tools employed in an e-learning environment; and (3) the combination of a number of pedagogic approaches irrespective of the learning technology used. From an analysis of the various definitions of the term Friesen (2012) proposes that “blended learning designates the range of possibilities presented by combining internet and digital media with established classroom forms that require the physical co-presence of teacher and students” (Friesen, 2012, p.1).

Despite the variations in the definitions, during the first decade of the 21st century, there seemed to be an agreement on the themes and the aims blended learning intended to address. A number of researchers as Bonk & Graham (2005), Brew (2008), Georgouli et al (2008) agree that blended learning is a combination of instructional media learning systems, linking face-to-face instruction with computer-assisted student learning and management systems. However, a literature survey conducted in 2018 indicated that there is still very little consensus as to a universal definition of the term blended learning (Nortvig et al, 2018).

Blended learning aims to meet the needs of learners and the educational objectives by providing instructors with the capability of generating personalized e-learning processes to ideally acquire knowledge regardless of time and space (Osguthorpe & Graham, 2013; Levin et al, 2013).

The three most commonly mentioned definitions of blended learning documented by Graham et al (2003) are the following: 1) combination of instructional modalities or delivery media (Bersin & Associates, 2003; Orey, 2002a, 2002b; Singh & Reed, 2001; Thomson, 2002); 2) combination of instructional methods (Driscoll, 2002; House, 2002; Rossett, 2002); and 3) combination of online and face-to-face instruction (Reay, 2001; Rooney, 2003; Sands, 2002; Ward & LaBranche, 2003;

Young, 2002). Graham (2006, p. 9) describes blended learning as models “that combine face-to-face instruction with computer mediated instruction”.

Another consideration regarding the varied definitions for blended learning is in the term *hybrid*, which is used by some authors as interchangeable for *blended* when referring to courses that combine face-to-face components and distance delivery instruction. Nevertheless, Osguthorpe & Graham (2003) suggest that the word *hybrid* with its much-defined meaning may produce confusion. Hybrid suggests an idea that one mode is not used while the other is in use. Truly blended suggests that it is not evident when the mode shifts. Thus, the word *blended* is preferred to address this learning approach “that focuses on the mingling together of face-to-face and technology in ways that lead to a well-balanced combination” (Osguthorpe & Graham, 2003, p. 229).

According to McGee & Reis (2012), the majority of the definitions for blended learning focus only on the environment and context in which the learning experience occurs rather than on the roles, the pedagogy, and function of the technology.

2.2.3 Alternative models of online and blended learning

As outlined above, technology may continue to have long-lasting effects on education, but as Courville (2007) argues, technology is merely a distraction to the educational process if not supported by appropriate learning theories and methodologies.

Theories of learning offer insight into how individuals learn which are taken into account in designing effective learning environments. Behaviourism, cognitivism, and constructivism are the three broad learning theories most often used in instructional environments; however, these theories were developed when learning was not impacted by technology.

2.2.4 Connectivism – A learning theory for technology-based learning environments

According to Siemens and Downes (2005), connectivism is a learning theory that explains how the internet creates opportunities for learners to learn and share information across the World Wide Web and among themselves. Goldie (2016) argues that knowledge and learning knowledge consist of networks of connections formed from experience and interactions between individuals and the technologies that link them. And as knowledge flows through, it can be stored in varied digital formats and becomes part of the network opened to multiple interpretations and change.

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Critics of connectivism such as Bell (2010) state that it is an instructional theory, not a learning theory. They claim that connectivism is a conceptual framework grounded on learning theories and based on empirical findings, which recommends learning strategies performed by teachers to maximize the learning potential of learners.

To question whether connectivism is a learning theory is perhaps not relevant to this study. Nevertheless, the researcher finds the insight of Kropf (2013) useful, as he suggests considering connectivism as having a dual role in education since it serves as both a learning and an instructional theory, perfectly able to explain how individuals learn in the 21st century.

2.2.5 The use of technology in higher education

In regards to the transformations that technology has brought to education, Hogg & Lomick (2012) argue that higher education has experienced the most extreme transformation, since higher education institutions have been the main providers of traditional education.

That is to say, over the past two decades, higher education institutions have experienced structural changes that can be partially attributed to the integration of Information and Communication Technology (ICT) in their education processes (Tokareva et al, 2019). The adoption of ICT in education became popular during policy-development in the early 1980s with high expectations that it would make education more effective and motivating (Pelgrum & Law, 2003). Perhaps the effects of these transformations are still being faced.

Tokareva et al (2019) have stressed the importance of providing higher education learners with new literacies that support social communication and the use of communication technologies. However, as Gay (2016) and Petrides et al (2006) stated, some doubts have arisen with the promotion of online learning due to the lack of confidence in the medium, as learners cannot handle the independent nature of this delivery model.

Others like Lowes & Lin (2015) and Boylan (2002) have argued that learners need instant feedback and teacher presence to learn effectively; therefore, online learning may place them at risk of dropping out or feeling isolated. Nevertheless, with the continuing emergence of new learning technologies, instant feedback and teacher presence can be achieved online with the appropriate guiding framework.

As stated earlier, Information and Communication Technology is likely to increase levels of educational attainment by introducing changes in teaching and learning processes and strategies (Engel et al, 2016; Rodríguez et al, 2010). Singh et al (2019) report that ICT in education aims to enhance its efficiency, effectiveness, productivity impact, and sustainability. Zhang and Martinovic

(2008) and Kivunja (2014) state that ICT can improve learner understanding, problem-solving, and teamwork skills. Hwang et al (2015) and other researchers such as Unwin (2009) account that ICT can be a promoter for educational development by providing tools which teachers use to support and improve teaching, and by giving learners access to electronic media that make concepts clearer and more accessible.

It is especially important to note that higher education institutions are required to meet expectations that the knowledge economy demands such as acquiring new skills and the need for lifelong learning (Hamilton & Tee, 2010). As a result, these institutions have moved to create flexible learning approaches for students who present lack of opportunities to advance in their education due to factors such as unaffordable costs, requirements for synchronous learning, distance, and time (Deng et al, 2019).

To serve this purpose, ICT has not only has supported knowledge creation, learning and teaching techniques, but has also acted as a means to overcome the barriers of inflexible education structures (Zheng et al, 2020). As a result, this ICT evolution has been seen as a potentially powerful enabling tool for educational change and reform, as initially presented on radio and television and later in current technologies such as mobile phones and tablet computers.

The growth of ICT has made it possible for the existing higher educational systems to meet the demand of education for all (Haddad & Jurich, 2020) and to foster better quality teaching and learning processes in several ways. Also, it has increased learner engagement and motivation by assisting the acquisition of basic skills as well as enhancing teacher training (Vanderlinde, 2015).

2.2.6 Advantages and challenges of blended learning

As described above, blended learning appears to be developing increased interest as a learner-centred approach that combines the best qualities of face-to-face and online learning. This mixture allows learners to engage in onsite and online environments; it also offers several advantages to academic staff such as access to information, universal connectivity (which enables the formation of communities of inquiry), and innovative teaching strategies (Shaikh & Khoja, 2014).

In 2002, The Chronicle of Higher Education quoted the president of Pennsylvania State University as saying that the convergence between online and traditional instruction was “the single-greatest unrecognized trend in higher education today” (Young, 2002, p. 33). Also quoted in that article was the editor of The Journal of Asynchronous Learning Networks who predicted a dramatic increase in the number of blended courses in higher education, possibly to include as

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many as 80-90% of them (Young, 2002). Garrison and Vaughan (2008) regarded blended learning in the higher education context as an “evolutionary transformation”. Stein (2014) claimed that blended learning emerges as a solution to address learning and teaching needs. In 2014, the study of the National Centre for Educational Statistics (NCES, 2014) related to the learning outcomes and experiences of learners in blended environments, supports the increasing global trend in the use of blended Learning as an effective content delivery method in higher education. In a recent meta-analysis, Castro (2019) conducted a review of 45 articles on the use of blended learning and identified a series of factors being opportunities, barriers, drivers, effects, and challenges that impact blended learning as a learning system as well as specific technological tools that affect the learning activities within the classroom. He concluded that the teachers’ effective use of the technologies involved in the process such as the electronic devices and LMS, play a major role in the perceived usefulness of blended learning.

In Rasheed et al’s (2020) study, it is presented a systematic literature review revealing the current challenges learners, teachers and institutions face in the online component of blended learning. In their study, they state that it is very difficult to identify all the challenges in blended learning because of the rapid advancements of technological innovations and the complex nature of human behaviour. They mention that in research and in practice, the focus has been more on learners’ challenges in the online component of blended learning, consequently teachers and education institutions challenges have received less attention. Also, their findings indicate learners lack self-regulation and the ability to effectively use technology for studying; and that teachers’ main challenge is their unwillingness and negative perception of using technology for instruction. Concerning educational institutions, they say they find it difficult in providing the correct and sufficient technological infrastructure, as well as providing effective training support to their teachers. Another relevant finding for this study is that challenges associated with the online component of blended learning have greater impact on teachers.

Researchers such as Shelley et al (2013) drawing on the technique of narrative inquiry, examined the way individual teachers responded to the challenges associated with the change to a blended language teaching. They found context and experience to be relevant factors in the development of teacher cognition and teacher development. Teachers are generally constrained by institutional, social, instructional, or physical settings such as learners expectations, programmes modes, syllabus and assessment strategies. The interaction between context and experience and the possible tensions that may arise in the settings and the beliefs teachers hold about teaching, can provide a space for reflection and teacher development. The study also identified emotional reactions to the change from face-to-face to blended teaching, which Shelley et al linked to

tensions between teachers' previous beliefs and practices, and the requirements of the new systems.

Garrison and Vaughan (2008), So and Brush (2008) and more recently Means et al (2013) stated that blended learning is about to transform the structure of teaching and learning since it "combines the properties and possibilities of face-to-face and online learning to go beyond the capabilities of each separately" (Garrison and Vaughan, 2008, p.6).

According to Gedik (2012), the strengths of online and face-to-face course structures used together offer several opportunities and challenges for students: interaction, communication, increased motivation and ways to voice their opinions, and reinforcement of learning due to the affordances in the blended learning environment.

Furthermore, a review of ICT literature for education exposes that one tendency for improving quality in education involves blended learning (Graham et al, 2013); therefore, blended learning approaches have been recommended as the most efficient way to tap into the power of ICT (Unwin, 2005; Hoic-Bozic et al, 2016; Cummings et al, 2017). Blended learning commits to designing and delivering the right content in the right format using the right mix of media (Debande & Ottersten, 2004).

However, as suggested by Driscoll (2002) and more recently by Kintu et al (2017), blended learning is much more than adding another technology layer to the structures that already exist, such as e-learning. As Mendieta & Barkhuizen (2020) stated, changing to blended learning involves new ways of thinking about teaching, learning, assessment, and the development of social relationships including relations of power. The findings of their study indicate that switching to BLE is a complex initiative since there are multiple factors that come to reshape teachers' experiences. Teachers can find it more or less difficult to perform professional identities and develop ownership of their practice depending on the extent in which their aspirations and behaviours are aligned to the culture of the organisation. Consequently, they conclude in their study, it is important to consider ways to not only manage these tensions, but also to reflect upon opportunities to help teachers and administrators to implement BLE more effectively. The depending. For Garrison and Vaughan (2008), changing to BLE is redesigning the curriculum to reach the goals, which cannot be achieved through online and virtual learning or by face-to-face learning separately. It is transforming teaching and learning; it is reshaping and enhancing learning contexts; it is making e-learning more satisfactory. (Garrison and Vaughan, 2008).

Blended learning goes beyond the simple combination of face-to-face and online instruction. Osguthorpe and Graham (2003), reflecting upon what is blended learning and its goals, identified

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three types of mixing in a blended course: (a) learning activities, (b) students, and (c) instructors. In addition, they suggested that blended learning environments vary to a great extent according to the following goals: pedagogical richness, access to knowledge, social interaction, personal agency, cost-effectiveness, and ease of revision.

Blended learning provides several other benefits that are not present when using a single delivery medium alone (Jeffrey, 2014). Graham et al (2003) found that there are three general reasons why people choose blended learning: (1) improved pedagogy, (2) increased access/flexibility, and (3) increased cost-effectiveness. As well as Graham et al, Dempsey & Van Eck (2007) claim that blended learning provides more interaction with students in large classes and more flexible learning environments in regards to economic and administrative considerations. The most common reason provided in the blended learning literature is that it combines the best of both worlds.

To conclude, a number of researchers such as Davies (2016), Clark & Mayer (2011), Amrein-Beardsley et al (2007) argue that the attractiveness that universities find in blended learning relies on the fact that it has the potential to meet learners' needs in a mutually-beneficial way (Davies, 2016) by mixing the best of learning onsite and online educational opportunities, as well as experiencing new practices in teaching and learning. Researchers such as Xu et al (2020) and Bai et al (2016) point out that the use of blended environments in English language instruction in developing countries have been increasingly recognised as a potential approach capable of tackling constraints such as lack of high-quality instructors or learning resources. Xu et al (2020) findings at a Mexican public university point out that the positive language learning outcomes found from blended instruction support the use of blended learning as a strategy to improve English language learning and at the same time lessening costs in a higher education context of a developing country. In regards to Massive Open Online Courses (MOOCs) the integration of blended initiatives have dropped the high costs of MOOC creation locally produced and third-party MOOCs are reused and integrated into traditional courses (Pérez-Sanagustín et al, 2017). This scenario offers the possibility to promote greater self-direction in learners, and less teacher-directed approaches to teaching and learning. That is to say, instead of receiving information and knowledge from the teacher, learners are encouraged to search on their own for information, so as to develop and reflect on their understanding, and to collaborate with their peers. Understanding over simply memorizing and reproducing knowledge (MacDonald, 2008).

Nonetheless, blended learning still has challenges to meet. On the learners' side, scholars like Dabbagh & Kitsantas (2005) and Vaughan (2007) point out the difficulties some learners have in taking responsibility for regulating and controlling their own learning process during the transition

from a passive to a learner-centred approach. Additionally, Thota (2010) recognises problems such as uneven sharing of work and the inability to exchange ideas to come to an agreement and meet solutions. Gedik et al (2012) addressed the issues learners have to adjust to the online element and to manage their time and workload. Zhu (2012) reported that learners may wish for more teacher guidance and interaction in the online element, and they may experience undeveloped skills of collaboration and teamwork.

On the teachers' side, Blatchford et al (2006) agree that teachers have a vital role in a blended learning environment since they are the ones that plan, organise, and assess the group so learners actively engage in learning. According to Wright et al (2006), perceived learning, this is learner's opinions and views about their own learning, has been considered as an indicator of learning. It is important for instructors to evaluate how students perceive their learning to improve the quality of online courses in terms of aspects such as course design, delivery, and evaluation, and eventually to enhance students' learning experience. Students who believe that they have learned course materials extremely well are more likely to be active participants in online classes (Fredericksen, Pickett, Shea, Pelz, & Swan, 2000). Shand et al (2016) suggests that course redesign is the opportunity for the teacher to perform course improvements. The learner's feedback on the online component indicates a need to refine the content of the course. The learner enables the teacher to continue the redesign process of the blended course. The course redesign seemed to be the stage in which the objectives of the course and the needs of the students are effectively met for the online component to be appropriate and productive.

Monteiro & Morrison (2015) argue that it is the teacher's responsibility to make it very clear to the learners what they are required to do in the task, how the task should be done, its deadlines, the expected outcome completely explained as well as how to operate in an online group. The issue here is, on one hand, teachers assume their learners know how to work in the online element of a blended learning environment; and on the other hand, teachers are not trained to teach effectively and perform all their responsibilities in the online element of a blended learning course (Monteiro & Morrison, 2015).

2.2.7 Teacher ownership and agency in Virtual Learning Environments with reference to change management theories

According to Coyne (2010), technology can be seen as an "outcome of a turning process (as in turning a radio) where technology is positioned within a flow of material agency that is harnessed, directed and domesticated, this interactivity stabilising both material and human agency toward a human goal" (p. 27). Teachers have preconceptions, norms and values that come into play when

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they use learning technologies such as VLEs, which have an impact on their interpretations of those technologies into their practice.

The use of learning technologies has increased and become common in the classroom; however, their application does not necessarily guarantee success as intended (Johannesen et al, 2012).

Alvarez et al (2009) made an extensive study that suggests that teaching staff in higher education holds at least five different roles: 1) the designer/planning role, 2) the social role, 3) the cognitive role, 4) the role as operating the technological domain and 5) the role of handling the managerial domain. The data from their study suggest that the added value of VLEs as learning technologies is that they have the capacity of making teaching more efficient.

Ownership and agency are closely related to teachers' identities (Ketelaar et al, 2012). Ownership is understood as a mental or psychological state of feeling owner of an innovation, and is assumed to lead to integration of the innovation in the teacher's teaching routines. Agency, is seen as the vehicle to give direction to someone's career as a teacher and to stay true to oneself. These concepts help to understand how teachers position themselves towards an innovation.

Innovations in the learning context require a different role from the teacher. In addition to their role as a subject expert, they are required to perform a coaching role (Biemans et al, 2009) that will guide and support learners' learning process anticipating the different learning needs of learners. Depending on their degree of ownership and agency, teachers will position themselves towards their coaching role.

According to Van den Berg & Geurts (2007), only if teachers support an innovation, they will feel the necessity to change and will invest time and effort in it. By investing time and effort in an innovation, the teacher can identify with it. Teachers feeling a high degree of ownership towards an innovation communicate about it and express their identification with it. Teachers acquire a sense of agency when they "have the capacity to act purposefully and constructively to direct their professional growth and contribute to the growth of their students and colleagues" (Calvert, 2016 p. 16).

To support teachers in changing their practices, there must be a platform of developing communities capable of re-thinking practice (Van de Pute et al, 2018). The emphasis of these communities is "not the result of the sum of its properties, but the actual exercise of its various components' capacities to intra-act with each other" (Schoepher and Paisiou, 2016 p. 389). So, agency always depends on the collaboration, cooperation or intra-active effect of many agents working as an assemblage that opens to the possibility of transformation (Van de Pute, 2018). In Edwards' (2015) study, it was found that teachers usually perceive themselves as pedagogically-

based professionals, yet collaboration and shared responsibilities can provide support for initiatives, resistance and change.

To understand the notion of teacher agency, Nespor (2014) proposes a framework to examine the conceptualisation of teaching practice in specific pedagogical settings as well as the networks with the objects in use, VLEs in this case. When these technologies are used to support pedagogical processes, they affect and are affected by a number of stakeholders that are linked with each other. In these networks, as suggested by Johannesen et al (2012), agency of teachers is crucial in consolidating educational expectations placed on teaching, teaching and learning strategies, and the pedagogical values and beliefs of teachers. In the first network, the central administration of the higher education institution is the one that decides the use of VLEs.

This implementation is accompanied by certain amount of negotiation and resistance. Calvert's study (2016) points out the fact that in order to transform professional learning so that it really supports teachers' learning, education leaders need to pay attention to the importance of teacher agency. The second network is built around the idea that VLEs can support good learning and teaching strategies as efficient communication with learners and encouragement of self-supported learning. The third network is built around the idea of learner-oriented teaching and learning that is strongly influenced by commonly accepted pedagogical values and beliefs. As presented by Johannesen et al (2012), the teacher and the VLE go through processes of mutual negotiation and those on going processes contribute to shaping the pedagogical values and beliefs of the educator's teaching practice.

In Oaks et al's study (2018), Initial Teacher Education (ITE) is mentioned to be for some contributors the solution for problems of lack of agency or lack of commitment to institutional goals, while others such as Holland et al (1998) observed that it is not possible for a teacher to develop agency in a formative stage. These conclusions in Oaks et al's (2018) study are not mutually exclusive, since it is expected some alignment between strong professional commitments embedded in ITE; and when it is a misalignment, to exercise agency can become problematic.

Technology Enhanced Learning, TEL, according to Smuts et al (2017) has become synonymous of a trend that replaces older teaching practices with devices and software. The issue presented in the models aligned to TEL, such as the UTAUT (Unified Theory of Acceptance Technology) and the ADKAR (Awareness, Desire, Knowledge, Ability, Reinforce) is not always a pedagogical one, rather the ability of learners and teachers to interact effectively in online environments using technology. In general, as Smuts et al (2017) state, there are numerous barriers around online learning, but the predominant ones have been identified to be a lack of technical expertise

related to the effective use of a platform, and will either motivate or dissuade use and inabilities to manage organisational change.

Although VLE provides a number of advantages to the teaching staff, it cannot improve their performance if they do not have the intention to utilise it. The Technology Acceptance Model, (TAM) proposes that the perceived usefulness and perceived ease of use of a technological tool are determinant of its utilisation (Scherer et al, 2019). This is, teachers will use VLE if they believe that the computer system will improve their work performance when interacting with it.

2.2.8 Theoretical models that support blended learning

As the researcher has previously remarked, the term and the understanding of blended learning is not a homogeneous concept within a learning theory (Meier, 2016; Torrao & Tiirmaa Oras, 2007; Dangwal, 2017) (see 2.2.2). This diversity of understanding and different ways of conceptualising results in blended learning being rather one mode to be used within other theoretical models (Torrao & Tiirmaa Oras, 2007).

The Community of Inquiry model (CoI) was selected to provide the theoretical base for the present study (see 2.3), since the concept of teaching presence in the CoI model seems to provide a sound theoretical base for exploring the role of the teacher in blended learning. The construct of teaching presence with its articulation of three main teaching responsibilities was developed to explain the role of the teacher in online learning but it seems appropriate for use when examining both online and face-to-face contexts given the way the model attempts to integrate the teaching structures that lead the educational process. However, before selecting the CoI as a framework for this research, other theoretical models were considered in an attempt to address the challenge of integrating technology and pedagogy in ways likely to impact learning. These are briefly reviewed below.

As online teaching and learning continues to evolve, the phenomenon of instructors integrating technology into their traditional education presents pedagogical and technological challenges to educators. Researchers in the area of educational technology such as Mishra & Koehler (2006) and Shea (2009) affirm that in education there has been a large tendency to look at technology and not at how to use it, resulting in a criticism for lacking theoretical background.

Blended learning, as part of this educational technology change, has become fairly pervasive in the field of education. But despite its popularity, the theory mostly covers a best practice

approach (Thorne, 2003; Garrison 2008), which means that there is still a need to provide a model such that its pedagogical design is based on theoretical concepts (Kerres, 2003, Meier, 2016).

Mayes (2004) argues that the existent frameworks are not models of e-learning by itself, they are enhancements of models of learning; and to be considered models, they must demonstrate the theoretical principles they operate in order to allow learners to interact with each another and with the subject matter in a way that could not be possible without technology (Mayes, 2004).

As mentioned earlier, the present study is framed on the Community of Inquiry for best fitting the researcher's purposes for a number of reasons that are comprehensively discussed in the following section (see 2.3). The CoI has a social-constructivist orientation towards learning (Akyol & Garrison, 2011; Akyol et al, 2010; Akyol et al, 2009; Arbaugh et al, 2008; Shea et al, 2011; Swan et al, 2009; Swan & Ice, 2010). This is, according to social-constructivism, learning is developed by the learner's interactions in a socio-cultural context through a sense-making process (Oldfather et al, 1999). This process involves individual interpretations of experiences, the sharing of perspectives among learners, the negotiation of meaning (Vygotsky, 1962) in settings that reflect the conversational paradigm and emphasize collaborative effort in the knowledge building process (Laurillard, 2002). Consequently, frameworks with this orientation as the CoI focus on the learning process rather than on the learning outcomes, as other frameworks do (Akyol et al, 2009).

The researcher reviews the following seven models for two reasons, they highlight the role of the instructor in the learning process, and as well as the CoI, they have a social-constructivist orientation towards learning (see 2.3).

Social-constructivist models began to gain attraction in distance education when the technologies of mass communication became widely available, firstly by email and bulletin boards, and later through the World Wide Web and mobile technologies.

Social-constructivist pedagogy recognizes the social nature of knowledge and of its creation in the minds of learners. Teachers do not merely transmit knowledge to be passively stored by learners; rather, each learner constructs new knowledge by integrating previous with existing knowledge. Greenhow et al (2009) and others have claimed that learning is located in contexts and relationships rather than just in the minds of individuals. Similarly, Kanuka and Anderson (1999) stated that in constructivist models of distance education, "the educator is a guide, helper, and partner where the content is secondary to the learning process; the source of knowledge lies primarily in experiences."

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According to constructivists (see 2.2.3), the way learners learn or construct knowledge is not a systematic process; rather, it is constructed socially using language and relies on negotiation and mediation to help the learner advance to the next level (Vygotsy, 1962), and everyone has different social experiences resulting in multiple realities (Jonassen, 1996).

Researchers such as Garrison believe that asynchronous online discussion forums could provide ideal environments for the social constructivist way of learning, where learners actively participate, negotiate, and construct meaning in the social context (Jonassen, 1991; Kanuka & Anderson, 1998; Oztok et al, 2013). More specifically, asynchronous online discussion forums support learning environments, where the teacher acts as a facilitator, and students take responsibility for their own learning (Jonassen et al, 1995).

The first four models or frameworks that support blended learning and meet the researcher's criteria are:

1. The *3-C Model* developed by Kerrs and De Witt (2003).
2. The *E-learning Instructional Model with a Blended Learning Approach* presented by Alonso et al (2005).
3. The *Technological Pedagogical Content Knowledge (TPCK)* by Mishra and Koehler (2006).
4. The *Situational Leadership Theory* (Hersey, Blanchard and Johnson, 2008) transformed by Meier (2016) into a framework for blended learning.

The second group of blended learning models have been identified by the London Met ELearning Matrix (Heap and Fregona, 2014) as practical models when it comes to blended and distance delivery. These models are:

5. The *Five-stage E-moderation Model* by Salmon (1990)
6. Laurillard's *Conversational Model* (1993).
7. The *SOLE* model by Atkinson (2010).

These are outlined below. The eighth model, the COI, which is at the heart of this research, is detailed in section 2.3.

2.2.8.1 The 3-C Model

According to Boyle (2005), one of the first model that framed blended learning was the 3-C Model. I consider relevant to include the 3-C Model in this revision since both the COI and the 3-C Model suggest similar ideas regarding interaction in distance and online educational settings. Both models posit that learning frequently happens when interaction is fostered among learners and between learners and instructor (Buraphadeja & Dawson, 2008). Kerrs and De Witt (2003),

developers of the model, suggested that large and diverse learners' cohorts demand more flexible delivery models that can provide learners with quality learning experiences. The developers of the model conceptualized learning in three components: content, communication, and construction. They further pointed out that in order to achieve meaningful learning, the instructor has to provide the learner with academic tasks as well as with feedback that will encourage reflection upon the learning experience.

2.2.8.2 The E-learning Instructional Model with a Blended Learning Approach

Alonso et al (2005) developed this model which does not present a significant difference from the 3-C Model. In fact, there are many similarities between them: both emphasize the instructional design and have several features in common such as the nature of the blend that is given by the learning objectives, the target learners, the content structure, and the available technologies (Boitshwarelo, 2009).

As for Kerrs and DeWitt's model (2003), they both are called "e-enhancements" of models of learning. This means that they use technology to achieve better learning outcomes or a more effective assessment of these outcomes. In addition, the instructor finds it easy to conduct a course on their basis because their instruction is systematic.

It is relevant to point out that the developers of this model claim that even though e-learning is an option to teaching and learning, it has not yet incorporated the pedagogical principles of teaching with technology, as Bixler and Spotts (2000) also support. As said by Govindasamy (2002), there are no guidelines for analysing, designing, developing, supplying, and managing e-learning materials pedagogically, the reason why educators have to find the means to stretch e-learning tools for learning to pedagogy. To these claims, I add that this is particularly relevant to my teaching and learning context, where teachers' discussions around the use of blended learning, its pedagogical possibilities and advantages are beginning to change the teaching process (González, 2011).

2.2.8.3 The Technological Pedagogical Content Knowledge Model

This model considers effective teaching the fact of integrating knowledge of technology, pedagogy, and of content. As Koehler & Mishra (2009) affirm, teachers have to navigate the environment and handle with equilibrium the tension of the complex interactions of the elements in each specific context.

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The authors of the third model considered by the researcher, the Technological Pedagogical Content Knowledge (TPCK) model, Mishra and Koehler (2006) revised the historical separation of teacher knowledge of pedagogy and disciplinary knowledge, and attempted to identify some of the essential properties of teacher knowledge required to integrate technology to pedagogy.

I have found in this model an affinity between what I have observed throughout my context, teaching with technology is a difficult thing to do well, and my Research Questions (see 1.4) regarding the teaching presence and the main goal of the researchers Koehler and Mishra (2009). Through their model, they are trying to understand the relationships between two chief domains, the way teachers do their thinking processes and how they acquire knowledge, and teachers' actions and their observable effects. Likewise, these researchers are making sense of how affordances and constraints of specific technologies influence what teachers choose to do in their classrooms. For instance, they posit that for teachers acquiring new digital knowledge can be challenging and unlikely to be used unless they conceive that this knowledge is consistent with their existing pedagogical beliefs. Another example, teachers choose to use e-mail to communicate because it affords asynchronous communication, but they may not use e-mail in other situations because it does not afford synchronous communication in the way a phone call, a text message, or a face-to-face conversation does (Koehler & Mishra, 2009).

This model focuses neither on knowledge of content, nor on general knowledge of pedagogy, but on the integration of both. It works around providing effective solutions and developing knowledge that can help their learners learn. Teachers get engaged with content, pedagogy, and technology. The TPCK proposes a framework to resolve the bifurcation between pedagogy and technological content that signifies a barrier to the improvement of instruction at schools when it comes to using technology.

2.2.8.4 The Situational Leadership Theory

Again, as in the previous models, blended learning is put into a theoretical and pedagogical context where the instructor that is considered a leader has a preponderant role in the learning process as expressed by Meier (2016).

In the Situational Leadership Theory (SLT), developed by researchers Blanchard and Hersey in the late 1970s/early 1980s, instructors and trainers become leaders since they have to guide and lead their trainees to gain knowledge. Due to critics, this theory was reformed (Hersey et al, 2008), situation that later became a strength when Meier transferred this model to higher education settings.

Meier (2016) took the different styles of leadership and levels of maturity posed by Blanchard and Hersey (1977) in the SLT and transformed this model into a didactical framework for blended learning contexts based upon the fact that teaching/learning comes first. In this framework, the teacher employs the most suitable teaching style according to the learner's maturity level.

What the researcher finds relevant in this model is the different perspective by which the role of the instructor is framed within the model. The other frameworks that I present apply and use pedagogical concepts. The SLT draws on models of leadership to develop the notion of teaching styles which are adjusted according to different teaching contexts (Meier 2016). The model posits that once the instructor identifies the learner's needs he or she is able to choose the appropriate teaching style within a blended learning framework.

Meier (2016) demonstrates in his study that the leadership sciences can enrich pedagogy in building a framework for teaching in a blended learning environment. He shows in his study that blended learning could be applied situationally accurately by transforming the SLT model into a didactical framework where the teacher employs four different teaching methods according to the maturity level of the learner to reach certain learning goals. If the learner is dependent but interested in learning, the learning goals would be the acquisition and development of knowledge, and the teacher would use programmed instructions, tutorials, and technological tools with moderate interactivity. If the learner is involved in his/her learning process and nearly autodidactic, the learning goals would be applying and reflecting on knowledge and the understanding of complex relations. In this situation, the teacher would use an LMS, a feedback structure, MOOCs and social learning platforms. Once the maturity level of the learner is identified, the teacher can understand the learner's needs and based on this, select the appropriate teaching method to reach the learning goals within a blended learning framework. According to other researchers like Rajbhandari (2016), it is possible to use the SLT in educational contexts bearing in mind the dynamism of the leader (teacher) and the dynamism of the followers (learners).

Blanchard and Hersey (1976) integrate two aspects of a leader's behaviour, the supportive and directive behaviours. Later, House (2010) developed these behaviours into relations-oriented and task-oriented behaviours. These two behavioural patterns in the SLT have similarities with the model that frames the present study, the CoI model (Garrison et al, 2001), since the task-oriented behaviour in the SLT and the teaching presence in the CoI, the leader and the teacher respectively, are the experts that know much more than the followers/learners. This position helps the leaders/teachers to scaffold the task to be accomplished (Brown, 2003), or the learning experience for Garrison et al (2001) by providing direct instruction. The relations-oriented

behaviour is parallel to the social presence in its group cohesion category. When used in a meaningful way, both raise positive effects and quality in the relationships (Xi, 2012) (see 2.3.1).

2.2.8.5 The Five-Stage E-moderating Model

The Five-Stage E-moderating model is a researched and tested model that helps teaching and learning in online environments. The model was developed in the late 1990s by Gilly Salmon through her work at the UK Open University, and it has an original premise similar to that of the Community of Inquiry model (see 2.3) where learners need to be socialised into a learning community in order to function as effective learners (Salmon, 2002 and 2013; Atkinson, 2013).

In the five stages of this scaffolding model, typical activities have been identified which are performed by the teacher and by the learner at different stages of the student's learning process. Since the interest and focus of this study is placed on the teacher, some examples of teachers' behaviours are provided.

Stage 1, Access and motivation; the teacher is expected to welcome and encourage and guide in finding technical support.

Stage 2, Online socialisation; the teacher opens space for introductions and ice-breakers, and rules are presented.

Stage 3, Information exchange; the teacher facilitates structured activities, assigns roles and responsibilities, supports the use of learning materials, encourages discussions, and summarizes findings and/or outcomes.

Stage 4, Knowledge construction; the teacher is the most active at this stage facilitating open activities and the process of asking questions and encouraging reflection.

Lastly,

Stage 5, Development; where the teacher is less active, supporting and responding only when required, though keeps encouraging reflection (Salmon, 2000).

Gilly Salmon's Five-Stage E-Moderating model and the CoI have some similarities. On one hand, The E-Moderating model depicts behaviours that teachers perform in the learning process (Salmon, 2004) as the Community of Inquiry does. On the other hand, in the CoI model, conversations take an important role as Garrison et al (2001) highlighted stating that elements of successful teaching presence include among others, the "use of an effective moderation style in discussions" (p. 96-97). In the Community of Inquiry, teaching presence is explained through the

three components of design, facilitation and direction (see 2.3.3). It is worthy of note that these elements overlap competencies for online teaching identified in Salmon's framework. The following table gives a representation of these competencies in both models:

Table 1. Online Teaching Competencies Compared with Teaching Presence Indicators

Five-stage Online Teacher	Community of Inquiry Teaching Presence
Facilitating the range of online activities that are supportive of student learning	Facilitation and Design
Working on an individual/private basis, offering advice or counselling learners to help them get the most out of their engagement in a course.	Facilitation
Concerned with providing grades, feedback, validation of learners' work, etc.	Direction

My research investigates teaching presence in the two components of blended learning environments, the online and the face-to-face. Using the Five-Stage E-Moderating model would limit my study as the face-to-face component is not incorporated in the framework, and it lacks the flexibility needed to add the face-to-face component to practice (Lisewski & Joyce, 2003).

For the purpose of my study, the Community of Inquiry model seems more appropriate given the significant number of studies which have already adapted and used the model for examining teaching presence in blended learning environments, both online and face-to-face.

2.2.8.6 Laurillard's Conversational Framework

One of the main arguments perhaps to consider Laurillard's Conversational Framework (1993) as opposed to the E-Moderating model which is discussed above, is its focus on learning as an interactive dialogue (Heinze & Procter, 2007), which can be seen as crucial when introducing online media into face-to-face course (ibid).

Diana Laurillard developed the Conversational Framework, first published in 1993. Her framework is widely used and accepted to analyse educational technology contexts (Britain & Liber, 2004). The Conversational Framework is based on the underlying ideas of dialogue developed by Pask (1976, cited in Laurillard 2003) and Ramsden (1992, cited in Laurillard 2003) for facilitating the

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learning process. Laurillard's framework uses the notion of conversation as the basis for teaching and portrays the communication process that occurs between the teacher and learner in the development of the latter's knowledge (Heinze & Procter, 2004). In the 2002 version of her framework, Laurillard identifies four stages of the learning process that are part of the framework within which learning occurs.

These four stages as analysed by Beckmann & Mahanty (2016) are: 1) the discursive stage, where learners enter into a dialogue with the teacher after the teacher presents a new concept; 2) the interactive stage, in which learners put the new concept into practice as they interact with the teacher and receive feedback on their performance; 3) the adaptive stage, wherein learners attempt to put their understanding into practice and begin to construct their own connections between ideas; and finally, 4) the reflective stage, in which both learners and teachers relate the theory back to the practice and adjust their thoughts through reflection.

The main principle behind Laurillard's conversational framework is the discussion leading to the development of the learners' insight and it allows for different educational media to impact variously on the structure of a meaningful discussion. Laurillard (2002) considers that the role of learning technologies is to unite online and face-to-face higher university learning contexts (*ibid*), improving the quality of the learner's learning experience as Bliuc et al (2007) later expressed.

Thus, this framework is a useful analytical tool for investigating learning experiences (Bliuc et al, 2007). As Laurillard (2009) argues, her framework can be used not only to specify the requirements for an effective technology-enhanced learning experience, but also to test the experience of students by highlighting the relevance of pertinent questions and appropriate feedback.

Although useful in concept, Laurillard's framework is less relevant to the current study in focus than the Community of Inquiry model and its concept of teaching presence. The Col provides a number of studies with research on teaching presence, both on focus and on methodology, to round my understanding of how teaching presence works in blended learning environments.

2.2.8.7 The Student-owned Learning-engagement (SOLE) Model

According to Atkinson (2010), the aim of the SOLE model is to make pedagogical theory accessible to staff to support their ability to envision novel and effective ways for learners to engage distantly. The model attempts to avoid the danger of having staff developing materials in addition to those they have delivered face-to-face, resulting in a double workload difficult to carry on for teachers and learners.

Barker (2008) states that learning design is a complex activity that is influenced by an ample range of factors like the prior experience and background of the designer, the nature of the recipient of the learning product, the designer's insight of cognition, pedagogy and epistemology, and technological factors related to the use of media and its characteristics.

The terms for SOLE (student-owned learning-engagement) have an educational background, but the main emphasis is put on arousing learners' consciousness about learning design and processes so they are more engaged in their learning opportunities.

Atkinson's (2010) SOLE model has threefold goals:

1. To insert pedagogical guidance regarding constructive alignment (Biggs & Tang, 2007) inside a learning design tool easily accessible to staff.
2. To produce a practical model that retook Laurillard's representations of her conversational framework (Laurillard, 2002).
3. To enable the development of a practical toolkit which would make patterns of learning design easy to share and transparent to learners and staff (Conole & Fill, 2005).

The model of learning engagement is aligned to learning outcomes and assessment (Atkinson, 2011), and the associated toolkit generates a visual representation of these elements for diagnostic, developmental, descriptive, and evaluative purposes in the learning process.

The work performed around the SOLE intends to make pedagogical theory accessible to staff, which is a different approach to my work.

Despite the fact that in the last few decades there has been an increasing integration of learning technologies into teaching and learning in higher education (Laurillard, 2013), the challenge of integrating technology into teaching is practically the same in all the frameworks that I have addressed so far. Salmon (2000) points out that online environments have to be carefully planned and managed in order to be pedagogically successful. It is also necessary to identify each of the roles of the elements and then establish the interrelations between them present in the framework (Dangwal, 2017). When teachers work with technology in their classes, they confront their educational basis and face pedagogical issues, since they have to know how to represent the content of their subjects and connect it with their learners. Likewise, teachers have to help learners feel engaged with the course and establish learner-learner and teacher-learner interrelations (Jimoyiannis et al, 2013; Lu & Churchill, 2014; Yuan, & Kim, 2014). In addition, teachers, whether working online or in blended learning environments, have to think through the

design of structured learning experiences for their students. To exploit the teaching in these environments, teachers must first understand its potential (Salmon, 2011).

In the next section, the model that drives the focus and scope of the present study is comprehensively discussed.

2.3 The Community of Inquiry Model (see 1.1)

For almost two decades, the CoI framework has been a popular model for both teachers and researchers studying computer-mediated communication (CMC) and blended learning environments (For the researcher's motives to use the CoI, see 2.2.8). As of August 2020, a review of Google Scholar lists more than 4258 citations referring to Garrison et al's (2000) 'Internet and Higher Education article', and the ProQuest Dissertation and Theses database includes over 3646 studies with 'Community of Inquiry' in the title or abstract.

In an effort to improve and explain the importance of immediacy behaviours, (see 2.3.3) and the perceptions of closeness of online learning environments, Garrison et al (2001, 2010) developed a framework called the Community of Inquiry Model (CoI) that has generated significant impact on both research and practice worldwide over the past eighteen years. It is widely accepted (Leng et al, 2009; Kim et al 2011; Murphy, 2004; Shea & Bidjerano, 2009, 2010; Zhao, 2017) that the CoI is the most widely used model in computer conferencing studies.

The Community of Inquiry framework was developed by Garrison et al (2001) as a comprehensive framework to guide the research and practice of online learning. This is theoretical framework for the ideal design of online learning environments to support critical thinking, critical inquiry and discourse among students and teachers (Garrison et al, 1999). The developers of the CoI framework for e-learning worked together at the University of Alberta on a graduate programme that was partially online. The objective of their work was to provide an empirical understanding and a methodology for studying the potential and effectiveness of computer conferencing.

The Community of Inquiry sets to create a model for learning based on educational experiences (Tolu, 2010) that take place within a learning community through the interaction of its three core elements or fundamental dimensions: social presence, cognitive presence, and teaching presence (Garrison, 2000, p. 42). This social interaction among students and teachers is said to provide deep and meaningful learning environments in higher education, either online or face-to-face (Shin, 2008).

As stated by Scott (2016) the work of Garrison, Anderson and other scholars like Rourke, Archer and Arbaugh in developing the Col through three presences -social presence, teacher presence, and cognitive presence- has been fundamental to advancing effective online learning.

The widely referenced Col describes, explains, and predicts learning online environments arguing that a complete educational experience in an online collaborative learning setting will develop only if three kinds of presence exist in such a community: cognitive, social, and teaching presences (Arbaugh et al, 2008; Garrison, 2007; Garrison et al, 2010). The model stresses that learners interact learner-instructor, learner-learner, learner-content, and learner-context (Anderson et al, 2001) in a community and should be encouraged to take responsibility for their own learning process.

The Col is social constructivist (see 2.2.8) in nature and conceptually grounded in theories of teaching and learning in higher education. Originally, the Col was coined by Matthew Lipman (1991) who was also influenced by the ideas of Dewey and Lev Vygotsky (Gutiérrez, 2012). Philosophically, it relies on John Dewey's (1933) work on community and inquiry, who believed that inquiry was a social activity. More specifically, Vygotsky's social constructivists emphasise the influence of "contextual factors" on learning (Garrison, 2013, p. 4) and believe that learning can be achieved through collaboration and discourse activities (Garrison, 2013). Vygotsky argued that knowledge is co-constructed by sharing ideas, negotiating and collaborating with others to construct meaning (Garrison, 2013).

Years later, online studies emphasized social presence. However, it was Henri (1992, cited in Gutierrez, 2012) who paid close attention to the cognitive presence. Garrison et al (2000) used Henri's work and developed a more comprehensive framework to guide the research and practice of online learning. The Community of Inquiry model, as expressed by Pecka (2014), has helped to contextualize the online learning environment, incorporating all the essential components needed to design, guide, evaluate, and research distance-learning activities.

This framework discusses blended learning from a socio-constructivist perspective and assumes that effective online learning requires the development of a community (Rovai, 2002; Thompson & MacDonald, 2005; Shea, 2006) that supports meaningful inquiry and deep learning. The Col attempts to define the dynamics of online learning environments through the function of three types of presence that effective online teaching and/or learning have.

To fully present the model, it is necessary to clarify the concept of presence. Loomis (1992) presents a clear conceptualisation of presence, and the understanding of it constitutes a great deal of debate within distance learning since it can be real or imaginary. The sense of presence is

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important because it provides the learner an anchor to an environment or a mediated space, a feeling of "being" or "purpose".

The primary elements of the CoI consist of three presences. The first is the social presence that reflects the development of climate and interpersonal relationships in the community. Additionally, it is the ability of learners to project themselves socially and emotionally, portraying themselves as "real people" (Gunawardena & Zittle, 1997; Short et al, 1976). The second is the cognitive presence that provides a description of the progressive phases of practical inquiry to resolve a problem or dilemma and the extent to which learners are able to construct and confirm meaning through sustained reflection and discourse. Last is the teaching presence that provides leadership throughout the course of study, and it is the main predictor in course satisfaction (Finally-Neumann, 1994; Williams & Ceci, 1997). Teaching presence is the design, facilitation, and direction of cognitive and social processes for realizing personally meaningful and educationally worthwhile learning outcomes (Garrison & Archer, 2000). These three elements are discussed ahead in the following subsections.

Table 2. Community of Inquiry Model coding template

Elements	Categories	Indicators
Social Presence	Effective Expressions	Emoticons
	Open Communication	Risk-Free Expression
	Group Cohesion	Encourage Collaboration
Cognitive Presence	Triggering Event	Sense of Puzzlement
	Exploration	Information Exchange
	Integration	Connecting Ideas
	Resolution	Applying New Knowledge
Teaching Presence	Design and Organization	Setting, Curriculum and Methods
	Facilitation and Discourse	Sharing Personal Meaning
	Direct Instruction	Focusing Discussion

Source: Burgess et al (2010, p.2)

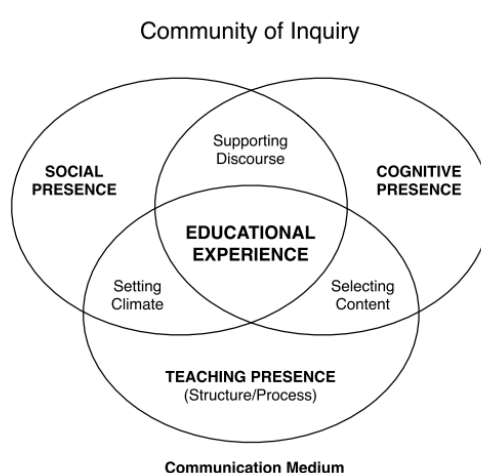
According to Table 2, within the CoI framework-coding template, there are the categories of cognitive, social, and teaching presence, and a sample indicator relevant to each individual category. Indicators in the coding template are composed of keywords, frequently repeated

expressions or their synonyms. These elements in the CoI framework can either increase or decrease the quality of learning outputs and educational experience, according to authors.

The CoI depicts the behaviours and processes required to construct the knowledge that sustain online environments. The model is also used by teachers to design and guide learners' activities through the necessary development of three forms of "presence": teaching, social, and cognitive (Garrison et al, 2001; Akyol & Garrison, 2008, 2011, 2014; Archibald, 2010; Chakraborty & Nafukho, 2015; Garrison & Arbaugh, 2007; Lin et al, 2015).

As a result, the Community of Inquiry framework (Garrison et al, 2001) has been widely adopted in studies of asynchronous blended and online learning (Akyol & Garrison, 2011; Shea, Li, & Pickett, 2006). The quality of the educational experience is conceptualized at the intersecting centre (Figure 2) of the teaching, social, and cognitive presences of the CoI framework. The focus is on the achievement of deeper levels of meaningful learning through constructivist-oriented instruction (Akyol et al, 2009; Akyol & Garrison, 2011). The three presences are important conceptual elements in the CoI, with each only representing a side of the educational experience but mutually dependent. They also relate to each other in the process of changing and adapting both synchronous and asynchronous communications. Thus, the social presence lays the foundation for a higher level of discourse, the teaching presence creates the environment and structure and organizes the cognitive presence (Gutiérrez, 2012). The three presences are discussed in turn below since all are relevant to this study despite the focus is on teaching presence.

Figure 2. Elements of an Educational Experience



Source: Garrison et al (2000, p. 16)

2.3.1 Social Presence

Social presence (SP) is related to all the dialogue happening through text-based asynchronous and synchronous communication channels. There are three categories of social presence: affective expression, open communication, and group cohesion. Social presence is connected with the extent of participation and social interaction amongst the members of the learning group and therefore, it is considered a critical variable for learning (Picciano, 2002; Koh et al, 2007; Yang et al, 2007; Goggins et al, 2009).

The Community of Inquiry (CoI) framework defines social presence as the ability of a student to relay characteristics of themselves in the online community to be perceived as “real people” in mediated communications (Gunawardena & Zittle, 1997; Short et al, 1976). Social presence establishes cohesive bonds and a sense of belonging within the community, as progressing through the phases (1) acquiring a social identity, (2) having purposeful communication, and (3) building relationships (Kreijns et al, 2014).

Tu (2000) linked social learning theory to social presence and assured that social presence ‘is required to enhance and foster online social interaction, which is the major vehicle of social learning’ (p. 27). And, since social presence is central for maintaining a high degree of online social interaction, it ‘is a significant predictor of course retention and final grade in the community college online environment’ (Liu et al, 2009, p. 165). Also, SP is associated with the degree of satisfaction of the group members (Gunawardena & Zittle, 1997; Garrison & Arbaugh, 2007).

According to Kreijns et al (2014), the CoI social presence construct seems to have its origins and inspiration in the definition given by Short et al (1976): “degree of salience of the other person in the interaction and the consequent salience of their interpersonal relationship” (p. 65).

2.3.2 Cognitive Presence

Cognitive presence (CP) is defined as “the extent to which learners are able to construct and confirm meaning through sustained reflection and discourse in a critical community of inquiry” (Garrison et al, 2000 p. 5). The CP is the intellectual environment necessary for participants of a given community of inquiry to construct and develop higher levels of thinking through constant communication (Garrison et al, 2001). The cognitive presence can be created and supported in a conference mediated by a computer with meaningful teaching and social presence (Garrison et al, 2001). Additionally, it is defined in terms of a cycle of practical inquiry where participants move deliberately from understanding a problem or dilemma through exploration, integration, and application.

Cognitive presence consists of four stages (Garrison & Anderson, 2003):

1. Triggering event: starts the inquiry process through a well-thought-out activity to ensure full engagement from students. In addition, it has several positive outcomes like involving students, assessing the state of knowledge, and generating unintended but constructive ideas.
2. Exploration: focuses first on understanding the nature of the problem and then searching for relevant information and possible explanation.
3. Integration: constructs meaning, decisions are made about integration of ideas and how order can be created parsimoniously.
4. Resolution: solves the dilemma or problem by reducing its complexity, constructing a meaningful framework, or discovering a specific solution. This confirmation or testing phase may be accomplished by direct action.

Due to its stages, cognitive presence provides an environment where critical thinking occurs while in a learning context. "When there is good cognitive presence, the focus of discussion becomes ideas in contrast to social factors" (Moore, 2002 p. 62). Interrelated to social and teaching presence, cognitive presence is the domain, as the learners must engage in in-depth critical thought and reflection: a key characteristic of higher education (Dauer, 1989; Dewey & Small, 1897, Dewey, 1959; Garrison et al, 2001).

Course design, structure, and leadership influence the extent to which learners engage course content (Garrison & Cleveland-Innes, 2005). These findings suggest that the role of instructors in cultivating cognitive presence is significant in terms of how they structure both the course content and participant interactions.

2.3.3 Teaching Presence

Before addressing Teaching Presence, it is useful to look at the origin of the concept, in particular the notion of immediacy.

2.3.3. A Teacher immediacy

A key element of learning is the transactional exchange between teacher and learner. Without this exchange, learning becomes hindered or even non-existent according to Mehrabian (1967, 1969), whose early research on teacher immediacy suggested the need to reduce the physical and psychological distance between teachers and learners. Immediacy first appeared in the face-to-face educational environment (Andersen, 1979; Gorham, 1988; Plax et al, 1986; Richmond et al,

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1987), and Mehrabian (1967) defined it as the extent to which communication behaviours facilitate physical or psychological closeness in interpersonal communication.

According to Short et al (1976), research on social presence and on teacher immediacy led to the evolution of the concept of teaching presence. John Dewey (1933) described the behaviour of the teacher as “alive”, and he wrote: “give full time and attention to observation and interpretation of the pupils’ intellectual reactions. [She] must be alive to all forms of bodily expression of mental condition...as well as sensitive to the meaning of all expressions in words” (p. 275).

The exchange that exists between teacher and learner is a key component of the learning process. Without this exchange, named teacher immediacy, learning becomes delayed and stuck. Gorham (1988) broadened this definition to include any verbal interaction that amplified the psychological closeness between teachers and students. This concept includes communication behaviours, reducing the perceived distance between people (Thweatt & McCroskey, 1996). If the learner feels psychologically close to his or her teacher, this perception is transformed into teacher-student immediacy.

In Chakraborty & Nafukho’s study results (2015) it was established that teacher immediacy and teaching presence (see 2.3.3.B) can influence learners’ cognitive and affective learning experiences in VLEs. Subsequent research on the immediacy phenomenon has extensively emerged regarding face-to-face educational environments in which it found its origins. E-immediacy behaviours are employed by the incorporation of up-to-date ICT tools that can significantly contribute towards reducing the sense of separation, promoting connectedness between learners and teachers developing teaching and learning in virtual settings (Ghamdi et al, 2016). Also in Stavrova & Luhmann (2016) study’s, connectedness has shown to have a positive influence on how a learner feels, is confident and motivated to learn.

Connectedness refers to the extent to which learners perceive that they are valued and accepted, and that they are supported by significant others (Yuen & Datu, 2021) and are essential elements of learner satisfaction, academic success and retention (Jorgenson et al, 2018). Earlier, researchers such as Rovai (2002) stated that connectedness is an overarching construct that encompasses learners’ sense of belongingness, integration, and satisfaction with their relationship to their institution, programs and faculty. In Jorgenson et al’s (2018) study, it was found that learners felt connected to those teachers that cared about them and made them feel seen.

Online environments make it possible to extend the university’s reach increasing accessibility for learners who may not be able to attend otherwise. However, this environment poses distinct

challenges (see 2.2.6). And one of these challenges is the lack of connectedness learners may feel to the teacher. Researchers such as Law & Law (2018) support the fact that a teacher to be effective in establishing a sense of connectedness with his or her learners needs to take an active role by detecting, assessing and interpreting data used to evaluate, plan, reflect and make decisions that will enhance the educational experience and learning outcomes for the learners. According to Stone & Springer (2019), supportive and engaging online teaching and learning environment mitigates difficulties that affect the sense of connectedness such as feelings of isolation, technical issues, problems with instructional materials and learners' own difficulties with time management; and lead to learner retention. When online learners are engaged in an interactive learning environment, both synchronously and asynchronously, with strong teacher-presence quality learning takes place, as said by Vincenzes & Drew (2017). Moreover, when teachers take the time to connect with online learners through introductions, welcome activities, videos when course begins, discussion boards, as well as providing timely feedback, learners are assured that their teacher is present, interested and supportive of their learning.

Hand-in-hand with teacher presence, goes the importance of designing online courses that sustain active participation and interaction with academic and technical support within the curriculum. These elements are a powerful combination in promoting connectedness and teacher presence and immediacy.

Acknowledging how teacher behaviour in the classroom can reduce the distance between two or more people, Anderson (1979) illustrated that teacher immediacy is a predictor of teaching effectiveness (Lowenthal & Parscal, 2008). Research on social presence and on teacher immediacy, led to the evolution of the concept of teaching presence (Short et al, 1976). Baker (2010) reported a positive correlation between the Col teaching presence and instructor immediacy.

It is crucial for educators to understand their role and influence upon the learning environment. It is greatly differentiated from the face-to-face environments most educators are used to or have received training from. Garrison et al (2000) and others (Anderson & Garrison, 1995; Clark, 1994) suggest that instructional design plays a key role in affecting quality learning outcomes. Schrage (1995) suggests that technology "inevitably shapes the way people relate to each other" (p. 137).

In Latin America, distance education has been developing only since the last decade (Flores & Lozano, 2015), and thus, immediacy in online educational environments has not been researched enough, yet empirical research is needed on this topic.

2.3.3. B Teaching Presence

Teaching presence (TP) is one of the three core constructs of the Community of Inquiry framework as well as the primary variable to investigate in this research; nonetheless, social and cognitive presence are also part of a complete educational experience, which is why they are referenced in this study. Social and content-related interactions among learners are necessary in virtual learning environments; however, interactions by themselves are not sufficient to ensure effective online learning. These interactions need to have clearly defined parameters and to be focused in a specific direction, thus the need for teaching presence (Garrison et al, 2000). They described teaching presence as the design, facilitation, and direction of cognitive and social processes for the purpose of realising personally meaningful and educationally worthwhile learning outcomes.

Teaching presence is the ability of instructors to project themselves in an online learning environment, exhibiting behaviours that facilitate or establish closeness and immediacy toward students. Anderson (2008) identified ways to denote teaching presence in the VLE. To pay attention to “creating or repurposing” (p. 347) contents like lecture notes, adding teachers’ comments, posting video lectures, etc. can ensure a personal trace from the teacher and enables learners to actually relate to the teacher. As stated earlier in the literature review, the performance of the teacher is highly correlated with the learner satisfaction (see 2.3), particularly to his or her availability and response time.

TP is necessary to initiate the development of a community of inquiry, and it is established when the overall direction of the course is given by the teacher (Garrison, 2001). Teachers identify relevant knowledge, and upon that, design activities of a course, moderate students’ discussions, and evaluate (Garrison, 2001).

The motivation to study the nature of teaching presence arose with the adoption of the Internet as a mainstream instructional tool (Garrison et al, 2000). Exploratory in nature, recent research on teaching presence has focused primarily on two areas: 1) transcript analysis of empirical studies of a limited number of courses (Anderson et al, 2001; Fahy, 2002; Jefferies et al, 2003; Garrison & Cleveland-Innes, 2004), and 2) basic statistical techniques such as frequency distributions and correlational analysis to determine the extent to which teaching presence relies upon the actual presence of the instructor in the online course (Arbaugh, 2007; Shea et al, 2003).

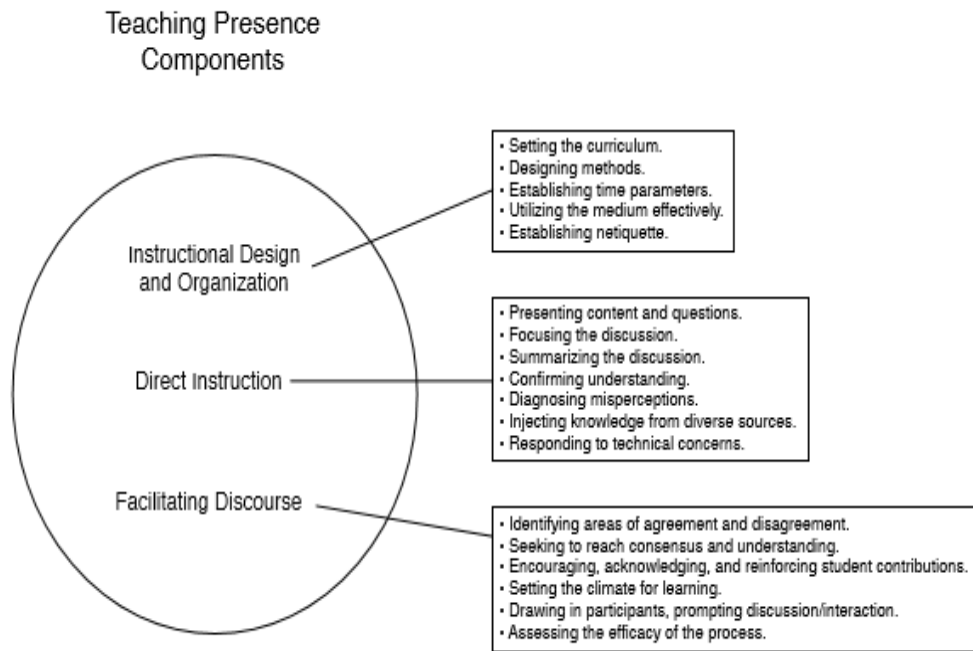
Regarding online learning and CMC, perhaps the most relevant definition for teaching presence is the one provided by Garrison et al (2001):

“...as the design, facilitation, and direction of cognitive and social processes for the purpose of realizing personally meaningful and educationally worthwhile learning outcomes. Teaching presence begins before the course commences as the teacher, acting as instructional designer, plans and prepares the course of studies, and it continues during the course, as the instructor facilitates the discourse and provides direct instruction when required (p. 5)”

Teaching Presence includes attitudes, actions and behaviours of the instructor who establishes closeness and immediacy to the learners. As stated earlier in the literature review, the performance of the teacher is highly correlated with the learner satisfaction (see 2.3), particularly to his or her availability and response time. In addition, Burgoon et al's (1984) research support the following premise: if increased availability and willingness to communicate enhance teacher-student relationships, then there exists the potential that learning may be positively impacted. A premise that, later on, other researchers supported through empirical evidence (Bentz, 2010).

By using the term ‘teaching’ instead of ‘teacher’, the authors of the model emphasized the possibility of distributing the responsibilities and roles of a teacher among participants. Teaching presence does not need the teacher to perform all the activities, teachers may assign learners to moderate their discussions since the most important function of a teacher is to assess the efficiency and effectiveness of the learning activities, not to lead them (Garrison, 2001). Nevertheless, according to Anderson et al (2001), assessment is the variable that is most directly under the control of teachers, the task of creating and sustaining “teaching presence”. There is another term, “*instructor*”, that in some cases appears to be interchangeably with teaching presence (Lear, Isernhagen et al, 2009; Sheridan & Kelly, 2010). For the purpose of this study, instructor and teacher have the same implications.

Figure 3. Teaching Presence Components



Source: Garrison, Anderson, & Archer (2000, p. 16)

Figure 3 presents a technique provided by the developers of the Col for systematically analysing the context of the text-based transcripts of a course. The model looks for unseen knowledge in the data recovered from the interactions between the learners and the teachers as they develop, facilitate, and evaluate learning activities. By the assessment of teaching postings, this technique aims to: (1) develop efficient, reliable, and practical tools for helping teachers understand and improve their online teaching; and (2) test hypothesis or diagnose online-teaching problems (see 2.3.3).

Although more than one participant may provide teaching presence, the primary provider is the instructor (Marks et al, 2005). The perception of the extent to which the instructors provide this presence has found to be more linked to the course outcomes than to the extent to which learners demonstrate teaching presence behaviors (Shea et al, 2013). Instructors influence the development of teaching presence in an online course in different ways. To name some: instructors determine and regulate the content to be covered, moderate discussions effectively, provide discussion posts to restart stalled discussions (Jefferies et al, 2003), establish group size, use tools and techniques such as online journals (Vonderwell, 2004), and supplement the online component with an initial face-to-face session to begin the course (Anderson et al, 2001).

Garrison et al (2010) stated that Teaching Presence provides the frame to a course that leads Cognitive and Social Presences; in other words, TP supports both social and cognitive presence

(Scott, 2016). In addition, Garrison et al (2010) identify three major responsibilities in teaching presence: “1) Establishing curriculum content, learning activities, and timelines 2) Monitoring and managing purposeful collaboration and reflection 3) Ensuring that the learning community reaches the intended learning outcomes by diagnosing needs and providing timely information and direction” (p. 32). Moreover, there is growing evidence that teaching presence is a significant determinant of student satisfaction, perceived learning, and sense of community (Akyol & Garrison, 2008; Arbaugh, 2008; Shea et al, 2005).

The value of TP to establish a learning community where reflection and collaboration prevails, is highlighted by Tu and Corry (2003). They explain that, in order to insure a good learning experience, an ideal interactive learning environment must be constructed according to a fully integrated design rather than assembled as a set of “unrelated, disconnected, and fragmented learning activities scattered throughout the course” (p. 54). Collaborative learning does not happen as an isolated event. It must be planned, and preserved with a conscious, continued effort according to researchers such as Roschelle (1992) and Weinberger et al (2009). Teaching presence provides the structure (design) and leadership (facilitation and direction) required for effective interaction and discourse, which leads to higher-order learning.

Garrison et al (2000) outlined teaching presence as a model that represents a challenge to study empirically due to its three components: 1) Instructional Design and Organization that is directly related to managerial and organisational roles, 2) Facilitating Discourse that is associated with the social role, and 3) Direct Instruction that is connected to pedagogical and intellectual roles. These three components, despite the fact they provide conceptual and methodological opportunities to test and/or use the model in research, they also make the construct of teaching presence more complex to operate since the three components are distinct yet highly correlated with each other (Hiltz & Arbaugh, 2003). Moreover, teaching presence may have possible overlaps between the other two constructs, cognitive and social presence. Thus, it is necessary to define the conceptual distinctions for each of the three components to test the impact of teaching presence and its contribution to the Community of Inquiry. The following subtopics define each of the three components or major responsibilities in teaching presence. These components are graphically described in Figure 3.

2.3.3.1 Course design and organisation

Of the three components, this one is the most likely to be performed solely by the instructor. Teaching presence commences with the course design before teaching formally starts and continues during the educational process (Lazarevic, 2011). Anderson et al (2001) outline that the

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design and organization is the planning and designing of the structure, process, interaction, and evaluation of the online component of the course. These activities are completed prior to the beginning and delivering of the course; however, adjustments can be made as the course progresses. These aspects of the online course must be explicit and transparent to the learner because the indications and norms of the traditional face-to-face classroom are not present in the online environment (Anderson, 2002; Coppola et al, 2002; Palloff & Pratt, 1999).

More institutions are now providing structural support to their teachers through the use of instructional design formats, documents on learner usage of technology, teachers cues across courses, and instructional design experts (Shea et al, 2004). Consequently, they can create clear and consistent courses that, alongside engaged instructors and dynamic discussions, are the most constant predictors of successful online courses (Swan, 2002, 2003).). Design and organisation provides the framework for discourse and direct instruction to have meaning.

2.3.3.2 Facilitating discourse

Facilitating discourse is the means by which learners engage in interacting about and building upon the information present in the material of the online course (Anderson et al, 2001). This component of teaching presence reinforces research findings in regards to the importance of interaction in online learning effectiveness (Arbaugh, 2000, 2005b; Hiltz & Turoff, 2002; Sherry et al, 1998; Yoo et al, 2002).

This component has to do with sharing meaning, identifying agreements and disagreements, moving the course discussions in the desired direction, and seeking consensus among the participants of the course to reach the learning objectives.

Unlike the Design and Organisation component that is to be completed by the instructor before the course begins, Facilitating Discourse must be completed by the instructor and the learners' community in reciprocity and cooperation.

2.3.3.3 Direct instruction

For the component of teaching presence Direct Instruction, the instructor focuses on providing individual feedback to the learner, making use of his/her intellectual subject matter knowledge (Anderson et al, 2001) and actively guiding and orchestrating the learners' discourse leading to a sense of connectedness and learning (Shea et al, 2006).

As well as the Facilitating Discourse component, Direct Instruction requires the presence of the learner to be completed. These characteristics make Design and Organisation a distinct component for the teaching presence construct.

The effects of these three presences as instructional components provide multiple instructional roles prone to establish a climate for meaningful learning. In other words, “the group cohesion and open communication created by SP and the structure, organisation, and leadership associated with TP, lay the foundation to create the environment where CP, which is considered to be the most important element associated with higher order learning, can flourish” (Layne & Ice, 2014).

2.3.4 Criticism of the Community of Inquiry

Since the conceptualisation of the Community of Inquiry model in 2000, research on it has been conducted to evaluate its reliability as a process for understanding the complex and dynamic nature of teaching and learning in online and blended learning environments (Akyol et al, 2009).

The Col has achieved promising results; however, it still requires further research as some methodology issues remain unclear or unresolved (Rourke & Kanuka, 2009). And due to criticisms, the authors of the model have conducted further research to resolve them. Some of these issues are the reliability when coding text elements to assess the three presences (see Table 2 in 2.3). To aid the situation, the authors have created the Col validated survey (Garrison & Arbaugh, 2007; Garrison, 2008); Arbaugh et al, 2008).

Rourke & Kanuka (2009) critique the Col and doubt that this framework can be used to elicit deep and meaningful learning because “students are not engaged in the constituent processes” (p. 39) proposed by the framework, at least not in the context where deep and meaningful learning is regarded as the dependent variable under examination. Rather, they claim that students seem to report lapses of superficial learning and associate these more with instructional material as the individual completion of assignments or projects than with sustained interaction with the instructor or other learners. Rourke & Kanuka (2009) considered the Col framework deficient as a model for online learning and as a programme of research since it cannot grow deep and meaningful learning.

Annand (2011) supports Rourke & Kanuka’s argumentation in the sense that the Col cannot adequately inform about the development of online education theory and practice. Particularly, Annand (2011) considers that the influence of social presence on the online learning experience is overestimated according to the studies of some scholars like Boston et al (2009). Kupczynski et al

(2010) concludes that social presence needs to be re-evaluated to clearly determine the influence of group-based social presence categories on the learning process.

Critics still go on, as Xin (2012) debates on teaching presence stating that the only way the instructor can be presented is through his or her words. Shea et al (2010) suggests an adjustment to the framework: a fourth category, Learning Presence, to the TP construct in a way, they claim, that course design and organisation, facilitated discourse, direct instruction, and assessment better reflect the concept of teaching presence in an online class (Shea et al, 2010).

With this addition, Shea and Bidjerano (2010, 2012) have extended the Col framework to include a fourth category, Learning Presence. They posit that due to the electronic, social, and self-directed nature of online learning, it is necessary to examine the elements of the Learning Presence construct. These elements are the metacognitive, motivational, behavioural traits and activities that are under the control of successful online learners, especially as they relate to desired outcomes such as higher levels of cognitive presence as described in the Col framework.

These researchers postulate that learner self-regulation is a well-researched construct compatible with multiple theories of learning (Zimmerman, 2000, 2008), and its introduction to the Col framework has the potential to enhance the model. Even though research on the role of learner self-regulation in online courses is still incipient, its early results demonstrated the beneficial effects of self-regulatory behaviours on learners' successful engagement in online environments (Barnard et al, 2009). Therefore, the next section is dedicated to Learning Presence.

2.3.5 Learning Presence, additional construct proposed as a reform for the Col

The Col has certainly helped contextualise the online learning process, though it still has several gaps (Arbaugh & Hwang, 2006) that have to do with a fertile ground for the development of a more comprehensive and explanatory model in order to understand the potential benefits of online instruction: the online learner self-regulation (Bixler, 2008; Chang, 2007; Chung et al, 1999; Cook et al, 2005; Crippen & Earl, 2007; Nelson, 2007; Saito & Miwa, 2007; Shen et al, 2007; Wang et al, 2006).

Founded upon the work of Bandura (1986) and Zimmerman (2000, 2008), Learning Presence is defined as the “forethought, monitoring, reflection, and strategy use associated with self-regulated learning, but with emphasis on the goals and activities of online learners specifically” (Shea, 2014).

This depiction clearly differentiates the LP from TP instructional design, facilitation of discourse, and direct instruction from the affective and cohesive dimensions of the SP as well as from the CP: triggering event, exploration, integration, and resolution (Shea, 2014).

Shea (2012) suggests that the name “Learning Presence” integrates with the other three constructs of the Col and reflects “the proactive stance adopted by students who marshal thoughts, emotions, motivations, behaviours and strategies in the service of successful online learning”. Learning Presence indicates the control rather than the passivity, and more so, it articulates the well-known importance of self-direction in online environments (Shea, 2012).

The addition of Learning Presence (LP) does not mean to undermine the other three presences. Shea (2012) proposes that despite the considerable overlap of the three presences, the roles of online teachers and students, their duties, expectations, motivations, and mechanisms for success are not the same. The SP, TP, and CP do not fully explain the attitudes, abilities, and behaviours that engage students in their online learning, reason why the Learning Presence is proposed to be the new construct to be included in the Col model (Shea & Bidjerano, 2012; Shea et al, 2010; Shea et al, 2013).

Garrison and Akyol (2013) disagree with the idea of extending the Col through the addition of the LP, arguing that it violates fundamental assumptions of the Col model since the self-regulation of learning is inherent in the original Col model, and instead of adding a new presence, it is necessary to look at the roles and responsibilities within the three original presences to seek evidence for students’ self-regulation.

Shea (2014) contends that the roles proposed in the original Col are more related to the instructor than to the learner, and agreeing that all participants in a community of inquiry can perform both, the teaching and learning roles, forces the learner’s roles and responsibilities, which are crucial to succeed in an online environment, to be delineated. “To be successful in these pursuits learners must participate in online environments in ways that vary definitively from those of instructors” (Shea, 2014). The developers of the Col state that: “A key feature of the Col framework is the integration of personal and shared cognitive and teaching presences. Regulation is central to both cognitive and teaching presences. All participants are both learners and teachers” (Garrison & Akyol, 2013).

Even though it is an ideal that teachers can perform the roles of students and students those of teachers, that does not work in real higher education settings (Shea, 2104); two situations exemplify this distinction: first, teachers are the ones that design courses before students can make use of and participate in them, students do not pre-design courses for teachers. This role

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pertains the instructional design element of the teaching presence in a community of inquiry (Shea, 2014). Second, teachers are the ones that assess students' performance and assign them an overall grade at the end of the course (Shea, 2014).

Besides, the distinction in the roles of teachers and students are their goals. Students and teachers engage differently within a community of inquiry. Students are obligated to demonstrate that their competence in the community of inquiry has grown, this is moving from the periphery of the community of inquiry to the centre of it (Lave & Wenger, 1991). The elements of the Learning Presence represent a conceptually and empirically valid way of explaining how students move from the periphery of the community of inquiry to the centre of it, demonstrating their growth with participatory models of teaching and learning (Sfard, 1998).

The Col model certainly represents an advantageous theoretical framework for understanding online learning (Shea, 2012). It contemplates that teachers and students share roles at some point including shared responsibilities of teaching presence but suggests that it is necessary to know more about effective online learners, and that the means for supporting and developing that knowledge is the learner's self-regulation study.

2.4 Other studies in blended learning

In this section, the researcher presents an account of empirical research employed by some scholars using the Col. These studies have valuable insight from the researcher's present study.

In *Subject matter effects and the Community of Inquiry (Col) framework: An exploratory study*, Arbaugh et al (2010) integrate the developing literature of empirical research on the Col framework. In order to be able to generalise the findings, the data was collected from two institutions from the United States for one year. The instrument used was the Community of Inquiry Framework survey, and after examining over 1500 learners in seven different disciplines, the results based on learner's perceptions of cognitive, social, and teaching presence suggest that the Col may be more applicable and appropriate in disciplines such as education, health care, and business than in pure disciplines (Garrison et al, 2000; Smith et al, 2008).

The present case study also examines disciplinary differences from the data gathered from four courses: two from education, one from software engineering, and one from international commerce. Considering that a fair number of researchers have pointed out that disciplinary difference is a significant factor in teaching and learning (Cashin & Downey, 1995; Neumann, 2003; Smith, et al, 2008; Smith et al, 2008b), the nature and characteristics of different disciplines should be considered in the Col framework (Arbaugh et al, 2010; Richardson et al, 2012).

Although the CoI principles are relevant for all disciplines, it is possible that the differences in the nature and characteristics of each subject and the purposes of teaching and learning may impact the understanding and application of the teaching presence in the CoI.

In *The first decade of the Community of Inquiry Framework: A retrospective* (2010), the three scholars who developed the CoI model, Randy Garrison, Terry Anderson, and Walter Archer, describe its development and growth. Relevant for the researcher's purposes is the fact that these scholars grounded the CoI research in content analyses so as to develop a common survey instrument, making possible a variety of large scale, quantitative studies as well as studies centred on the CoI framework to explore the impacts of varying instructional strategies on online learning processes. A survey that has been widely accepted in literature, adapted to a number of languages, and employed in diverse applied disciplines such as education, business, and health care as supported by Olpak et al (2016), Burgess et al (2010), Bangert (2009), to name some. The methodology employed was a quantitative content analysis of 16 studies published in the 1990s that had applied the technique of content analysis to the transcripts of online discussions.

Another relevant research for this study is *A re-examination of the Community of Inquiry Framework: social network and content analysis*. Peter Shea (2010) documents the correlation between the three components of the model, learner satisfaction, and perceived learning. Shea reports that the CoI framework has become one of, if not the leading model guiding online teaching and learning research in higher education. The data for this research includes all of the content of two Business Management fully-online courses at a state college, a distance and adult education centre for non-traditional learners. The content analysis technique was used to code the transcripts.

The importance of the CoI framework was documented in *Researching the community of inquiry framework: Review, issues, and future directions* (Garrison et al, 2007), which laid out the CoI model and has been the most cited paper in the Elsevier journal, *The Internet and Higher Education*. Garrison et al (2000), Anderson et al (2001), and Rourke et al (1999), the other primary articles in research and practice of online and blended learning and teaching contexts, have had massive impact as well. They have been greatly cited raising the focus on the CoI of a strong community of researchers (Swan et al, 2008). The community of inquiry framework has used a methodology best described as an exploratory qualitative approach to provide "insights for the purposes of constructing meaningful propositions to be explored in further research" (Garrison et al, 2006). In addition, much of the research on the CoI has been interpretivist in an attempt to understand interactions through text analysis (Miles & Huberman, 1994).

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The purpose of the study *From the perspective of Community of Inquiry Framework: An examination of Facebook uses by pre-service teachers as a learning environment* (Kucuk & Sahin, 2013) is to examine the development of the CoI in face-to-face and blended learning contexts in relationship to students' academic success, satisfaction, and motivation. The study collected data in an undergraduate course delivered in both face-to-face and blended delivery modes, and the instruments included an achievement test, a motivation survey, a satisfaction survey, and a community of inquiry survey. The content analysis technique was used to analyse learners' postings on Facebook. The research group for this study consisted of 109 students in the Department of Computer and Instructional Technology Education. It used a mixed-methods research design. The methodology of this research was relevant to the researcher for it included a variety of instruments, which the researcher considered as she planned this study (see 3.3).

2.4.1 Methodology used in empirical research in Teaching Presence using the CoI

Compared to the amount of research performed on the CoI model, little research has been done regarding Teaching Presence, the prime construct of this study.

In the study of Preisman (2014), *Teaching presence in online education: from the instructor's point of view*, the purpose of this mixed-methods research was to determine, through data collected from 124 learners in the span of three semesters, whether creating a greater sense of teaching presence is an effective investment of time and energy for the teacher. Preisman supporting Oztok & Brett (2011) claims that the majority of the time, the topic of the study of teaching presence online is viewed from the learner's perception. The data for the study was collected from learners' grades, learner-teacher communication in discussion board postings, and course evaluations. My interest in this article is threefold. Firstly, the fact that teaching presence is evaluated under the perspective of the teacher, which is not the perspective of my study, but still I find it very interesting. And secondly, Preisman mentions that it is a general consensus perceived by faculty that teaching online is more demanding and time-consuming than teaching face-to-face (Van de Vord & Pogue, 2012). In my context, this perception has become prevalent since the implementation of the blended learning delivery mode, *Modalidad 2012*. Though, as asserted by Bollinger & Waslik (2009), Harber & Mills (2008), Worley & Tesdell (2009) in Preisman (2014), this has not been conclusively proven yet. And lastly, the instructor of the course was also the researcher, a situation that I considered in the early stages of my research but rapidly discharged due to my incipient teaching experience in blended learning environments.

Richardson et al (2015), in *Conceptualizing and investigating instructor presence in online learning environments*, present a descriptive multi-case study approach that conceptualises teaching presence and its intersection with social presence, with 14 instructors in 4 courses that teachers neither design nor develop of a Master's Programme in Learning Design and Technology at a large Midwestern public university in the USA. The intention of the study is to depict profiles of online teaching presence and build an explanation of the teachers' actions and behaviours. Different from using the subcategories for coding provided by the Col model as in my study, Richardson et al's developed a coding schema based on social and teaching presence indicators presented previously by other researchers (Akyol, 2009; Rourke et al, 1999; Shea et al, 2010; Swan, 2002). The researchers of the study also considered a fourth category for the teaching presence construct: assessment as Shea et al's (2010) argued was needed to add to the Col model.

2.4.2 Recent research in Teaching Presence using the Col

In this subsection, the researcher includes some of the findings of recent research to round her understanding of the teaching presence in blended learning environments.

Shea et al's study (2003) stresses the need to strengthen instructional design and organisation, and further improve facilitation of discourse and direct instructions. The researchers found out that, through guided learning activities, online instructors reflected on how to enhance instructional design and organisation, discourse facilitation, and direct instruction in a way that will result in higher levels of teaching presence, higher levels of student satisfaction, and reported learning.

In Shea et al (2003, 2006), it is documented that teaching presence, when studied in isolation, does not connect with its three components: instructional design, facilitation of discourse, and direct instruction. These results, supported by other researchers like Arbaugh (2007), indicate that the teaching presence instrument consist of directed facilitation, instructional design, and organisation. The description of direct instruction provided by Shulman (1986, 1987) and updated by Mishra and Koehler (2006) suggest that the Col instrument should be modified to reflect this more distinctive characterisation of direct instruction, which is suggested to define the capacity of the instructor in a more round way as the following: to provide valuable analogies, to offer useful illustrations, to present helpful examples, to conduct supportive demonstrations, and to supply clarifying explanations.

In Heba & Nouby's (2008) study, it is highlighted that the three modes of interaction that take place in blended learning environments (content, social and teacher) function together. The study focuses on the learning process, instructional design, and the technology to understand the

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relative effectiveness of the delivery method. And from the results of their study, they suggest that requests for e-learning courses need to become more of a reality, particularly in teacher education programmes if teachers are to integrate technology in their own classes.

In Shea et al (2010), it is suggested that quantitative content analysis fails to explain the majority of teaching presence behaviours (actions, attitudes and words), which causes an under representation of the online effort of the instructor teaching presence. They claim that further research using the CoI framework needs to examine its applicability at a whole course level, not just to discussion threads, to get effective and reliable data that can measure the three constructs of the Community of Inquiry model. In addition, they have argued that a fourth category should be added to teaching presence: assessment, which includes “both formative and summative assessment across a broad range of instructor and student activities that occur within an online course” (Shea et al, 2010, p. 134).

Rubin et al (2012) examine how technology affords learners and teachers the ability to communicate in an online environment. They suggest a model to explain the effect of LMS affordances on the Community of Inquiry. In regards to teaching presence, the study found that learners’ reading everything play a significant role on the CoI. When learners read everything, they are more aware of the teacher’s course design and instruction, so it would contribute to a greater sense of teaching presence. However, the easier an LMS is to use, the less learners attribute some behaviours to teaching presence, for example the reminders that keep learners on task.

Recently, in a study conducted through the lens of the CoI, Zhao (2017) shows that the teacher’s roles of teaching presence and means of making teaching presence shape its impact on learning to a great extent. Regardless of the well-documented roles and responsibilities of online teachers (Berger, 2008; Darabi et al, 2006; Salmon, 2011; Swan, 2001), the extent to how teaching presence impacts online learning still requires a lot of research, according to Zhao (2017). Moreover, Baran et al (2011) suggest that studying teaching presence is very important as it provides information about the training and support teachers must receive to properly teach online as well as the aspects that contribute to achieve an effective online learning environment.

2.4.3 The Community of Inquiry as an Evaluative Tool

After two decades of research, the CoI theoretical framework (Garrison et al, 2000) has provided enough empirical evidence to be considered a coherent set of articulated elements and respective models describing a higher learning experience. This learning experience can be applicable to a large range of learning environments that go from face-to-face to online, from K-12 to higher

education to be used in research and in practice (Garrison, 2013). The framework also provides the means to understand and explore the relationships among the elements and learning, and it has the ability to generate hypotheses and provide the theoretical context to interpret findings (Garrison, 2013).

The ultimate value of a tool to assess the nature of a phenomenon, teaching presence in this study, depends on its validity. As expressed by Anderson et al's study (2001), the CoI is a generalised model of critical thinking and practical inquiry, where the quality of an educational experience is the outcome within a specific educational context and it is the responsibility of a teacher as a pedagogical and content expert. This educational experience from a process perspective is assumed to be greatly assisted by a tool to assess critical discourse and reflection for acquiring an intended and worthwhile learning experience (Anderson et al, 2001).

The order provided by the CoI framework, is perhaps the main reason that the framework has been widely adopted as the methodological guidelines for measuring each of the presences (see 2.3) that constitute a community of inquiry (Arbaugh et al, 2008). In addition, Arbaugh et al (2008) and Swan et al's (2008) studies, validated the CoI Survey (see 2.3.4 and Appendix G) to provide online researchers with a common instrument for "qualitatively assess [ing] the state of a community of inquiry" (Garrison, 2017 p. 29). The original CoI Survey included 34 likert-scale items, twelve associated with cognitive presence, nine associated with social presence and thirteen associated with teaching presence.

According to Arbaugh et al's study (2008), the survey items measuring the three presences appear to capture the dimensions of the three constructs in a valid yet efficient way providing also increased external validity to the findings. And they conclude that the instrument could be used to examine the CoI elements as predictor variable of course outcomes and as a criterion variables in studies examining the extent to which course characteristics encourage, or inhibit, the development of the each/all presences.

The CoI framework and the CoI Survey have been strongly applied to online learning research (Stewart, 2019) where hundreds of studies have been conducted and have "constantly demonstrated the stability of the CoI framework" (Garrison, 2017 p. 28) and their use as a valid measure of teaching, social and cognitive presence.

The increased reliability and validity of CoI measurements impact not only the work of researchers interested in the framework, but also course designers, degree program administrators and teachers (Stewart, 2019).

2.5 Chapter summary

This chapter reviewed the literature on e-learning and blended learning in higher education. The ICT have a key role in blended learning environments as they serve as mediating instructional tools that have reshaped activities, content, and methodology of learning in general and in the English language learning. Also, it presents a brief description of seven theoretical models that support blended learning. The emphasis is on the theoretical lens selected to conduct this study, the Community of Inquiry model. Additionally, empirical studies conducted by scholars using the Community of Inquiry model in blended learning environments, the methodology used and recent research in teaching presence are presented. The literature reviewed has provided evidence that the implementation of blended learning continues to grow due to its benefits. However, it is also noted that there is a need for a better understanding of how new technologies are used, and the importance of developing awareness of their affordances and constraints.

In regards to the understanding around the role of the teachers, research has shown that teachers need concrete strategies and clear guidance on how to teach effectively and connect with their learners in synchronous and asynchronous environments (McCombs & Vakilia, 2005). A set of skills and strategies are therefore required by the teacher to bridge this distance, connect with students, and develop presence (Barbour, 2013). The teacher has an important influence on the cognitive, affective, and behavioural outcomes for learners (Hattie, 2003; Haughey, 1997; Kramas & Kopp, 2010; Rowe, 2003).

Chapter 3 Research Design and Methodology

Chapter three presents the procedural steps followed to obtain the necessary data for this mixed-methods institutional case study focusing on the role of the teacher in blended learning contexts, both face-to-face and online environments, in an attempt to answer the research questions presented on section 1.4. The study analysed the role of the teacher in blended learning environments, and how learners and teachers see themselves both face-to-face and online. Data was collected between January 2016 to September 2019 from four teachers of three different disciplines, two were English Language teachers, one was from the International Commerce Department, and the fourth was in the Department of Software Engineering. The study was mixed methods using two kinds of data, namely quantitative survey data and qualitative interview data. To compensate for the limitations of each research method, and to generate a deeper and more complete understanding of the data collected, both data sets were merged to obtain more comprehensive results.

This chapter describes the research design and it is divided into 5 sections. The first section explains why I used an exploratory sequenced mixed-methods approach to frame this institutional case study. The second section describes the research context and the study participants. Section three presents the research instruments used and the data collection process and shows how they are designed to answer the research questions. The fifth section presents the role of the researcher followed while the last section addresses the procedures for the analysis of data. The ethical considerations and the risk minimization are addressed in this final section as well.

3.1 Research Paradigm and Research Approach

The present study is an exploratory mixed-methods institutional case study, positioned within an interpretative qualitative paradigm (Denzin & Lincoln, 2011). Yin (2014) stated that when a study is asking *what*, *how*, or *why* types of questions, it is justifiable to employ an exploratory study.

This study involved a small group of participants in order to achieve a better understanding of teaching presence as a whole in blended learning environments rather than finding a universal truth (Akyol & Garrison, 2008). One of the most significant characteristics of qualitative research, according to Punch (2009) is its richness and variety suitable for using multiple methodologies and research practices. For Merriam (2009) the focus of qualitative research is on understanding the process rather than outcomes or products. The researcher collects and analyses the data which

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allows him or her to spend a great amount of time in the setting of the study building concepts and theories and interacting with the participants to richly and inductively describe the process to be understood (ibid). This interaction gives the researcher the opportunity to clarify and check the information gathered and to explore participants' responses more deeply.

The research paradigm chosen has implications for the selection of an appropriate methodology. According to Robson (1993), a paradigm is the conjunction of the theoretical framework with the assumptions and beliefs that supports a research study. Mackenzie and Knipe suggest it is "the choice of paradigm that sets down the intent, motivation and expectations for the research." (2006, p. 194). For Creswell (2013) terms this a "worldview" whereas Lincoln et al (2011) and Mertens (2010) also refer to the research paradigm. Other such as Guba (1990, p. 17) say that "it (a paradigm) is a basic set of beliefs that guide action"; and Crotty (1998) refer to epistemologies and ontologies (Crotty, 1998); whereas Neuman (2009), mentions broadly conceived research methodologies.

I adopted a social constructivist worldview or paradigm because as in Cohen et al (2000, p. 36) suggest my study has "the intention of understanding the world of human experience" through the processes and interactions of its participants. A constructivist paradigm rather develops throughout the research process, theory or pattern of meanings instead of beginning with the theory itself (Creswell, 2013). Besides, qualitative data collection methods and analysis are mostly adopted by the constructivist researcher. Mixed methods are also reliable when the qualitative method gives support and improves the description of the data.

According to Creswell (2013), a research approach is built according to the paradigm adopted, the research design and the specific methods used. To develop my understanding of a research methodology, paradigm and framework I felt comfortable with, I found Mackenzie and Knipe's (2006) explanation particularly useful. They claim that the framework is intended to 'assist ...researchers to make considered decisions about the type of study they undertake, the process involved in undertaking a research project and the debates in the literature surrounding theoretical frameworks underlining research,' (Mackenzie and Knipe, 2006, p. 193).

In order to investigate my research questions, a mixed methods research design allowed the researcher to triangulate the methods by comparing statistical results with qualitative findings to corroborate and validate data (Creswell & Clark, 2011) as well as to respond to the adverb *how*. In this study, quantitative data was collected from surveys applied to learners and teachers; and qualitative data from classroom and online observations, teachers' and researcher's journals, learners' and teachers' interviews, and learners' focus groups. The merger of qualitative data with

more concrete evidence was allowed a richer interpretation of the data gathered during this study of teaching presence. Also, this merger was used to better comprehend the quantitative survey findings, allowing the researcher to have a better understanding of the relationships involved.

This study design can “increase the interpretability, meaningfulness and validity of the constructs and inquiry results by both capitalising on inherent method strengths and counteracting inherent biases in methods or other sources” (David & Sutton, 2011, p.296). Despite the research methods adopted, data collection must be planned systematically and methodologically to produce reliable findings (Dornyei, 2007). Likewise, the research approach considered most suitable to be adopted for an investigation and for collecting data, is determined by the nature of the investigation and the type of information needed (Dornyei, 2007).

The combination of qualitative and quantitative methods provided a better understanding of my research focus than just using one approach alone (Creswell & Clark, 2007). According to Fielzer (2010), the use of mixed-methods research has become a solution to the unproductive argumentations between the advantages and disadvantages of qualitative vs. quantitative research as a result of the positivism/post-positivism and constructivism/interpretivism paradigm differences (Creswell & Clark, 2007).

This study used a case study approach. A case study is "an ideal design for understanding and interpreting observations of educational phenomena" (Merriam, 1988, p. 2). A descriptive case study is appropriate to study an area in education, and according to the literature reviewed, learning in blended learning courses has usually been explored using a case study research method. This case study, in particular, was situated in a higher education context. For Yin (2014), a case study provides a platform for an empirical inquiry into a contemporary phenomenon. Duff (2016) states that a case study generally creates a qualitative and interpretative approach to understand in-depth the experiences, behaviours, characteristics and processes of a delimited unit.

Duff assigns the value of a case study to the description of the unit in context, which allows researchers and readers to gain an in-depth and new understanding of issues. Additionally, it provides a holistic description expressed in a non-technical language, rich in details and whose focus is on the process and the analysis of meaning. This process description reflects the unique characteristics of the case and the researcher’s subjective experience of that case (Hamilton & Corbett-Whittier, 2013). Even though findings obtained through a case study are not

generalisable, this method is useful for the relevant information that can be found once the analysis of the data is completed. As Gerring (2007, p.1) said: “in-depth knowledge of an individual example is more helpful than fleeting knowledge about a large number of examples”. As stated by Creswell (2003, p. 52) a “case study research involves the study of an issue explored through one or more cases within a bounded system”. For Bassey (1999), a case study is the main strategy for the development of real-life educational theory. Robson (1993), Stake (2000 and 2006), argue that as a methodological approach, a case study is extensively used in social science and educational research.

A case study approach was of great help in providing the context and considering the data needed to investigate teaching presence behaviours in blended learning environments since it gathered numeric information through surveys and text information as well as interviews resulting in databases containing both qualitative and quantitative information (Creswell, 2003). An extensive collection of data was gathered through interviews, observations –synchronous and asynchronous- and documents in order to be able to make sense of the situation through the “how” and the “why” teachers act and behave in the way they do (Yin, 2009).

Since the researcher sought for a comprehensive understanding of the teaching presence in blended learning environments rather than obtaining an outcome or product of this phenomenon (Merriam 2009) a case study approach allowed her to explore the dynamics of relationships, interactions and the decisions made by the participants.

3.2 Participants

This case study used a purposive sampling technique when selecting the participants for the study. Yin (2014) states that purposive sampling is appropriate for case studies to achieve representative results within a single case. According to their knowledge in the use of blended learning environments and their fields of study, four teachers and their learners were selected to explore teaching presence: Lee from the International Commerce Department, Mark from the Software Engineering Department and Morgan and Grace who are English as a Foreign Language teachers. The sample was chosen as they represent four different areas of expertise, different experiences and perspectives. Purposive sampling is convenient when the information is to be collected from a small number of participants that can provide an in-depth understanding of the phenomenon of study.

The participants in this study are four teachers and their learners. These teachers were teaching one semester blended learning courses in undergraduate programmes. These courses were

selected (see 1.3.1) for three reasons, 1) English Language Teaching because the main research interest of the researcher is in applied linguistics and it is my field of academic practice; 2) International Commerce because it is one of the two programmes that first started using blended courses, and because the participant is said to be one of the most skilled teachers in the use of technology at the research site university; and 3) Software Engineering in order to document whether the computer knowledge strengthens teaching presence online.

The researcher personally invited the teachers and the learners to take part in this study. Each of them was given an information sheet that explained their voluntary participation and the purpose of the study and the approach to data collection. All the participants agreed on the terms of the study and signed the consent form given by ERGO. Anonymity was granted to the 4 teachers and the 114 learners during the analysis and publication of results.

3.2.1 Characteristics of Participant Teachers

The participants in this study were four members of three different disciplines and all have different teaching backgrounds and started working at the target university at different times. Pseudonyms are provided for each participant.

Table 3 provides participant details, the number of years' experience, subject taught, their area of expertise. Additional details are provided in narrative form following the table.

Table 3 Research Participant Information and number of learners on the observed course

Participant	Teaching Experience	Area of Expertise and Programme	Number of Learners
Lee	18 years	Administration/International Commerce	22
Mark	10 years	Algorithms/Software Engineering	34
Morgan	19 years	Teaching Practise/English Language Teaching	31
Grace	15 years	Phonetics/English Language Teaching	27

When the study was carried out, the four teachers were practising classroom teachers, with different amounts of experience. Their class sizes ranged from 25 to 35, were delivered online using the *its Learning* Learning Management System (LMS) as required under an institutional policy. All of the participants had worked in higher education for several years by the time they took part in this study. They had also taught the same topic area more than once. Lee has a PhD, and the other three participants have a Master's degree in their fields. Except for Mark, the other three participants, Lee, Morgan and Grace, were already faculty members when the modality of

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the university changed to blended. I remember having shared training sessions with them when *Modalidad 2012* was launched (see 1.3.1).

Lee was chosen as he was one of the highest-evaluated teachers in the university and also recognised for his confidence in delivering instruction through technology. His experience in the use of electronic platforms was very helpful for the staff developing *Modalidad 2012* and his opinion was considered when selecting the institutional wide LMS. Grace and Morgan were chosen because as part of the BA in English Language Teaching faculty, they experienced the full process of adopting the blended learning approach. Also the researcher wanted to explore if the pedagogical strategies and instructional approaches in language education help and guide teacher-thinking when designing learning. Also, I might have expected as future teachers that the learners of ELT would be delighted to be getting access to the use of technology for learning. Mark from Software Engineering was selected because it was my interest to explore if the effective use of computers and/or technology support teaching presence and facilitate teaching and learning activities in blended environments.

3.3 Instruments

The data collection began in the winter 2016 semester and ended in the summer 2019 semester. Over this period of three years, the longitudinal nature of the interviews and focus groups and the resulting reflections allowed me to understand from the voices of the participants the changes that they experienced and how this impacted on the construct of teaching presence. During the three stages of this study, the instruments that were used for the collection of data were the following: a learner questionnaire administered at the beginning and end of the course; a teacher questionnaire; teachers' journal entries about their teaching experience in blended learning (8-10 entries per teacher); videotaped classroom observations (12 hours, 3 hours per teacher); review of instructional material posted online; unstructured interviews with teachers and learners; focus groups with learners; and the researcher's journal. Table 4 represents the stages and implementation of tools.

Table 4. Stages and tools of the study

Stage one	Pre study I
	Pre questionnaire blended learning scale for learners (Classroom Survey Student Engagement, see 3.3.1.1) applied in English to English Language Teaching learners and in Spanish to International Commerce and Software Engineering learners.

Stage two

Pre Study II

Pre questionnaire blended learning scale for learners (Classroom Survey Student Engagement, see 3.3.1.1) applied in English to English Language Teaching, ELT, learners and in Spanish to International Commerce and Software Engineering learners.

Questionnaire blended learning scale for teachers (based on El-Dehaidy, A. Nouby 2008, see 3.3.1.2) applied in English to the four teachers.

Stage three

Main study (all the instruments)

Pre questionnaire blended learning scale for learners (Classroom Survey of Student Engagement, see 3.3.1.1) applied in English to ELT learners and in Spanish to learners from International Commerce and Software Engineering learners.

Questionnaire blended learning scale for teachers (based on El-Dehaidy, A. Nouby 2008) applied in English to the four teachers.

Focus groups with learners conducted in English for ELT learners and in Spanish for International Commerce and Software Engineering learners and their responses were translated into English.

Face-to-face and online observations where classes were delivered in English in the ELT classrooms and in Spanish in the International Commerce and Software Engineering classrooms.

Semi-structured learners' interviews conducted in English for ELT learners and in Spanish for International Commerce and Software Engineering learners and their responses were translated into English.

Post questionnaire for learners (CoI Validated Survey for Learners) applied in English to ELT learners and in Spanish for International Commerce and Software Engineering learners.

Teachers' reflective journal written in English except for the International Commerce teacher who wrote in Spanish and his quotes were translated into English.

Semi-structured teachers' interviews conducted in English except for the International Commerce teacher that were in Spanish and then translated into English.

Researcher's journal written in English.

The instruments were piloted in the fall semester of 2015, with the intention of modifying them if necessary, and validating the surveys given to teachers and learners. The pre study was reviewed

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and approved by Ethics and Research Governance Online, ERGO with the following information (see 3.3):

- Pre study: 14567, Teaching Presence in Blended Learning

The pre study was carried out in one blended learning course from the English Language Teaching programme in the targeted university. The pre study helped the researcher to refine the application of the instruments as it uncovered that some learners were not familiar to the term *blended learning*, which might have compromised the data. The pre study allowed the researcher to plan for such challenge; and for the main study, she unified the meaning of blended learning by fully explaining the concept to the respondents before delivering the surveys.

The necessary amendments to all instruments were sent to ERGO as part of the ethical considerations of this study, and permission to conduct the present study was requested and granted with the following information:

- Main study: 18499, Investigating Teaching Presence in Blended Learning Environments

Application for approval of research, as part of the ethical considerations, was sought and received from the University of Southampton Ethics Committee, being ERGO submission approved number: 18499. Upon receiving the approval, the researcher visited and invited each participating teacher and each class in order to explain: 1) the general purpose of the study and its nature; 2) participation was entirely voluntary; 3) participants could withdraw at any time with no penalization; and 4) the promise that all information would remain confidential.

Learners and teachers were given two written documents, the Information Sheet and the Consent Form for them to sign if they were willing to participate as volunteers in the study. Learners not wanting to participate were able to simply turn both documents back.

The researcher will keep the data in confidential store for five years after the completion of the study. At that time, they will be treated in accordance with the university regulations.

Running a second pre study was not my intention; however, decisions taken by the target university turned what was meant to be my main study into a second pre study. This “main study” began on January 25th, 2016, again reviewed and approved by ERGO as part of the ethical considerations. The study was going to last until the last day of May, but a month before finishing the study, the university facilities were lent to a high school to run a contest. This included the four courses that I was working with and they altered their activities and schedules to be able to cover their content. I felt terribly frustrated and concerned about the impact that this would have

in my research. Fortunately, there was not such impact, and I planned for the second time new dates to run the main study for the second time.

The following table explains how each of the instruments were designed to answer each of the research questions.

Table 5. Research Questions and Instruments

Research Questions	Data Collection Methods
1. How do teachers design and organise the content of their blended courses both, face-to-face and in the VLE for a meaningful educational experience (DESIGN & ORGANISATION)?	<ul style="list-style-type: none"> • Questionnaire blended learning scale for teachers (based on El-Dehaidy, A. Nouby 2008) • Synchronous and asynchronous teaching observations • Teachers' reflective journal • Semi-structured and unstructured teachers' interviews • Researcher's journal
2. How do teachers engage and maintain learners in active learning face-to face and in the VLE for a meaningful educational experience (FACILITATING DISCOURSE)?	<ul style="list-style-type: none"> • Pre questionnaire blended learning scale for learners (Classroom Survey Student Engagement) • Synchronous and asynchronous observations • Teachers' reflective journal • Semi-structured students' interviews • Focus groups with learners • Post questionnaire for learners (Col validated survey for learners)
3. What are the teachers' roles in managing the teaching and learning process using face-to face and online teaching strategies to help learners make sense of the course and of the programme ojectives for a meaningful approach to learning (DIRECT INSTRUCTION)?	<ul style="list-style-type: none"> • Pre questionnaire blended learning scale for learners (Classroom Survey of Student Engagement) • Face-to-face and online observations • Semi-structured students' interviews • Focus groups with learners • Post questionnaire for learners (Col validated survey for learners) • Researcher's journal
4. How do learners understand their role in the teaching in blended learning both, face-to-face and in the VLE for a meaningful educational experience?	<ul style="list-style-type: none"> • Pre questionnaire blended learning scale for learners (Classroom Survey of Student Engagement) • Face-to-face and online observations • Semi-structured students' interviews • Focus groups with learners • Post questionnaire for learners (Col validated survey for learners) • Researcher's journal
5. How do learners understand teaching presence in the VLE as a support for their learning process?	<ul style="list-style-type: none"> • Pre questionnaire blended learning scale for learners (Classroom Survey of Student Engagement) • Face-to-face and online observations • Semi-structured students' interviews • Focus groups with learners • Post questionnaire for learners (Col validated survey for learners) • Researcher's journal

The data collected by the researcher is the following:

Table 6. Data collected

Research Tools	Data Collected
Pre attitude blended learning scale for learners (Classroom Survey of Student Engagement)	150 five-point Likert-type scale fully answered questionnaires, half of them electronically entered using Microsoft Excel 2013

Pre attitude blended learning scale for teachers (based on El-Dehaidy, A. Nouby 2008)	4 five-point Likert-type scale questionnaires electronically entered using Microsoft Excel 2013
Teacher's reflective journal	The intention was to receive one comment, thought, idea a week from each of the teachers collaborating in the study. But they were always too busy so I opted to visit them in their cubicles once a week and collect their data.
Synchronous (classroom) teaching observations	9 hours of video recordings
Asynchronous (online) teaching observations	Screenshots from the forums and support from the University for the four courses that I worked on not to be erased as is usually.
Semi-structured student interviews	8 hours of audio recordings
Semi-structured teacher interviews	8 hours of audio recordings
Focus groups with learners	Three rounds of focus groups recorded in audio
Col validated survey for learners	114 five-point Likert-type scale questionnaires stored in Excel
Researchers' journal	20 + entries

3.3.1 Quantitative Instruments

The instruments used in this study were designed to measure teachers and learners' perceptions regarding teaching presence at the university where I conducted my study. In the next subsection, the data collection methods implemented in this study are presented in order of their implementation that began in the summer semester (August - November, 2016) the first instruments applied were the qualitative, three Likert type questionnaires, two for learners (pre and post study) and one for teachers.

The instruments used for the study were the Pre Attitude Blended Learning Scale for Learners (Classroom Survey of Student Engagement) with 35 questions; the Attitude Blended Learning Scale for Teachers (based on El-Dehaidy, A. Nouby 2008) with 21 questions; and the Post Questionnaire for Learners End of Semester (The Col Validated Survey for Learners) with 20 questions. Responses in these three surveys were indicated by circling numbers one through five on a Likert-type scale with a 1 signifying "strongly disagree" and a 5 signifying "strongly agree".

3.3.1.1 Pre questionnaire blended learning scale for learners (Classroom Survey of Student Engagement)

The central focus of this pre-test is to know the learners' satisfaction towards blended learning environments. Satisfaction according to researchers such as Moore (2009) has to do with enjoyment and achievement in the learning environment. Findings related to learners' satisfaction were not originally contemplated to be included in this study, but as documented by So & Brush (2008), insufficient learner satisfaction is still an obstacle to success in blended learning environments. Moreover, the degree of student satisfaction with blended learning courses play an important role in a successful implementation of this approach (Wu et al, 2010). Hence the researcher deemed it important to measure students' attitudes towards blended learning as compared to traditional learning in the context of the present study. In addition, Boston et al (2009) found that the impact of learners' satisfaction, as an affective expression is a prerequisite for the development of teaching presence, as it is for cognitive presence as well. According to a number of researchers like Akyol & Garrison, 2008; Arbaugh, 2008; Shea, Li, Swan, & Pickett, 2005 there is growing evidence that teaching presence is determinant to student satisfaction, perceived learning, and sense of community.

The questionnaire was based on items drawn from the *Classroom Survey of Student Engagement* (CLASSE, n.d.), which is an adaptation of the *National Survey of Student Engagement*, in the appendix of Garrison and Vaughan's (2008). The questions were adapted so that the survey in three sections measured learners' experience on blended learning, satisfaction with blended learning courses and comparison to typical face-to-face courses. Added to these three criteria were several other questions specific to the local university context. The resulting questionnaire (see Appendix E) contained 29 items on a 5-point Likert-style scale: 1 Strongly Disagree, 2 Disagree, 3 Neutral, 4 Agree, and 5 Strongly Agree. The participation in the study was voluntary and there were 114 respondents. The survey was translated and applied in Spanish to learners from International Commerce and Software Engineering. All the surveys were administered in-person, during face-to-face sessions.

3.3.1.2 Questionnaire blended learning scale for teachers (based on El-Dehaidy, A. Nouby 2008)

This questionnaire is a 5-point Likert-style scale (see Appendix F), adapted from an instrument developed by Heba El-Deghaidy and Ahmed Mohamed Nouby for the purpose of the study conducted at an Egyptian university *Effectiveness of a Blended E-learning Cooperative Approach in an Egyptian Teacher Education Programme*, in 2008 (see 2.4.2). The study measured the

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effectiveness of a blended e-learning cooperative approach on teacher's achievement, attitudes towards e-learning and cooperativeness.

I adapted the survey in a way that it could be better understood by the four respondents. The wording of the questions was simplified since I knew beforehand due to my previous role at the university, that this would be the first time that the concept of "blended learning" was used at the university for research purposes. The phrase "*science teaching methods*" was changed in all the questions for "*blended learning courses*". For example, question 20 from the original survey was "*I get low grads if taught science teaching methods course electronically*" and it was changed to "*I get low grads if taught blended learning courses*". Also, the survey was translated into Spanish for one of the teachers of the study that does not speak English.

This survey served as a starting point to begin talking and exploring the experience and perception of blended learning with the four participant teachers, since even the name of the approach was new to them as they called the modality *semipresencial* (semi face-to-face) and not blended learning. This survey set the context to explore how teachers value the effectiveness of a blended learning approach and the extent of involvement they have had with their learners and with the course. Since this survey was administered to three different programmes, my goal was also to explore possible themes related to disciplinary differences that would emerge across these questions.

3.3.1.3 End of semester post questionnaire for learners (The CoI Validated Survey for Learners)

According to Garrison & Arbaugh (2007) and Rourke & Anderson (2004) the CoI was firstly assessed by a qualitative analysis of discussion transcripts within the context of online learning environments. Later, Garrison, Cleveland-Innes, and Fung in 2004 were the first researchers to evaluate the three presences of the Community of Inquiry model with the CoI Survey, a 34-item item questionnaire, ranging to strongly disagree to strongly agree. This instrument viewed from a practical perspective provides adequate support to assess and improve the design and delivery of online courses (Bangert, 2009). For the purpose of this study, the researcher used a survey based on a modified version of the CoI instrument. This instrument used to measure the perceived teaching presence in the learners was developed by Shea et al (2003) in the study that they performed about teaching presence in the SUNY Learning Network (see 2.4.2). The questions from this survey were elaborated by the instructional design team of the State University of New York. The experience they gathered through workshops, under the guidance of Terry Anderson, principal author of the paper *Assessing teaching presence in a computer conferencing context* (2001). These questions written as statements sought to elicit learners perceptions of teaching

presence by expressing their level of agreement based on a five-point Likert-type scale. The scales for the three teaching presence categories are Course Design and Organization, 6 items; Facilitation Discourse, 8 items; Direct Instruction, 6 items (see 4.1).

The content of the survey was not modified, except that for the purpose of this study, only the Teaching Presence component of the survey was applied and instead of 34 items, the survey had 20 items (see Appendix G). For the two programmes that were delivered in Spanish, the researcher used the survey in Spanish provided on the web site of the Community of Inquiry. The 20 questions of this post-test helped me to explore the perceptions of learners in regards to the three categories of teaching presence (see 2.3.3).

3.3.2 Qualitative Instruments

The qualitative instruments were chosen to explore the phenomenon of teaching presence that would have not been possible to obtain from the questionnaires above described. Qualitative methods were used to collect data in stages two and three of this study, and they helped to further understand teaching presence. Follow-up interviews helped me to explore the views, experiences and beliefs of teachers and learners on the focus of my study; and provided qualitative data particularly useful to clarify the answers to certain questions of the questionnaires, as the interviewees were asked to express their views and their opinions. Semi-structured interviews are well suited for case studies like this one because they include specific, well-defined questions determined in advance. The key questions of my study, categories and subcategories of the teaching presence component of the Col (see 4.1), asked during these interviews helped me to define the areas to be explored, and to pursue more detailed answers. However, unstructured interviews were also helpful as they did not reflect any preconceived ideas. Such interviews with this opening question “Can you tell me about your experience of teaching in blended learning environments?” supplied a lot of rich and significant information where the depth was required or when the perspective of certain area needed to be expanded. These two formats complemented each other to discover information that was important to participants, but not been thought to be as highly influential as the data later confirmed.

From the focus groups discussions with learners, I generated information on the collective view, and on the meaning behind those views. I collected narratives to be used in the presentation of results and in the discussion chapters from understanding the participants’ experiences and beliefs related to teaching presence in blended environments. The composition of the focus groups and the time they had spent together as classmates created a comfortable atmosphere where participants felt free to speak and share their thoughts leading to obtaining richer data.

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Every focus group (see 3.3) organised helped me to clarify and extend ideas, and to challenge data collected through other methods. Fruitful discussions arose when learners were asked questions like what teachers' behaviours helped them to be better online learners; or how their perception of their teachers' teaching in blended learning had changed throughout the study. The most eye-opening topic discussed in those sessions was probably how their teachers were different online and face-to-face.

Observations, along with interviews, are a primary source for qualitative data according to Merriam (2009). Observations are different from interviews in that they occur within the natural setting of the phenomenon observed as opposed to a potentially designated space apart from the phenomenon (Merriam, 2009); and "observational data represent a first-hand encounter with the phenomenon of interest rather than a second hand account of the world obtained in an interview" (p.117).

The role of the researcher according to Creswell (2013) may be anything from a complete participant in the activities of the social context to a complete observer, and anywhere in between. My observations occurred in the classroom and I did not participate in the class but the learners were aware of my presence as the group teachers announced to their learners why I was there. Observations in the classroom were important to understand how the teaching presence happened in the physical context and contextualised some of the themes and quotes that I highlighted during the interviews and focus groups. They also allowed me to make sense of how the blend happened in both environments, face-to-face and online.

Asynchronous observations happened in the examination of *its Learning* the institutional LMS (see 1.3.1) within each of the four online courses. The LMS sites of each course were observed to find evidence of any of the categories or subcategories of the teaching presence component.

Since the beginning of the study, teachers were asked to write a weekly reflective journal entry to describe their experiences, thoughts, challenges and beliefs related to their teaching in blended learning. From the teachers' voices, these entries gave me qualitative evidence to be able to analyse their pedagogical insight in regards to their presence face-to-face and online.

Qualitative research does not look for universals that exist out of the context, rather they seek for results that are not only context-bounded but also describe the context.

3.4 Role of the researcher

The role of the researcher in this study was intended to be of an outsider, more of an objective viewer. The present research was a transformational process in which I sought to learn about the

experiences and perceptions of learners and teachers in regards of teaching presence in blended learning environments. Since my research is an exploratory mixed-methods institutional case study, with an emphasis in an interpretative qualitative approach, my work “closely involves the researcher with participant data...questions about how personal experiences, perceptions, and interpretations enter into the data are of particular interest” (Daly, 1992 p. 9).

This research was originated from my participation as part of the developer team of *Modalidad 2012* (see 1.3.1) when the university migrated from a complete face-to-face approach to a blended learning approach. This study was an outgrowth of the role I had as part of the development team, my immersion within the training of the faculty of the university, and my own interest on examining how teachers can be supported to become more meaningful to learners in environments that blend face-to-face and online learning.

As part of the developer staff, I wondered myself many times if we were taking the right decisions. I knew teachers were able to draw their presence in the classroom; but I just was not certain that they were receiving the necessary pedagogical tools to draw their presence online too. I needed to examine how we guided teachers and learners to face this institutional change.

When I was part of the development team, I only had the perspective of manager/administrator. However, I needed to examine the phenomenon from a researcher's view. Miles and Huberman (1994) discussed how the nature of a researcher's background knowledge that impacts on the nature of his or her work, regardless of how explicit they are about it. It was because of this background knowledge that I gained that I was able to make sense of situations and of the complex nature of teaching presence. However, my former position at the university could have potentially influenced the views I expressed. So I tried to be very clear about my assumptions and stay away from them. I found my research journal very useful where my personal reflections helped me to identify my biases, my expectations and my own experiences to preserve the ability to conduct my research objectively.

As a researcher, I tried to build the picture of my case study asking questions, listening, reflecting, and then asking more questions to get to a deeper understanding of the situation. I did not intend to do an interventionist research; however, the researcher triggered changes in the teaching presence of my participants. The hours we talked about blended learning, the instruments that they answered, and the reflective journal they kept opened opportunities for new insight that impacted their teaching presence and their perception about it. Each of the categories and subcategories of the teaching presence component was analysed. Certain data that was not initially contemplated was considered a key concept that emerged from the findings associated with the construct of teaching presence from the Community of Inquiry. These

emergent topics and concepts were identified (see 5.1) which permitted the researcher to develop new defined categories: ownership, immediacy and agency.

3.5 Data analysis

This section describes the processes used in the analysis of data which aimed to answer the research questions which aim to examine the perception of teachers and learners in regards to the teaching processes and behaviours framed online and face-to-face. The section is divided into two subsections, qualitative data sources and quantitative data sources.

3.5.1 Qualitative data source

The coding, organising and storing of data relating to the interviews and other qualitative data was carried out through QSR NVivo 10, a data analysis software programme. Interviews and focus groups were transcribed. The transcripts were read several times to identify themes and categories according to the categories for teaching presence of the Col and to establish whether they were any additional categories. For the process of coding, organising and storing, the researcher selected those segments of a transcript to be units of analysis. For this purpose, the researcher used a method called content analysis (Anderson et al, 2001; Garrison et al, 2001; Jefferies et al, 2003) that is a research methodology that makes use of an arrangement of procedures that validate inferences from text, and analyses the nature and quality of the qualitative data. Due to the richness of the information gathered from multiple sources of data, the researcher used the coding scheme from the Community of Inquiry Model, Elements, Categories and Indicators (see Table 2, in 2.3). The dimensions for the three teaching presence components (Course Design and Organisation, 6 items; Facilitating Discourse, 8 items; and Direct Instruction, 6 items) were developed by Shea et al. (2003) in their study of teaching presence in the SUNY Learning Network. This way, the analysis was aligned to the Col, but still allowed emerging themes such as the redesign of the online course.

Analyses and interpretations incorporated insights and feedback from the research participants in the synchronous and asynchronous observations, semi-structured interviews, teachers' and researcher's reflective journals, and in focus groups. The researcher reviewed the transcripts of these data applying codes representing the nodes used in the NVivo software. Those nodes together with the questionnaire data developed patterns that became themes associated with the teaching presence construct that created an overall better understanding of the data and led to more valid conclusions around the teaching presence construct.

The following chart condenses the number of codes collected for each of the categories and subcategories of the teaching presence construct, and the learning environment in which they happened.

<u>Teaching Presence Categories</u>	<u>Codes</u>	<u>Learning Environment</u>
Instructional Design and Organization <ul style="list-style-type: none"> • Setting the curriculum • Designing methods • Establishing time parameters • <u>Utilising the medium effectively</u> • Establishing netiquette 	15 7 2 4 1 0	Both Both Both Classroom Classroom
Facilitating Discourse <ul style="list-style-type: none"> • Drawing in participants, prompting discussion/interaction/feedback • Identifying areas of agreement and disagreement • Encouraging, acknowledging, and reinforcing student contribution • Assessing the efficacy of the process • Seeking to reach consensus/understanding • Setting the climate for learning 	24 13 4 3 1 1 2	Classroom Classroom Classroom Classroom Both Both
Direct Instruction <ul style="list-style-type: none"> • Confirming understanding • Injecting knowledge from diverse sources • Diagnosing misperceptions • Focusing the discussion on specific issues • Responding to technical concerns • <u>Summarising the discussions</u> 	41 19 17 1 0 0 4	Classroom Both Both None None Classroom

The qualitative data gathered by the researcher were deemed to be more highly relevant to the study than the quantitative data since at the research site, the culture around research was not highly developed, and it was clear that participant learners did not appreciate the value of giving thoughtful and truthful answers in questionnaires. For this reason, the researcher is prioritising the qualitative data over the quantitative data in presenting the results of this study.

3.5.2 Quantitative data source

The original sample size was 114 participants from four blended courses. Responses from each participant were entered on paper forms and the researcher transferred the responses from the paper form into an Excel spreadsheet. After reviewing each questionnaire by hand, it was decided that none of the questionnaires needed to be discarded, since all the participants circled only one option, and consistently answered all the questions. The three questionnaires were assessed by two experts in descriptive analysis, the same professors that helped the researcher to process the data on SPSS. There were two questionnaires (46 and 47) from the CoI Validated Survey for Learners (The Community of Inquiry Instrument) that missed one answer; however, the experts Luis Enrique Ibarra Morales, Ph.D and Alberto Macías Duarte, Ph.D, concluded that the data missing was not

excessive, and they were still valuable for the sample. The data was then exported from the Excel Spreadsheet into SPSS.

3.5.2.1 Pre attitude blended learning scale for learners (Classroom Survey of Student Engagement)

In the present study, the level of student satisfaction in the use of blended learning courses, was high and 67.2 % of the participants were in agreement or totally agree, as shown in Table 7.

Table 7. Student Satisfaction in Blended Learning Environments

	Frequency	Percentage
Valid		
Strongly disagree	1	.9
Disagree	4	3.5
Neutral	31	27.4
Agree	56	49.6
Strongly agree	18	15.9
Total	110	97.3
Lost	3	2.7
Total	113	100.0

In addition, a bivariate correlation analysis revealed a strong positive correlation between the questions of part 1 of the survey with the satisfaction level students have in regards to part 2, the use of blended learning courses ($R=0.698$; $p<0.01$). Moreover, the Pearson correlation coefficient revealed a 69.8% shared variance between the percentage obtained and all the answers of part 2 of the survey, as shown in Table 8.

Table 8. Bivariate Pearson Correlation Coefficients

		SP10	Part 2
SP10 (Part 1)	Pearson Correlation	1	.698**
	Significant (bivariate)		.000
	N	110	110
Part 2	Pearson Correlation	.698**	1
	Significant (bilateral)	.000	

N	110	113
---	-----	-----

** $p < .01$ (two-tailed). The correlation is significant at the 0.01 level (bilateral).

The internal consistence among the items of the survey was statistically evaluated using the Cronbach's Alpha test. These results are shown in Table 9.

Table 9. Cronbach's Alpha reliability coefficients

Cronbach's Alpha coefficient	Number of questions
.787	32

As a general criterion, George y Mallery (2003 p. 231) provide the following rules of thumb: “_ > .9 – Excellent, _ > .8 – Good, _ > .7 – Acceptable, _ > .6 – Questionable, _ > .5 – Poor, and _ < .5 – Unacceptable.”

Based on the previous criterion, it can be inferred that Cronbach's alpha coefficient is acceptable for the pre study; and therefore, to ensure good results after administering the survey to the total sample of the population.

Table 11 shows the item discrimination analysis, where most corrected item-test correlations (r_{ij}) are greater than 0.30, except for the following items: 9, 11, 14, 15, 17, 20, 21, 22, 23, 27 and 28, which indicates a good discrimination rate of the items. The total Cronbach's alpha coefficient assumed a value of 0.787, which can be considered acceptable and of good reliability.

However, by doing the analysis of suppressing the items with a $r_{ij} < 0.30$ in absolute values, the result in Cronbach's alpha coefficient increased considerably to 0.903 Appendix B, which is an excellent acceptance level and therefore, the reliability is increased.

The correlations between the degree of satisfaction of blended learning courses and each of the questions in part 2 (see Appendix C) shows the correlations between the response variable “degree of satisfaction with blended learning courses” and each of the questions asked in part 2 of the questionnaire. At a question-level feedback, the answers that most contribute to the degree of satisfaction is SP3 *I enjoy taking classes that have both online and face-to-face components*, with 68.3% ($R = .683$; $p < 0.01$). It seems to indicate that students are much more satisfied if they combine both components, online and face-to-face. However, the answers derived from question SP2 *I feel*

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confident using a computer, contributed the least to the degree of student satisfaction with blended learning courses.

** $p < .01$ (two-tailed) The correlation is significant at the 0.01 level (bilateral).

Table 10 shows the degree of correlation between the 24 questions of the survey that were formulated in part 3 with the degree of satisfaction that the student reported to have when using blended learning courses over only face-to-face courses ($R = 0.434$; $p < 0.01$).

Table 10. Pearson correlations between the degree of satisfaction of blended learning courses and each of the questions in part 3.

		SP35	Part_3
SP35	Pearson Correlation	1	
	Sig. (bilateral)		
Part_3	Pearson Correlation	.434**	1
	Sig. (bilateral)	.000	

** $p < .01$ (two-tailed) The correlation is significant at the 0.01 level (bilateral)

The correlation between the degree of student satisfaction with blended learning courses over only face-to-face courses (see Appendix D) shows a strong correlations, where it can be seen in SP12 ($R = 0.585$, $p = 0.000$); SP18 ($R = 0.328$, $p = 0.000$); SP21 ($R = 0.503$, $p = 0.000$); SP27 ($R = 0.579$, $p = 0.000$); SP32 ($R = 0.416$, $p = 0.000$); SP33 ($R = 0.640$, $p = 0.000$) and SP34 ($R = 0.625$, $p = 0.000$). These values are highly related to the learning gained and the interaction with teachers through the blended learning course.

In regards to the analysis between the two measurements that were made at the beginning of the school period and at the end of it, a statistical analysis was carried out using the T-test for related samples, since the same subjects were studied during the present study. In Table 11, the results of the T-test show the degree of association between the variable: degree of satisfaction with the blended learning courses before and after the school period.

Based on the following hypotheses:

H_0 : The association is equal to zero.

H_1 : The association is greater than zero.

According to $p = 0.000$, the alternative hypothesis (H_1) can be accepted considering that it was found a significant association between the variables. Therefore, it can be deduced that the appropriate analysis is being used, since Sig. < 0.05 .

Table 11. Degree of association between the variables of the sample

Correlations of paired samples				
		N	Correlation	Sig.
Par 1	Part_2 & SS_Part2	113	.990	.000

Following the same methodology, Table 12 shows that there are significant differences between the measurements that were made before and after using blended learning courses. The T-test concludes that the student satisfaction was higher at the end of the blended learning course.

Base on the following hypotheses:

H₀: There are no significant differences between the measurements.

H₁: There are significant differences between the measurements.

It can be accepted the hypothesis (H₁), since the Sig. <0.000. There are significant differences between both measurements, before and after using the blended learning courses, in terms of the degree of student satisfaction in the use of blended learning courses (t = 5.324, p = 0.000).

Table 12. Test-t for related samples (first part of the survey).

Variables	Mean	Standard deviation	Standard error average	t	Gl	Sig. (bilateral)
Part_2 - SS_Part2	.0604842027	.1207692453	.0113610149	5.324	112	.000

For the measurements made based on the variable *degree of satisfaction and preference of blended learning courses over face-to-face courses*, the following results were obtained.

Using Table 13, it can be stated that there are significant differences between both measurements (t = 5.912, p = 0.000). That is, the student prefers and feels more satisfied after using a blended learning course rather than a traditional face-to-face course.

Table 13. T-test for related samples (second part of the survey)

Variables	Mean	Standard deviation	Standard error average	t	gl	Sig. (bilateral)
Part_3 - SS_Part2.1	.0185957879	.0334374593	.0031455316	5.912	112	.000

3.5.2.2 Attitude blended learning scale for teachers (based on El-Dehaidy, A. Nouby 2008)

Reviews of statistical procedures as the one conducted by Warne et al (2012) show that one of the most common multivariate statistical methods in the social science research is multivariate analysis of variance, MANOVA. MANOVA tests the differences between underlying unobserved latent variables derived from the variables in the dataset. MANOVA is therefore often more useful to social researchers because most topics they research are latent constructs that are not directly observable, such as beliefs and attitudes.

To process and interpretation of the data gathered through the Attitude Blended Learning Scale for Teachers (based on El-Dehaidy, A. Nouby 2008), the statistical procedure MANOVA was used, since the instrument was testing several dependent variables (Stevens, 2002) to investigate the existence of an interaction between subject variables. The researcher with the assistance of Professor Macías conducted a multivariate analysis of variance, MANOVA (Timm, 2002), to determine if the behaviours of teachers have impacted the perception of their learners with respect of their teaching presence in their blended learning courses. The use of the MANOVA measure intended to reveal which group from the four blended courses found more coincidence with their teachers teaching presence.

After rejecting the null hypothesis of no difference in the learners' questionnaires scores of the four participant teachers, the scores of the questionnaires were tested. The scores gathered from all the questions, SP01 to SP20, were treated as a multivariate response to proceed with a linear discriminant function analysis (LDF), or canonical analysis, to estimate the contribution of each question to mark the difference in the scores of each group of learners and the scores of each of the teachers (Timm, 2002). A LDF analysis reduces the dimensionality of a dataset by determining the coefficients or weights (a_i) in linear combinations of responses or discriminant function ($DF = a_1y_1 + a_2y_2 + \dots + a_p y_p$) that maximize the among-group variance of such a linear combination. The contribution of each response in determining the separation among groups by a given discriminant function is measured by the magnitude of its coefficient. For any dataset, there are at least $g-1$ discriminant functions, where g is the number of groups ($g = 4$ in this case).

Discriminant functions are uncorrelated to each other.

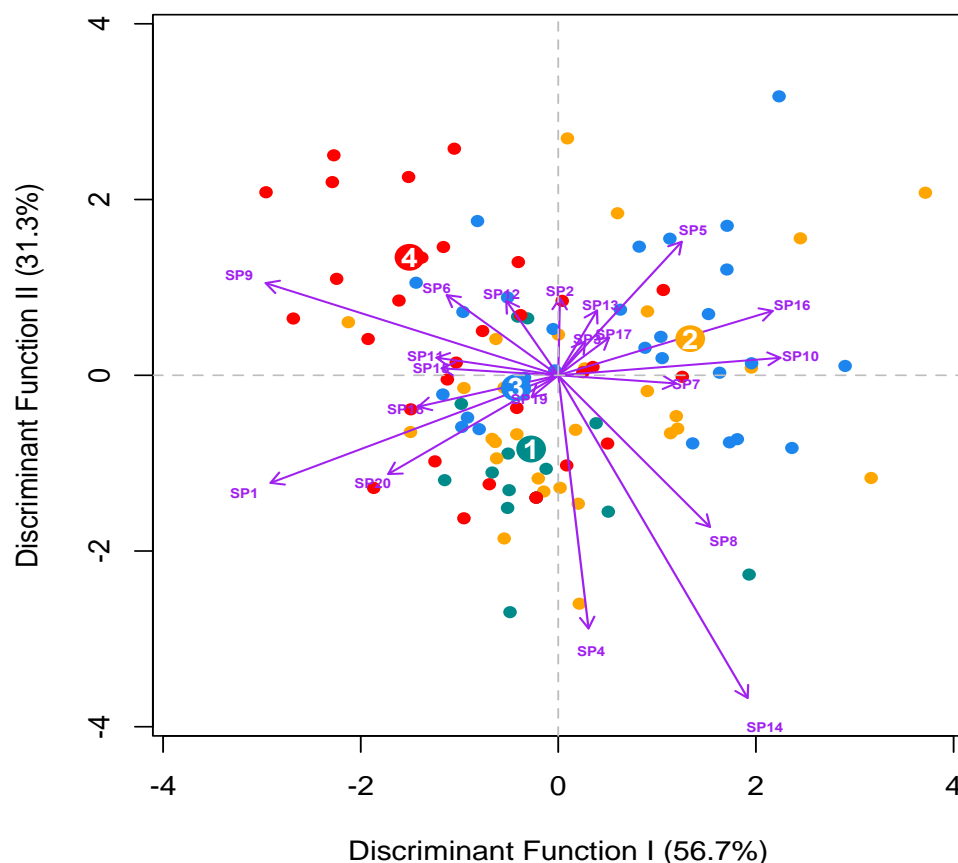
Once conducted the procedure, I found that students' test scores differed among the four teachers (one-way MANOVA, Pillai's $\Lambda = 0.972$, d.f. = 3 and 102, $P < 0.001$). The first two linear discriminant functions for my dataset of students' questionnaire scores accounted for 88.4% of relative importance (cumulative eigenvalues).

As seen in Figure 9, Discriminant Function I roughly represents a gradient from high scores in questions SP1 and SP9 to high scores in SP10, SP14 and SP16 (but low scores in SP1 and SP9). In this regard, students from Teacher 4, Grace, whose low scores in DF I tended to separate from students from Teacher 2, Mark, who obtained high scores in DF I, and tended to separate along this gradient.

Discriminant Function II represents a roughly gradient from high scores in questions SP4, SP8 and SP14 to high scores in the rest of the questions, and where the contribution to the rest of the questions to DF II is similar. Teacher Lee and Teacher Grace tended to differ along DF II.

Discriminant Function III contributes only 12.0% to explain the among-teacher variation and can be neglected.

Figure 4. Linear Discriminant Function Analysis



This analysis of the linear discriminant function showed the differences in the students' questionnaire scores among the four teachers (labeled 1 Lee, 2 Mark, 3 Morgan, and 4 Grace).

Chapter 4 Evidence of Teaching Presence

The aim of this chapter is to present the online and classroom data which gives insight into teaching presence in blended learning. The data is presented thematically (see 3.5.1) and integrates both quantitative and qualitative data to better inform the findings. The research questions will be answered in chapter five.

This chapter is organised into six sections. The first section examines the concept of teaching presence in detail (Instructional Design and Organisation; Facilitating Discourse, and Direct Instruction) (see 2.3.3). The second section looks at learner data and their attitudes and experiences with blended learning while the third section examines the teachers' perspectives on their role in blended learning. The fourth section looks at potential disciplinary differences in teaching presence. The final section summarises the results presented in this chapter and reflects on how teaching presence and attitudes to blended learning in this context have evolved over the data collection period.

The findings reflected some expected outcomes especially in the teachers' classroom behaviours (actions, attitudes that facilitate or establish closeness and immediacy toward students). However, some unexpected topics emerged in the results from the data, which are not part of any of the categories of teaching presence from the CoI (instructional design and organization, facilitating discourse and direct instruction). These emergent topics and the answers for the research questions are presented and discussed in the next chapter.

4.1 Evidence of Teaching Presence according to the lens of the Community of Inquiry

The teaching presence subcategories analysed in this section describe the actions, attitudes and behaviours observed from teachers and learners. The analysis is based on the experiences of this group of participants in teaching and learning on blended learning environments during this longitudinal study. This descriptive analysis as explained in the methodology section (see 3.5) is supported by interview data and helps to indicate the degree of teacher involvement and closeness to learners both online and face-to-face.

The results of this section were analysed according to the three categories and subcategories of the Community of Inquiry model for the construct of Teaching Presence (see 3.5.1). These

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subcategories are reported in the arrangement established by Garrison, Anderson, & Archer (2000 p. 16) (see 2.3.3.B).

As described in Chapter 3, various sources of data were utilised throughout this study (see Table 5 in 3.3). The interview questions were planned according to the categories and subcategories of the teaching presence component (see Table 3 in 2.3.3.B) to encourage the participants to provide a comprehensive and clear explanation of various points of their behaviours and answers given in the pre and post questionnaires. Another strategy used is triangulation of data. The purpose of employing triangulation of data helped to build a deeper understanding of the key events found on the results to build an account of the teaching presence behaviours. Throughout section 4.1, the researcher presents a detailed assembling of empirical evidence in support of the expression of teaching presence in its three categories. In addition, it examines the learners' perceptions about the behaviours performed by their teachers in the online and classroom environments. This section present the student data first to set the context.

4.1.1 Instructional Design and Organisation

Instructional design and organisation (see 2.3.3.1) is the first teaching presence responsibility that the teacher performs; this is, design the blended course and organise its content (establishing curriculum content, learning activities and timelines) in relationship to the intended learning outcomes. As the data below shows, in this first category of the Col, learners reported strong awareness of their teachers' behaviours (actions, attitudes that facilitate or establish closeness and immediacy toward students) during their blended learning course, both face-to-face and online.

Learners stated in writing that they considered their blended learning courses useful for their learning (pre questionnaire/post questionnaire); however, in interviews and focus groups they expressed rather different thoughts around their blended learning courses and the data presented here tries to reconcile these seemingly contradictory opinions (see 3.5.1).

It was found in the pre questionnaire that 75% of learners (86 out of the 114 participants) expressed the idea that they enjoy blended learner courses. Lee's International Commerce learners and Mark's Software Engineering learners were the ones that had the most positive comments around blended learning courses. Although, Mark's learners claimed that both aspects of blended environments are good, which no other learners did. Lee's learner, L-10, for instance, finds extra benefits in blended learning. He considers blended learning a means to learn more easily and more effectively:

“Los cursos blended son buenos porque te ayudan en muchas cosas. Una de ellas es a aprender mejor y más rápido” “Blended learning courses are good, as they help you in many things. One of them is to learn better and faster” (PreLQ_IC_Lee translated).

Likewise L-10, Lee’s L-17 also supports the idea that blended learning provides better learning opportunities:

“Es útil para aprender mejor” “It is useful to learn better” (PreLQ_IC_Lee translated).

Mark’s Software Engineering learners, L-24 and L-25, believe that blended learning provides them not only with new learning opportunities, but they also believe that it enhances a more traditional education:

“La verdad es que las dos formas son muy buenas para repasar el trabajo hecho” “The truth of the two ways are very good to review the work done” (PreLQ_SE_Mark translated).

“Creo que es bueno; la educación en línea y la educación tradicional se complementan bien” “I think it’s good; this online and traditional education complements well” (PreLQ_SE_Mark translated).

One of the most complete definitions of how blended learning works was given by Mark’s learner, L-26, since he considers that both environments complement each other in blended learning. He actually used the word “complement” as demonstrated in the quotations above and below:

“Creo que la enseñanza en línea se complementa por la enseñanza tradicional, así que es bueno que se implemente de esta forma” “I think that online teaching is complemented by traditional teaching, so it’s good to be implemented like this” (PreLQ_SE_Mark translated).

Later, in the first interview conducted with participant-learners from Software Engineering, L-26 was asked how he reached such a comprehensive understanding of the operation of blended learning, and he answered that he was used to blended learning in high school, and that he has always liked it:

“Yo estudié la preparatoria utilizando el aprendizaje blended con una plataforma diferente. Nuestros maestros subían ejercicios extra, videos y lecturas para que las hiciéramos desde nuestras casas como tarea. Un maestro nos explicó cómo trabajar con el aprendizaje blended” “I studied high school using blended learning with a different platform. Our teachers uploaded extra exercises, videos and readings to be reviewed from our houses as homework. A teacher explained us how to work with blended learning.” (LI_SE_Mark translated).

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Also Mark's learner L-31, finds in blended learning a connection with her future practice:

"Siento que tomar este tipo de educación nos ayuda mucho pues como ingenieros en software tendremos que pasar largas horas frente a la PC" "I feel that taking this type of education helps us too much since as a Software Engineer we will have to spend long hours in front of the PC" (LI_SE_Mark translated).

These comments from Mark's Software Engineering learners lead to believe that there is a disciplinary difference in the perception of blended learning. It was discovered that this positive perception is related to other factors presented ahead in this chapter (see 4.1).

In contrast, Morgan's and Grace's English Language Teaching learners gave blended learning the lowest scores in the pre questionnaire. Grace's learner, L-91, commented that he needs more classroom hours to solve the doubts he has when he does online homework:

"I feel more satisfied and motivated to have face-to-face classes, to have the hours that we need in class. On the other hand, I don't like online courses, because I get too many questions in homework, and my teachers don't answer the messages I send with my questions" (PreLQ_ELT_Grace).

The situation L-91 portrayed in her quote was explored during the first two observations in Grace's and Morgan's classes. This learner described the lack of continuity between both environments, because Grace did not mention at all any of the online content related to that day's lesson, despite the fact it was indicated in the learning sequence. Her teachers seemed to be unaware of the impact that their opinions have on the perception of blended learning in their learners. Morgan and Grace believe that blended learning is not a suitable approach for training future English teachers. They believe the programme should be delivered completely face-to-face. During the first observation in Morgan's class when he was reading an article, he complained about the effects of the lack of face-to-face hours in the learning of his students:

"This subject should have less online hours and more classroom hours...Today's content is a lot and we are not going to finish reading the article today. I don't know how you would do your weekly observation" (SO_Morgan_ELT).

Morgan feels that the subject Observation Workshop in Teaching Practice, needs more face-to-face hours because he believes that learners can only achieve the competencies of this subject during classroom time and under the guidance of the teacher. Morgan started his first interview

reinforcing his attitude against blended learning for the English Language Teaching Programme. He said the approach is suitable for other kinds of programmes, which are more theoretical but not for ELT. He also mentioned that for the next curricular revision, the ELT Department must give the administration the evidence needed to go back to only face-to-face classes. One piece of evidence is that “blended learning only works for the very small amount of learners that are high achievers” (TI_Morgan_ELT). However, something else happened during that session that I was observing that made Morgan upset with his learners. They had not read the chapter that was assigned as online homework and he couldn't continue with the class as scheduled. He lectured his learners about the consequences of getting behind in the class programme through losing face-to-face classes because they did not do their online work.

Another quote from Grace's learners, L-109, also shows the belief that the ELT programme should be face-to-face only:

“In my opinion I don't like the blended learning. I prefer face-to-face course I think it is more interesting for my major” (PreLQ_ELT_Grace).

Learners like L-109 began their major when it was delivered face-to-face only, but they fell behind and needed to take some subjects under the new blended learning approach. Another comment from L-90 in the first focus group conducted:

“Before the platform we were used to come to class for a full day. My life is still as if I had a full schedule at school. I miss coming to school!” (Fg_ELT_Grace).

From personal knowledge, I am aware that parents had complained to the university about the low number of hours that their children were expected to come to class. From then on, parents were invited to join the brief information sessions about the blended delivery modality of the university.

Later, in the last interview, L-106 said:

“I am not happy with blended learning. I just got used to it” (PostQ_ELT_Grace), and she added,

“If you want to study, you will study whether it is face-to-face or online” (IL_ELT_Grace).

L-106 is a high achiever learner for whom the modality was not enjoyable but it did not present a barrier to continue with her high standards.

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In regards to the face-to-face component of the blended course, participant-learners feel that it is well-organised and well-designed. In the first round of focus groups with learners, their comments favoured this aspect of their face-to-face courses. However, some of Mark's learners have a more complete understanding of the blended approach, and they do not speak of one environment or the other, they speak of blended learning courses. For example, L-27 believes that his blended courses are made up of two environments that merge into one, and both are well-organised and well-designed to be able to complement each other:

“El aprendizaje blended es alternar entre los ambientes de clase y de la plataforma dependiendo del contenido a aprender” “Blended learning is to alternate between class and the platform environment depending on the content to learn” (Fg_SI_Mark translated).

For the other three groups of participant-learners, the view of the face-to-face- component is different. They see blended learning as the union of two separate courses, the face-to-face and the online. For these learners the organisation and the design of the face-to-face course is stronger than the online, because they can follow the topics and activities of the course from the learning sequence. Lee's learner L-16 in the second interview shared his thoughts:

“Sigo el curso presencial de la secuencia didáctica y eso me brinda confianza en lo que estoy aprendiendo” “I follow the face-to-face course from the learning sequence and that gives me confidence in what I am learning” (LI_IC_Lee translated).

Grace's learner L-88 gave her reason that was shared by all the other ELT learners in the room. They nodded when she said:

“I know what topic comes next and the activities, because I can read them on the learning sequence. I cannot do this on the platform because my teacher opens the activities one by one, so I don't know what comes next” (LI_Grace_ELt).

She continued:

“I can organise my time and do the activities on time. I can't know what I have to do on the platform, how much time I will need, until the teacher opens the activity” (LI_Grace_ELt).

For the other component of blended learning, the online course, learners in the post questionnaire expressed the idea that online courses are well-organised and easy to navigate. This perception was shared by 61% of the learners (70 learners out of 114). An International

Commerce learner, Lee's learner L-9, gave an account of the impact of the organisation of the course, and expressed her frustration when both environments are loaded with homework; however, she also mentioned the ability of his teacher to maintain the instructional quality of the blended course:

“Algunas veces tenemos tarea en la plataforma y en la clase presencial para entregarse el mismo día y eso es un poco estresante. Lo bueno es que la mayoría termina a tiempo porque nuestro maestro responde nuestras preguntas en la plataforma, y nos ayuda en la clase también” *“Sometimes we have homework on the platform and face-to-face to be turned in the same day and that is a bit overwhelming. The good thing is that the majority finishes on time because our teacher answers our questions on the platform, and he helps us in the classroom too”* (PreLQ_IC_Lee translated).

On the contrary, for this other English language learner of Grace's, the organization of the course is interfering with his learning since he feels that its elements are not coordinated, and they are not helping him to improve connections between the online and the face-to-face environments:

“Teachers sometimes are the ones who don't get to manage / organise the course” (PreLQ_ELT_Grace).

Grace's learners believed that she lacked organisation in her courses since she opened some activities and then she closed them without telling her learners the reason. During the first round of interviews with teachers, it was found that the experience in the process of design and organisation is different since the university provides a core course each semester to the teachers (see 1.3.1) and they have the liberty to reuse the core course as it is or redesign it. From the interviews and observations, evidence was gathered to describe the level of involvement and commitment each of the participant-teachers has in regards to the design and organisation of their blended courses. From one aspect to the other, teacher Lee seemed to be the most involved and committed to the redesign of his core courses:

“Me gusta actualizar la información del curso cada vez que imparto la materia. Le dedico alrededor de cuatro semanas al rediseño del curso: actividades, videos, exámenes. Cambio casi todos los recursos y materiales” *“I like to update the information of the course every time that I teach the subject. I dedicate about four weeks to the redesign of the course: activities, videos, exams. I change almost all the resources and materials”* (TI_IC_Lee translated).

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Lee, as the other teachers, adheres to the regulations of the university, and he redesigns the materials, activities and resources, without changing the learning objectives of the course. From the teacher-learner interactions observed in his classes, his redesign knowledge builds a learning context suitable to blend both environments. For example, he brings to his face-to-face class aspects of online tasks to link the learning materials of both environments, as in his following quote:

“Leí varias veces en el foro de discusión este mismo concepto; me alegro que lo hayas entendido porque es lo que vamos a aplicar hoy en clase” “I read several times on the discussion board this same concept; I am glad you understood it because it is what we are going to apply today in class” (SO_Lee_IC translated).

while L-3 replied: *“¿Puedo utilizar el concepto de alguien más? El que mejor entendamos” “Can I use someone else’s concept? The one that we better understand?” (SO_L1_Lee translated).*

On the other hand, Grace seemed to be the teacher that completely reused the core course without redesigning it, changing only the deadline of the online activities. From interview one, Grace claimed that she felt too weak in the design and organisation of her blended courses, and that the university needed to strengthen teacher education courses in this area. Besides, she argues that the poor Internet connection at the university harms her ability to work online. She said:

“I do not feel in complete control; this semester we haven’t had good connectivity. The poor Internet connection doesn’t allow me to work on the platform. I feel I work almost in a traditional way. I don’t have time to change the activities on the platform, that is why I close the activities that I know my students won’t understand” (TI_Grace_EL1).

Grace’s learner L-111 during the first focus group shared a different reason. She believes that face-to-face courses are well-organised and well- designed because the content is reliable unlike the online course content. She said:

“Blended learning would be better if platform is backed up with trust-worthy sources. I don’t know what is the material on the platform; sometimes it is just a Word document without references. Other times, the resource reads “Manual of the teacher”, but there isn’t any, and my teacher closes the activity” (LI_Grace_EL1).

These quotes are related to the way Grace administers her online courses. According to learner L-88, her teacher closes the activities because they are incomplete and not relevant to her learning experience. Grace has a different reason that she expressed in an informal talk, she said she feels more in control of the online course if she opens one activity at a time:

“I only open the activity my students have to do, because most of the time, I receive my courses very late, when the semester has already begun, and I don’t have the time to check their content” (TI_Grace_ELТ).

During the first interview and later informal talks, Grace said that she closed the activities that she considered would bring trouble to her learners rather than a learning experience. She closed activities with poor instructions, with empty links or which were too difficult and long. As Grace said in the following quote, the redesign of the learning material online was not an option; she closed the activities instead:

“Redesigning is time consuming, and I can’t afford it with all the load of work I have” (TI_ELТ_Grace).

However, during the last interview in the study, she mentioned she needed to start using the online course more due to an incident with her learners. Some of them wrote comments on her teaching evaluation form expressing that they felt unsatisfied with her use of the ICT. She said that closing the activities of the course caused a misunderstanding that impacted on her teacher evaluation negatively.

Lee and Morgan work differently. It was observed that they open all the learning activities as soon as they receive the access codes for their online courses. Both of them are full time teachers and they knew before the beginning of the semester which courses they were going to be teaching. Lee has an extra advantage over the other three teachers, in that he designed most of the core courses he teaches; and every semester he freshens up his courses, adding, changing or deleting learning material based on his previous teaching experiences.

Grace and Mark are part time teachers, and they both needed to wait until the beginning of the semester for their courses to be assigned. For Mark, as he said in an informal conversation, the redesigning of the core course is a common practice that he mentioned was not to be problematic for him. Mark works at another university where he also uses a blended learning approach; and he said he is used to designing the online environment of his courses.

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From the observations made, results indicate that the mix of in-class activities with web-based activities from the design phase, promotes the integration of the blended course. This is, the teacher and the learner are able to “find each other” in both environments. The following quotes collected from interviews and focus groups with ELT learners illustrate the “find each other” need in blended courses. L-96 said:

“I feel that I have two different teachers, the one that I see in class and the one that orders me to do the activities on the platform. Activities that I do not understand how to do”
(LI_Grace_ELT).

Another quote from L-110:

“I do not see the connection between my morning classes and the activities on the platform”
(Fg_EL_T_Grace).

L-89 expressed:

“If I ask my teacher about the activities on the platform, most of the time she doesn’t know about them” (LI_EL_T_Grace).

Learners were asked if they could perceive when the online courses were not designed by the same teacher that delivers it. This is what L-92 expressed:

“Teachers handle every day’s words, its Learning handle more formal language or maybe it is Google’s exact words, but they are different. There is a lot of work to do on the platform, that is why I believe that the work online is developed by someone else. You notice another way of teaching in both environments. It is like working with two persons at the same time”
(Fg_EL_T_Grace)

L-70 said:

“I think that if the morning teacher did the course on the platform, it would be better”
(FG_EL_T_Morgan).

Learners perceived two different courses instead of perceiving the blends of both environments. From the evidence collected it seems that the blends are not enabled, and learners are not benefitting from the extra flexibility that a learning environment attempts to provide with additional resources and supplementary materials. Learners did not capture the integration of online instruction with face-to-face instruction in a planned and pedagogically organised manner. They felt the online activities are a replacement of the class hours.

On the other hand, ELT teachers expressed the idea that blended courses should have a completely different arrangement of hours from the one that is currently held at the targeted university. Teachers felt a “trade-off” of face-to-face time with online work, and the same perception was held by ELT learners. In addition, they believed these missing face-to-face hours made the program weaker, since learners need their teachers to help them to develop their language competence and to model useful behaviours for their future English teaching practice.

Despite the fact that in the post questionnaire 80% of learners (91 learners out of 114) agreed/strongly agreed that their teachers clearly communicated important information regarding the course topics, goals, dates, and instructions of the online activities, learners were not able to become fully engaged. Learners did not seem to perceive the integration of face-to-face verbal communication and online text-based exchanges, and the match with learning tasks. According to all the observations, Grace, Morgan, Mark and Lee addressed course topics, goals, dates, and instructions in the classroom, but only Lee addressed them online. Grace wrote on her journal:

“I don’t feel that I can encourage my students through its Learning. If I write on the online bulletin board, nobody answers my messages, and I am not sure if they read them. I don’t know how to engage online dialogue with my students. On the contrary, in the classroom, I see my students’ faces and I know for sure if they are understanding my messages” (TJ_ELT_Grace)”.

Grace, by the end of the study expressed the idea that she was searching for the blend of environments that best worked for her and for her learners. In her last interview, she said she was figuring out how to integrate the strengths of both environments in an appropriate and sustained manner for her teaching style and for her learners.

Unlike the International Commerce learners, the Software Engineering, and English learners agreed that their teachers handle things better in the classroom than online. Specifically, they commented about the inconsistency of the online course contents with the face-to-face content, and the absence of a deadline pressure from their teachers online:

“I need my teacher to remind me about deadlines. I know the platform sends reminders, but it is not the same” (LI_ELT_Morgan).

These issues commented on by learners illustrate how important it is for their teachers not only to get a balance in their teaching presence so they can upgrade their teaching knowledge and skills online and face-to-face; but also to reflect about their past and future practice, for example the design of effective content and tasks to stimulate the deep processing of ideas. Blended learning appears to have enabled Lee to transform his practice and grow his awareness of the use

of ICT to integrate technology into the educational experience of his learners.

Lee wrote in his journal:

“Depende de la intención del profesor y de su competencia tecnológica cuánto combina las clases con el trabajo en la plataforma” “It depends on the teacher’s intention and on his technological competence how much he combines classes with the work on the platform”
(TJ_Lee_IC translated).

The ideas expressed in interviews or informal talks with the participant-teachers help to understand their views and behaviours in terms of the design and organisation of blended learning courses. The integration of the online and the face-to-face components in blended learning, as Lee said, depends a great deal on the design, or redesign, of the course. For example, technical issues were evidently a barrier for Grace to fully use her online courses. At the beginning of this study, she neglected the redesign of the core courses; but as she gained confidence and practice in using the new approach, she took further steps as she stated later in her journal:

“My knowledge of the platform and of technology were poor but with practice they have improved a lot. I have opened discussion boards myself; and when I have a doubt about the use of the platform, I ask my colleagues” (TJ_Grace_ELt).

The following sub-sections relate to are the five subcategories integrated within the Instructional Design and Organization component, according to the Col. Quotes from learners and teachers give a detailed account of teachers’ behaviours in these subcategories.

4.1.1.1 Setting the curriculum

This subcategory is related to communication between teachers and learners; for example, building curriculum materials, important course goals, outcomes of the course, topics and activities to be carried out, rubrics, and what the teachers expect to get from their learners.

The first observations carried out by the researcher demonstrated that teachers did care about communicating the course goals to their learners by reading together the learning sequence (see Appendix A) of the course. Learners expect this to happen and they know it is important since it is one of the items which they evaluate in the teachers evaluation form. For Morgan’s learner L-66, revising the course document with his teacher demonstrates Morgan’s willingness to support task completion from day one of their blended course:

“The teacher tells us what he wants to see in our work, the way that we have to upload papers and the way we need to turn them in. He even gave us the rubric of the final project” (LI_ELT_Morgan)”.

For Morgan’s learner L-68, this first sessions established a sense of connectedness with her teacher even though she was told how strict Morgan was:

“I found a warm welcome from my teacher, telling me “if you need anything let us know”. My friends from seventh semester told me he is tough if you don’t work. I liked him” (LI_ELT_Morgan).

Lee’s learners also felt the support of their teacher in the first classes of the semester:

“Lo que me gusta es que casi todos los profesores explican con detalle la tarea para que no tengamos problemas” “What I like is that almost every teacher explains with detail the homework so we don’t have problems” (LI_IC_Lee translated).

From the teachers’ perspective, the presentation of the course documents and goals have more implications than just to inform. As Grace expressed, it is very important that learners remember that their teacher explained the learning sequence to them or they will receive a poor evaluation on this item:

“We have to be careful, sometimes learners are cruel and are not conscious of the power they have when they evaluate their teachers. Badly evaluated teachers are not hired the next semester” (TI_ELT_Grace).

The teachers reported in their three interviews that their classroom sessions were very useful in helping learners to solve their problems, and to monitor their progress through task completion. Mark says in his first interview:

“I do use the platform for teaching but I am one of the teachers that likes to explain all tasks in class even the ones marked in the learning sequence as online tasks. There are certain topics that I refuse to review only online and I explain them in class” (TI_SE_Mark).

Mark believes that there are topics that should be revised exclusively face-to-face, especially if the online material is not strong enough. He said he knows his learners and they are not going to search for their own online resources to help them understand difficult topics, or complex activities. He added:

“Students hardly work alone online. Sometimes I have opened the online course in the classroom to teach them how to resolve the exercise, but I would rather spend class time

explaining online activities than trusting they will do them alone. They get behind” (TI_SE_Mark).

Mark was asked if he has issues with online homework, and he said that his learners complete all the activities not in the most meaningful way but they always finish them. He commented that he grades homework for extra credit, and he tries to give some feedback to each of his learners to encourage them to work online. Lee has a different strategy for successful online homework completion. He briefly explains the homework in class, how it should be completed and how it connects to the next topic. Morgan and Grace did not mention that they have a specific strategy to make their learners work online; on the contrary, they mentioned they are not very successful in engaging their learners to complete online homework.

Mark’s learners were asked if they feel they learn online, and this is what learner L-28 answered:

“Creo que sí porque pones en práctica toda la teoría. Creo que la plataforma enseña, porque a veces los profesores piden más de lo que suben a la plataforma y luego tienes que buscar por ti mismo; más material del que revisaste en clase” “I think so because you put the whole theory into practice. I believe that the platform teaches, because sometimes teachers ask for more than what they upload to the platform and then you have to search for yourself; more material than what you reviewed in class (Fg_SE_Mark translated)”.

Interviews revealed that not only Mark but the other three participant-teachers all use face-to-face time to explain online tasks. Morgan and Grace, consider it necessary to model in the classroom sessions what a teacher does in the classroom; they believe that the online environment is not suitable for doing that. They claimed that they are building in their ELT learners not only knowledge about teaching, but also improving their learners’ language competence. Morgan said in his first interview:

“I hope that in the next curricular revision, the authorities realise that ELT requires more face-to-face hours and just a few online. There are aspects of our job that can’t be explained or learned through the platform” (TI_ELT_Morgan).

Morgan expressed this same idea in his journal,

“I have to provide feedback on the way my students are using the target language. I also need to check my students’ progress in the use of the language” (TJ_Morgan_ELT).

Grace commented why, despite the fact that some of the content in the learning sequence is marked as an online task, she explains what is needed in the classroom instead. Her reasoning is again related to the design and delivery of the courses (see 4.1.1) because she teaches courses she did not design. She mentioned the following in her first interview:

“The topics and the tasks are sometimes too broad, and the instructions too short, so I either explain them in class or I opt to close the task” (TI_ELT_Grace).

Lee also used class time to explain online tasks. However, he waited for his learners to ask for help. And he solved issues in a very particular way. During the second observation, he told his learners:

“Algunos de ustedes me enviaron mensajes a través de la plataforma expresando sus dudas sobre la tarea en línea. Tendremos una clase extra el próximo viernes para dudas, y espero verlos allí” “Some of you sent me messages through the platform stating your doubts about the online homework. We will have an extra class next Friday for doubts, and I hope to see you there” (SO_IC_Lee translated).

And his learners attended the extra class.

Lee said that it is important to stick to the learning sequence, and to encourage learners to find their own means to do their homework. He continued by saying:

“Siempre les ayudo, pero después de que veo que lo han intentado. Necesitamos ayudarlos a desarrollar sus habilidades de autoaprendizaje. Las instrucciones en la plataforma son muy claras, pero simplemente no quieren hacer mucho esfuerzo” “I always help them, but after I see that they have tried. We need to help them develop their self-learning skills. The instructions on the platform are very clear, but they just don’t want to expend much effort” (TI_IC_Lee translated).

Results from interviews indicate that teachers and learners tend to consider a face-to-face environment the most suitable for establishing interaction and closeness, for developing critical thinking and higher-order thinking skills (see 2.3.3.B). According to evidence, the design of the blended courses appeared not to be meeting the needs of teachers and learners. They find the face-to-face environment effective, but not the online environment, which is not used to its full capacity, as Lee mentioned in an informal conversation. In addition, teachers and learners showed different perceptions of satisfaction in the online environment. For learners, satisfaction had to do with the closeness of their teacher (see 2.3.3.A). For teachers, satisfaction had to do with the effective content and the learning materials of the course.

4.1.1.2 Designing methods

This subcategory is related to delivering clear instructions to completing the learning activities successfully and to providing clear explanations of how to participate in the course assignments successfully, posting personal insights or mini-lectures. Before the course begins, the foundation

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of teaching presence is grounded on the course design and organisation. The evidence for this subcategory came from class observations and document analysis.

It was observed that the four participant-teachers followed the university educational model policies that establishes that teachers revise the program during the first week of classes. In these sessions, learners were advised about the general guidelines of the university academic operation and also provided with supplementary course information that outlines the classroom management, course objectives, learning outcomes and evaluation. Teachers and learners read together the course syllabus (see Appendix A) and comment upon it. Lee carried out an additional exercise, he asked his students to sign up to receive the course information online and that they agreed. Lee and his learners even agreed on the due date for the final project.

After examining the course syllabi of the four blended courses, it was observed that the instructions to perform the activities are generally clear. This is the use of the check list (see 1.3) employed by the design staff which guarantees that the document was consistent in both online and class environments, and easy to follow. The following extract is an example of how the activities are presented in the course programme:

<p>Element of competence 1: Identify the types of supervision and observation of teachers according to the research carried out by the most representative authors in the field in order to apply them in practice <u>teacher</u>.</p>	
<p>EC1 Phase I: Elements involved in the observation of teaching practice</p>	
<p>Content: Introduction to observation as a teacher's tool. Teacher. The future teacher Coach. School staff. Observation tasks</p>	
<p>EC1 F1 Actividad de aprendizaje 1: <u>Contextualization.</u></p> <p>* Introduction to the subject. Presentation of student work scheme, rules and forms of evaluation. * The student will clarify their doubts. * 1 hour in the classroom.</p>	<p>Type of activity: Classroom (X) Online () <u>Group</u> (X) Individual () Team ()</p> <p>Resources: * To carry out this activity: * The facilitator will project in a PowerPoint presentation, the most important points on the subject, the rules and types of evaluation. <u>Activity evaluation criteria:</u> The student will have to attend the class to participate in the <u>informative process</u></p> <p>Evaluación criteria: The student will have to attend the class to participate in the <u>informative process</u></p>

For example, during Morgan's introductory session, everything was explained step by step to his learners. However, when they get to the "Resources" section the teacher should open a presentation linked to the course document (see above), and given that there is no such presentation attached, the teacher delivering the course will have to create the document redesigning the activity. At least once in their courses, Grace, Lee, Morgan and Mark found

activities that were lacking the resource indicated in the document and had not prepared anything themselves (see 4.1.1).

During class observations, it was found that the four teachers deliver their face-to-face classes in a similar way. There were sections within each class in which the teacher developed their pedagogical intention, and other segments in which the learners took control asking questions or making comments as needed. First, the content of the previous class was rapidly revised, followed by the announcement of the new topic, examples from the topic, and finally, the homework to be submitted online or to be collected in the next class. Mark included another element that he said, is usual in his classes. For him, it is important that the practice is carried out in class. Before he dismisses the class, he checks each of the learning exercises. His class was Programming.

The following extracts were collected in the second observation of Lee's class:

Lee: "Buenas tardes, de acuerdo con nuestra secuencia didáctica, nuestro próximo tema es?" Lee: "Good afternoon, according to our learning sequence, our next topic is?" (SO_IC_Lee translated).

Estudiantes: "la siguiente presencial o la siguiente en línea...Tipos de Estrategias de Negocios" Learners: "the next face-to-face or the next online...Kinds of Business Strategies" (SO_IC_Lee translated).

Lee: "La siguiente presencial...Primero repasaremos la clase pasada. A ver, Lidia, por favor dinos una de las formas en las que se desarrolla una estrategia de formación" Lee: "The next face to face...First we will review last class. Let's see, Lidia please tell us one of the ways to develop a formation strategy" (SO_IC_Lee translated).

Lidia: "Considerar los tipos de estrategias disponibles" Lidia: "Considering the kinds of strategies available" (SO_IC_Lee translated).

Lee: "Bien Lidia. Subiste a la plataforma un diagrama con las cinco formas... No he revisado todos sus diagramas, pero hasta lo que he visto hicieron un excelente trabajo... por favor revisen estas definiciones y discutan con su compañero cómo este tipo de estrategias están vinculadas al tema de hoy" Lee: "Fine Lidia. You uploaded to the platform a diagram with the five ways...I haven't checked all your diagrams, but so far you did an excellent job...please check these definitions and discuss with your partner how these types of strategies are linked to today's topic" (SO_IC_Lee translated).

Estudiante: "Con nuestros compañeros de equipo?" Learner: "With our team members?" (SO_IC_Lee Translated).

Lee: "Si, y escriban sus conclusiones utilizando la rúbrica para la discusión en clase" Lee: "Yes, and write your conclusions using the rubric for class discussion" (SO_IC_Lee translated).

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As can be seen in the extract, most of the teacher's communications and ensuring interaction has to do with delivering instructions on how to carry out the learning activities. In the post-questionnaire, 79% of the learners (90 out of 114 learners) responded that their teachers delivered clear instruction on how to do the online activities. As an example of this focus, there is data relating to the delivery of instructions that was found in both classroom and offline environments. The following extract is from a classroom observation while Grace was setting out the final presentations of the semester:

"I am going to assign the topics once you have organised yourselves into teams of four people" (SO_ELT_Grace).

The instructions to perform the activity seemed clear to her learners since there were no further questions. However, since the online courses are already designed for the teachers in accordance to institutional guidelines (see 1.3.1), both learners and teachers commented that it is sometimes difficult to interpret what the activity entails and difficult to follow the instructions. As mentioned in the previous section, the first time Grace was interviewed she said that whenever she finds the instructions of an online activity confusing, she just closed the activity and made it invisible for her learners. As she explained:

"Since I didn't design the online course that I teach, it is sometimes impossible to understand how the activity should be done. So, I avoid problems with my students and just close the activities and make them invisible" (TI_ELT_Grace).

She also said that she does not redesign her courses; she uses other strategies instead when the online activities are not clear. Besides closing activities, she also uses face-to-face time to explain online assignments, although she is aware is not a meaningful way of using face-to-face class time:

"I know that I should not use class time to explain online activities; but some of the instructions are not clear or the resources are lacking. I would rather explain the activity in class than give zeros to my students" (TI_ELT_Grace).

One of her learners' comment was related to Grace's classroom behaviours:

"My teacher explains the activities better in the classroom. Some activities on the platform lack instructions and we do them as well as we can" (Fg_ELT_Grace).

Morgan capitalises on previous experiences in order to better support his learners in certain activities which he has discovered beforehand are problematic. The following extract refers to this strategy:

“When I have taught the course previously it is easier. I already know which online and classroom activities will need extra support, and I give my students tips to complete them” (TI_ELT_Morgan).

He added:

“I don’t know why we are still struggling with badly-designed courses. I have made significant changes to some core courses activities that I didn’t designed but that I have taught. It has been wasted time because the staff that administers its Learning don’t keep the changes even if we send the information to update the course in the format they indicate. That is why I would rather warn my students which activities they will have problems with and tell them how to solve them. Sometimes I don’t have the time to redesign the activity. It will be better if every teacher designs the course they are going to teach...I know, I know it is impossible, there are teachers that don’t know how to work on the platform, how could they design a course” (TI_ELT_Morgan).

Unlike Grace and Morgan, Lee said in his first interview that he has always redesigned his courses before the beginning of the semester so his learners can take advantage of all the activities of the online course. This is what he commented:

“Siempre veo la necesidad de rediseñar mis cursos. Rediseño no sólo las instrucciones de las actividades, sino que también veo la necesidad de ajustar las actividades y los contenidos.” “I always see the need for redesigning my courses. I redesign not only the instructions of the activities, but also I see the need for adjusting the activities and the contents as well” (TI_IC_Lee translated).

Lee followed the strategy of redesigning the entire course before the beginning of the semester. He explained what he does:

Firstly, he defines the course objectives and then he follows this by working on the adjustment of the activities, assignments, resources and assessment. For him the course objectives determine the delivery modality of each content item, either face-to-face or online, and the pedagogical design he uses to link all the activities in both environments. Another aspect that he mentioned several times is that he redesigns the activities and resources of the course depending on his learners’ abilities and needs. This is what he commented:

“He impartido las asignaturas varias veces, por lo que sé adaptar el contenido de las actividades del curso en línea a las necesidades de mis alumnos. Cada cohorte es diferente.” “I have taught the subjects several times, so I know how to adapt the content of

the activities of the online course to meet my learners' needs. Every cohort is different"

(TI_IC_Lee translated).

Redesigning the course from his learners' perspective may be interpreted as the commitment he makes to build a successful blended learning experience.

The data indicates that teachers not only need strategies to support knowledge acquisition in a successful blended course, but also they need to fully understand course design components such as planning and managing the teaching stages as well as the learning processes involved in both environments, like selecting the required resources to work face-to-face or online. Moreover, results suggest that most critically, it is important to be able to integrate the online and the face-to-face learning experiences. As a result, the regular redesign (and ownership) of a course is one of the emergent topics the researcher found particularly relevant for establishing teaching presence in blended learning environments. This matter will be discussed in the next chapter (see 5.1.1.).

4.1.1.3 Establishing time parameters

The data in this subcategory is extracted from the observations, interviews and focus groups. This subcategory is related to teachers communicating due dates and accurate course schedules, timelines for group activities and project work. Except for clarifying misunderstandings, teachers reported that establishing parameters for learning activities is the only teacher activity that is not time-consuming either online or face-to-face. As Lee, said informal conversation almost at the end of this study:

"Es muy conveniente marcar los tiempos de entrega de las actividades presenciales y en línea; la plataforma está sincronizada para gestionarlos; y también envía recordatorios." "It is very convenient to mark the delivery times of face-to-face and online activities; the platform is synchronized to manage them; and it also sends reminders" (TI_IC_Lee translated).

Related to the idea of bridging face-to-face and online environments in order to have a successful blended course, Lee said that he ensured that he planned appropriately and was clear with his learners about the assignments and assessments and when and how they have to be engaged in the course activities. Lee worked in both environments to ensure there was good integration of both components of the blended course. On the other hand, Mark's learners, L-24 and L-55 showed how the not managing this integration can cause issues for learners, as is captured in the following extracts from the focus groups organised in the middle of their semester:

“No es que no nos guste la plataforma sino que nunca la hemos utilizado correctamente. La plataforma está bien, pero te dan tiempo para subir las tareas y a veces tienes algo que hacer en ese momento y pasa que te olvidas de subirlo y eso afecta tus calificaciones.” *“It is not that we do not like the platform but rather that we have never used it properly. The platform is fine, but they give you time to upload the tasks and sometimes you have something to do at that time and it happens you forget to upload it and that affects your grades”* (Fg_SE_Mark translated).

Another learner in the same focus group:

“Hay un profesor que cierra la plataforma a las 6 de la tarde y salimos de su clase a las 5 de la tarde. No puedo hacer las correcciones a tiempo porque ando en camión; y cuando finalmente los subo, ya es demasiado tarde.” *“There is a teacher who closes the platform at 6 pm and we leave his class at 5 pm. I can’t make the corrections on time because I commute by bus; and when I finally upload them, it is too late”* (Fg_SE_Mark translated).

Mark was asked about these comments and he said that for some of his learners, working online is a completely new experience and the reason why he opens a lot of online activities during face-to-face time taking advantage of the computer equipment he has in his classroom. He also commented that his subject, Programming, is the basis for so many other subjects in the curricula and he has to make sure his learners understand and do the practice. In regards to how tight the deadlines can become for some learners, Mark said that there is not much he can do.

“Students have to organise their time as we did when we studied. Each teacher assigns homework that is important for their learning...they leave things to the last minute, I believe. Next semester I will have my teaching load earlier, so I am planning to schedule all the activities of the semester and share that calendar with my students. It is tiring to listen to their complaints” (TI_SE_Mark).

In Grace’s and Morgan’s classes, it was observed that the deadline for the final project was mentioned several times. Morgan even negotiated dates with his students after hearing their complaints about a heavy workload. Teachers rely on *its Learning* reminders for their learners to complete their assignments.

4.1.1.4 Utilising the medium effectively

This subcategory is related to interactivity and feedback, since both are key instructional strategies to keep learners engaged in blended learning environments. The interactions involve teachers, learners, materials, resources, and the advantages of using the features of an LMS. A

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successful interaction happens when both environments intertwine and culminate in accomplishing class objective. For example, in Lee's class, it was observed how he integrated activities from both environments in a face-to-face class. First, he brought to class the comments that his learners posted online on the discussion board to introduce the in-class discussion concerning the next topic. Since he gave prompt feedback online, his learners seemed to be more confident in participating during the face-to-face session. Lee commented later in an informal discussion how he has increased the participation of his learners in online and in-class discussions:

"Se necesita tiempo para comprender cómo reaccionan los estudiantes en línea. Mi experiencia con Moodle me ayudó mucho a trabajar con su aprendizaje (ver 1.3.1). Sé cómo hacer que mis alumnos hablen en clase, pero no es lo mismo conseguir que participen en la plataforma. A veces, el tema es la motivación para participar, otras veces la motivación es la calificación. Pero lo que realmente ha sido difícil es hacer que aporten algo más que su opinión. Estoy trabajando en eso" "It takes time to understand how students react online. My experience with Moodle helped me a lot to work with its Learning (see 1.3.1). I know how to make my students talk in the class, but it is not the same to get them to participate on the platform. Sometimes, the topic is the motivation to participate, other times the motivation is the grade. But what has really been difficult is to make them contribute with something more than just their opinion. I am working on that" (TI_IC_Lee translated).

Mark helped his learners to enhance their online learning by using the LMS activities and resources. In class he told his learners:

"Intenta utilizar todos los recursos que vimos en la última clase, para que practiques y no los olvides. El video tiene algunas preguntas que puedes responder si lees el capítulo. Esta actividad es diferente a la que hicimos antes, pero también necesitas aprender teoría y conceptos. No olvides explorar el examen, ¿alguno de ustedes puede explicar su estructura?" "Try to use all the resources that we saw the last class, so you practice and don't forget them. The video has some questions that you can answer only if you read the chapter as well. This activity is different from what we have done before, but you also need to learn theory and concepts. Do not forget to explore the exam, can one of you will explain its structure" (SO_SE_Mark translated).

It is clear that teachers thought that each of the environments offer different strengths and they used different instructional strategies online and face-to-face. Participant teachers were asked which activities they valued most in face-to-face and online sessions. In their journal entries, the teachers identified giving advice as only a face-to-face activity, and also learners' presentations.

For the online environment, they identified activities that have to do with reading, listening and writing; problem solving exercises; and most of all, developing projects. Lee said:

“El trabajo en equipo es más fácil de organizar y calificar en línea. La plataforma hace los grupos y asigna la calificación a todos los miembros del equipo ... y solo lees un trabajo” *“Teamwork is easier to organize and to grade online. The platform makes the groups and assigns the grade to all the team members...and you only read one paper”*
(TJ_IC_Lee translated).

Morgan shared that some of the features of *its Learning* that he uses are related to grading easily. Grace checks the assignments sent by her learners on the platform and sends the default feedback messages of *Complete*. Mark writes in his journal that the online activities of his course are mostly readings, but he has occasionally posted programming tutorials to prepare the in-class programming practice.

None of the four teachers take advantage of the listening components of *its Learning* to record audio feedback instead of text feedback. The features of the LMS that they use do not seem to enhance their teaching or their learners' learning like creating a community of learning to foster reflection or collaborative work. This is discussed further in Chapter 5.

Discussions and discussion boards are also used minimally as Grace commented in her journal:

“The forums are for online work, I ask a question and they have to follow the instruction to answer on the forum” (TJ_ELT_Grace).

Lee wrote a document that guides the participation on the discussion boards. In this document, he explains the objective of discussion boards, how they are organized, and what learners are expected to do to receive full credit for their participation.

General policies were found on the online courses. These regulations are institutional course policies, and learners and teachers seemed to be familiar with them. There are just a couple of regulations, but teachers are allowed to add their own rules if they want to do so:

“For the optimal development of the course the student must meet the following policies:

- *Comply fully with the delivery of the task as in time and manner. In case of plagiarism, students will not get a passing grade in the corresponding assignment.*
- *Attend 90% of onsite sessions”*

Blended courses provide a rich medium for the development of higher-cognitive skills, the reason why research has shown that discussions are specially valued. The four participant teachers identified discussions as a face-to-face activity, but in their practice none of them really used them well in both environments. They did not realise that they use face-to-face discussions to give

clarification and for the application of knowledge and could do the same online. Research shows that online discussions are truly meaningful when teachers take advantage of the affordances of the LMS to collaborate actively building a discussion among all the group members. Online discussions are a clear example of a strong behaviour for this subcategory. In 4.1.2.1, prompting discussions and interaction, this behaviour is addressed.

In these COVID times, teachers did not see synchronous work online as an alternative to replace or cancelled face-to-face session, or more metacognitively-engaging activities such as e-mentoring, or peer review to name some. The attention was entirely given to online asynchronous activities. Technology is a fundamental component of blended learning, yet effective practices in this modality seemed to favour only one pedagogical tool. The flexibility, and the possibility of addressing varied learning styles which are affordances offered by the medium (LMS) had not been considered by the participant teachers in order to better support the diverse needs of higher education.

4.1.1.5 Establishing netiquette

This subcategory is related to expressing expectations of appropriate kinds of online behaviours. Data collected in the classroom and online showed that at the beginning of the semester all teachers introduced to their learners the document called *Secuencia Didáctica* (see Appendix A) which contains the guidelines for the blended course with other important information such as the competence to reach, course policies, and the face-to-face and online activities. Grace commented how important it is for teachers to present this document on the first day of classes:

"The presentation of this document is an item which is evaluated in the final teacher evaluation; teachers do review the document in the first sessions of the course" (TI_Grace).

Netiquette rules were not found as an expression of the concept of e-politeness. The researcher looked forward to finding them particularly among the language learners. If language learners aim to be successful in the target language, they have to be aware of the online culture that they are learning.

An ELT learner was asked about the relevance of netiquette rules for him. He commented as follows:

"I think they are not necessary, because we all know how to use a cellphone, and it is the same on the platform. For example, you don't use capital letters because it is like yelling" (LI_Mark).

In the case of ELT learners, they believed that netiquette is useful only for participating in the discussion boards. However, these rules also support correct communication with their teachers, and some learners lack the knowledge to write correct e-mails for example. There was a unique case found in the ELT program. Morgan has developed a rubric for learners that evaluates their behaviours, their attitudes and their values during the semester. This document is only used by the ELT faculty, and as mentioned by Grace, it has been of great help to count on a document that describes what behaviour is expected from learners:

“This rubric is very useful to show my students why they got a lower grade than the one they thought. If they haven’t helped other classmates, for example, they can’t get an outstanding final grade” (TI_Grace).

4.1.2 Facilitating Discourse

In this second category (see 2.3.3.2), where the main responsibilities are monitoring and managing purposeful collaboration and reflection, 68% (78 of 114 learners) of learners agreed/strongly agreed that their teacher acknowledged their participation in the course. This was the highest-scored item of the component. The rest of the items fluctuated between 62% and 64% of learners who agreed/strongly agreed with questions associated with identifying areas that were pivotal to their learning, from teachers helping learners to explore concepts in the course, to participating in productive dialogues, and to the ability of the teachers to maintain learners on task. The lowest rate was 43% (49 out of 114) of learners who agreed/strongly agreed that the quality of interaction with their teacher online was very high in the course.

The following subheadings are the six subcategories for the Facilitating Discourse category.

4.1.2.1 Drawing in participants, prompting discussion and interaction

This subcategory had 13 codes associated with learners work on the discussion boards (see 3.5.1). The data gathered in this study reflected many different perceptions and expectations about what learners and teachers should do in the online discussions. The discussion boards reviewed did not present any evidence of discussion between the teacher and the learners. Only the International Commerce discussion boards had evidence of the teacher’s participation; however, the interaction was only teacher-learner rather than interaction on both sides.

When the researcher interviewed teacher Lee about the possibility of having all the learners involved in the discussion, he commented that the platform did not have that function. The researcher then asked the technical staff how to configure the discussion board to serve that

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purpose, but despite their willingness to cooperate, they did not know how to enable the required feature, so that all the participants could see the whole thread of posts.

In the case of the ELT teachers, not engaging in discussions with their learners seem to match their beliefs since the full-time ELT teachers stated that they felt any teacher participation in the discussion forums would prevent learners from fully engaging with each other as they would feel their insight was being judged by their teachers. This is what they said in a conversation we had to this regards:

“Teacher Ramos, when he was the head of the research group, told us not to participate in the forum because we make learners uncomfortable and insecure of their answers. He said that we should only assign the task and on the due date, check for their participation. However, he didn’t mention what the pedagogical reason is or the researchers that support that behaviour.” (Grace_ELТ).

There was evidence in the data of productive discussions held in the classroom, though. The prevalent dynamic at the research site is for the learners to present the topic; then the teacher’s explanation and comments ensue followed by the classroom and online assignments. Class discussions are not usual; the closest attempts to ignite discussions were found in the ELT and International Commerce classes:

“Can anybody comment on the topic?” (Morgan_SO).

“¿Hay algún comentario adicional sobre algo importante que no se haya mencionado?”

“Are there any additional comments on something important that has not been mentioned?” (Lee_SO translated)

The researcher asked teachers directly why learners do not engage in class discussions, and they all agreed that learners attend classes unprepared, they do not read beforehand; and as a result, they lack arguments or any insightful comment to feed a discussion.

The common practice in the discussion board is for the learner to write his or her understanding about the topic and then to comment on two other previous learner commentaries. Participant learners shared their experiences in the discussion boards. I should note that none of the prompts mentioned the word “discussion”; additionally, they reflect a non-skilled handling of this online learning resource:

“Participamos cuando hay foros, participamos respondiendo a lo que se nos pide y damos nuestra opinión a otros compañeros” *“We participate when there are forums, we*

participate by answering what is asked and we give our opinion to other classmates”
(Lee_Fg translated).

ELT learners in the second focus group felt that their teachers agreed not to participate in discussion boards because they believed learners would truly express themselves if their teachers avoided taking part. Consequently, discussions between them do not take place in this program:

“Well sometimes they post forums and first they explain it in class what we need to do”
(Grace_Fg).

“They post forums about certain topics and in class they remind us we need to participate”
(Morgan_IL).

“Yes, in the face-to-face class they tell us to do them like an activity” (Grace_Fg).

Learners from the same program, ELT, commented in the last interview the following:

“They post forums about certain topics and in class they remind us we need to participate”
(Morgan_IL).

“Yes because all participate in the forums, we can give our opinions and send messages” (Morgan_IL).

“They post forums about certain topics and in class they remind us we need to participate”
(Grace_IL).

“Well sometimes they post forums and first they explain it in class” (Grace_IL).

Software Engineering learners found it difficult to even locate the discussion board on the online course:

“They do post forums and explain the instructions well, but sometimes they are in hidden places” (Mark_Fg).

Another pedagogical role for this subcategory is related to the role of the learners in the teaching process. In an interview, International Commerce learners shared their opinion in regards to their role in the teaching process agreeing that:

“Nuestro rol es participar y subir nuestras tareas. El papel de la docencia es da comentando en los foros cuando respondemos a nuestros compañeros” “Our role is to participate and to upload our assignments. The role of teaching is played by commenting on the forums when we respond to our classmates (Lee_Fg translated)”.

4.1.2.2 Identifying areas of agreement and disagreement

This was the second most referenced subcategory with four codes. According to the teaching presence construct from the Col, the teacher is the one who helps learners identify areas of

agreement and disagreement on course topics to help them learn. Learners from ELT commented the following the last time they were interviewed:

“When I work on the platform I feel confident because I see my classmates work in their own way and I can have an idea of how they think” (Morgan_IL).

“When we participate in a forum I can share my own opinion in someone else’s comment” (Morgan_IL).

“I can agree or disagree explaining my personal opinion and my point of view with everyone” (Morgan_IL).

Based on the comments collected, and on the synchronous observations made by the researcher, this presence was indeed found in the class component. On the last observation in Mark’s class, Software Engineering learners were working in teams working with algorithms, and as they could not find the right procedure, they were taking turns explaining their own ideas. ELT learners in Morgan’s class tended to raise their hand to participate when Morgan pointed out a mistake and asked for the right answer. In Grace’s class, her learners participated without raising their hand. For learners it is the teacher who identifies these areas; but in the online component, learners help other learners to identify them. It is clear that learners do not find their teachers’ guidance in discussion boards.

4.1.2.3 Encouraging, acknowledging, and reinforcing student contribution

This subcategory is related to positive acknowledgement of participatory contributions made by learners. It had three codes according to the data collected during the synchronous observations. Teachers in the classroom tended to acknowledge learner’s participation, and accuracy. For example, after a learner’s presentation the ELT teacher told the presenters:

“Thank you, I think you can do better” (Morgan_SO).

The researcher noticed that in private, after the session ended, the ELT teacher congratulated her learners in Spanish, which was more meaningful for the learner because Morgan never speaks Spanish to his learners in class. Grace also shared words of encouragement with her learners:

“Congratulations, you did very well. You see, you can do it, keep it up” (Grace_SO).

On the other hand, there was no evidence of individual positive encouragement found online for the ELT and Software Engineering learners different from the customised message given by the LMS such as “task completed”. Only the International Commerce teacher replied to each of his learners with a commentary on every document that he checked. He pointed out first the

strengths of the assignment followed by the areas that needed to be improved. Sometimes, he asked for a second submission to make sure they improved their paper with the corrections he advised.

4.1.2.4 Assessing the efficacy of the process and seeking to reach consensus/understanding

For the online component of the courses, there was no evidence of comments from any of the teachers that helped learners keep on task and learning, since no real discussions happened online (see 4.1.2.1). However, in the classroom, it was seen that the teachers do re-orient their learners to keep them on the right track as shown in this extract which took place during the second observation of Lee's class during a learner's presentation:

"Creo que la diapositiva se está desviando, ¿qué es lo que no están considerando sus compañeros [los presentadores]?" "I think that slide is getting off track, what are your peers [the presenters] not considering?" (Lee_SO translated).

Several hands were raised and Lee allowed some participations to contribute to the presentation. The researcher observed that unlike the ELT teachers, Lee did interrupt a presentation when the info presented was wrong. The ELT teachers focused the learners' attention on specific points at the end of the material presented in the classroom. Despite the stage of the class in which the participation of the teacher took place, learners wait for their teacher's direction. This pedagogical role is not expected in the online component since learners are not used to it, because it is not a common practice from teachers either. In the last interviews with ELT learners, it was evident that they perceived two environments that worked independently from each other. The following extract shows this perception:

"We do our homework on the platform and we know that our teacher will grade it without comments on the content. Sometimes I have questions to ask about the activity, but I don't ask them in class because the teacher never mentions the platform activities. One day I ask a question about a platform activity and the teacher did not know what I was talking about. I felt bad...And later I realised the teacher had erased the activity" (IL_Grace_ELТ).

4.1.2.5 Seeking to reach consensus/understanding

No evidence was collected in the online component of the course relating to the assistance and guidance of the teacher towards building understanding and consensus of course topics.

However, during a class observation, learners' contributions were used by the teacher to establish

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consensus and shared understanding. The behaviours participant teachers and learners had regarding content discussions were similar face-to-face and online.

During an International Commerce observation, it was very clear how the teacher tried to initiate a discussion:

“Lo que respondieron Itzel y Roberto es básicamente el punto clave de los objetivos del comercio exterior.” “What Itzel and Roberto answered is basically the key point of the objectives of foreign trade” (Lee_SO translated).

His learners nodded in agreement but nobody contributed to the discussion.

Since the only responses he received were answers to the questions he asked, he used them to create a shared understanding of that day’s topic, but not useful enough to carry on with a discussion. Lee was the only teacher that made frequent attempts to ignite a discussion in the classroom; however, his learners were no different from the other learners of the other three participant courses.

ELT teachers always complained about the lack of participation of their learners. Grace wrote on one of her journal entries the following extract:

“I do not ask much for students’ participation. It is very tiring to get my students to participate. I do not like the silence after my questions...I guess my students are still asleep at my 7.00 am classes” (TJ_Grace_ELТ).

Morgan several times commented the researcher the following:

“Students do not participate because they do not read and they do not know what the class is about...It is very annoying to look at their faces and realise that they are completely lost”.

In Mark’s classes, the researcher never heard him asking for his learners’ participation. In his sessions he explained the exercise, gave his learners time to finish it and then he checked each one’s work to later dismiss the class.

4.1.2.6 Setting the climate for learning

This subcategory is the intersection of social and teaching presences and refers to the teachers’ effort in encouraging the exploration of topics or course content. During the third and last round of interviews of this study, in two different interviews, two codes (see 3.5) were collected online. ELТ learners shared both thoughts and commented on how their learning has been growing as users of blended learning:

“I have noticed that we learn to work in this modality from the platform and from the teacher” (Grace_LS).

“On Its Learning I feel very confident about sharing my opinion and learning from others in this modality. I know that my classmates and teachers will respect my thoughts” (Morgan_IL).

For these learners and for most of the other participant learners, this is their first exposure to blended learning. They still lack experience so that they could develop more interactive and engaging online learning experiences. These learners often miss the opportunity not only to communicate their thoughts but also to connect and create communities of learning with their fellow learners.

Another code was collected during an observation conducted in Lee’s class. He told his learners the following in regards to participation on their discussion board:

“Siéntanse libres de expresar en el foro [foro de discusión] lo que piensan sobre el tratado económico firmado recientemente por el presidente de México, nadie juzgará su participación” “Feel free to express in the forum [discussion board] what you think about the economical treaty recently signed by the president of Mexico, nobody will judge your participation” (Lee_SO translated).

Lee was the only teacher that encouraged and offered his learners opportunities to be active participants but there were not found the conditions on the LMS to promote learner-to-learner interaction.

By the end of this study, the researcher witnessed how some behaviours were incorporated to the practice of the participant teachers (see 3.4). *Setting the climate for learning* subcategory is one of them. Grace, for example started to use the discussion boards on her online courses and she also mentioned that instead of learning how to use technology, she would like to receive training on pedagogical strategies for using technology to support her learners’ learning. She said:

“I can ask Morgan [another ELT teacher] how to use its Learning features, but I would like to receive pedagogical strategies to learn how to use technology to support my learners’ learning” (Grace_TI).

4.1.3 Direct Instruction

This last category (see 2.3.3.3) is intended to help the community of learners reach the learning outcomes by anticipating needs and providing timely information and direction. Direct Instruction

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contained the two most coded subcategories (see 3.5) in the whole construct of teaching presence, *Confirming understanding* (see Appendix G question 15 *The instructor presented content or questions that helped me to learn*) and *Injecting knowledge from diverse sources* (see Appendix G question 16 *The instructor helped to focus discussion on relevant issues in a way that helped me to learn*). This was the most highly rated behaviour in the questionnaire with 64% (73 out of 114 participants) of learners that agreed/strongly agreeing on the ability of the teacher to provide useful information from different sources that helped learners in their learning. 47% (54 out of 114 participants) of the learners agreed/strongly agreed that the teacher and their classmates helped them to revise their thinking whereas 60% (68 out of 114 participants) of the learners agreed/strongly agreed that their teachers presented content that helped them to learn, kept them focused on the important issues of discussions; and provided feedback that helped them to learn.

The following six subheadings describe the subcategories of the *Direct Instruction* component.

4.1.3.1 Confirming understanding through assessment and explanatory feedback

This subcategory collected 19 codes, more than any other subcategory of the CoI (see 3.5); and was the most mentioned by learners in the focus groups as well as in the interviews. The codes clearly indicated that learners obtain a greater occurrence of direct instruction from their teachers in the classroom. Confirming understanding, receiving feedback, presenting content and redirecting the discussion were the teachers' behaviours exhibited mostly in the face-to-face component.

During the last interview of this study, learners from the ELT program shared the following opinions when they were directly asked to compare their teacher's performance in both learning environments, the classroom and the online:

"I think it's good the face-to-face component because we can communicate with our teachers and their response is faster" (Morgan_IL).

"Just some teachers leave comments when I submit activities" (Grace_IL).

"Yes, in the classroom teachers support my learning by giving importance to the activities, revising the activities" (Grace_IL).

"In the classroom I get more attention from my teacher, I understand that they have a lot of work to do like giving online feedback" (Grace_Fg).

Learners from International Commerce shared:

“Sí a las clases presenciales porque la mayoría de las actividades se revisan en clase y sólo hay que entenderlas” “Yes to face-to-face classes because most of the activities are revised in class and we just have to understand them” (Lee_Fg translated).

“Sí, en clase nos dan su opinión, subrayan errores y nos animan a continuar” “Yes, in class they give us feedback, underline mistakes and encourage us to continue” (Lee_IL translated).

“Yes, teachers support my learning by checking my activities, revising the activities” (Morgan_IL).

Evidence collected indicates that learners highly value their teachers’ timely assessment and feedback as means of supporting their learning. Learners reported that their teachers provided them with accurate assessment and reliable feedback in the classroom but not online. Learners expressed that feedback with explanations of the reasons why the task was correct or incorrect helped them to learn and kept them interested in the subject.

4.1.3.2 Injecting knowledge from diverse sources

This subcategory is the second most mentioned with 17 codes (see 3.5). Learners recognized in their teachers their ability to assist their knowledge by providing them with information from different sources.

These are comments collected from learners of International Commerce during the last focus group:

“Creo que la plataforma sí enseña porque a veces, para completar la tarea, necesito hacer una investigación adicional” “I think that the platform does teach because sometimes for completing the task I need to do additional research” (Lee_IL translated).

“Creo que ahora aprendo más, porque hago muchas más cosas que me ayudan a aplicar la teoría en la práctica” “I think I learn more now, because I do many more things that help me apply theory into practice” (Lee_Fg translated).

Learners from the ELT program expressed themselves in the same way during the last focus group and the last interview conducted in their program:

“The platform triggers my learning a great deal” (Grace_Fg).

“I do learn because I have to search on the web for extra information” (Grace_IL).

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The behaviours exhibited in this subcategory are perceived in the online component rather than in the classroom. Learners connect this pedagogy role of their teachers with the material and resources they post online. For the participant learners, the most important role of their teachers in the online component of the course is posting the material and the activities that they will do later by themselves alongside with providing timely feedback. They do not see the online work as a space for interaction with their teachers or with other learners as will be further explained in 4.5.

4.1.3.4 Diagnosing misperceptions

For this subcategory, learners recognised that their teachers help them to revise their thinking, which eventually enhance their learning. During the last focus group conducted, the following codes were collected from the International Commerce learners. The first code has to do with online work:

“... el profesor subraya errores pero no nos da la respuesta” “...the teacher underlines errors but does not give us the answer” (Lee_Fg translated).

In the classroom, learners from International Commerce also perceived the help of their teacher; this is what one learner expressed:

“Cuando alguien dice algo mal, el maestro nos pregunta qué pensamos y luego verificamos nuestra respuesta antes de hablar” “When someone says something wrong the teacher asks us what we think and then we double check our answer before we speak” (Lee_Fg translated).

Learners from International Commerce were the only ones that recognised in their teacher behaviours attached to this subcategory.

4.1.3.5 Focusing the discussion on specific issues

Learners did not consider their teachers triggered focused and relevant discussions that assist their learning, neither in the classroom, nor online. They rather perceive the presence of their peers in this sense. Learners from ELT during the last interview shared their thoughts as shown in the following code:

“When I participate on the forum, the presence that I feel is my classmates’, I can understand their points of view in a debate” (Grace_Fg).

4.1.3.6 Responding to technical concerns

Learners did not express any thought that could relate their teachers' behaviours to this subcategory. There was no evidence collected online, and during classroom observations, only Grace told her learners at the beginning of the semester the following:

"If you cannot access the platform, the technical staff will help you" (Grace_SO).

Teachers and learners know that the LMS is managed by the technical staff at the university.

4.1.3.7 Summarising the discussion

There was no evidence collected online or in the classroom around this subcategory. As shown earlier on 4.1.2.1, discussions are not a common practice among participant teachers presumably because they do not have the knowledge or creativity to ignite them. Teachers are still lacking deep understanding of what the role of online and classroom discussions is. They know discussions exist, however they do not foster any behaviour leading to modelling and reinforcing their learners' participation in discussions. There was no evidence found that teachers plan classroom or online discussions and organise material and resources that could trigger learner participation. The prompts of online discussions were observed to be those of the core course activities and related to contributing with a concept not with organising, evaluating or generating original thoughts.

4.2 Attitude of the learners towards blended learning

Findings suggest that learners' perceptions and understanding of blended learning changed as this study progressed. As learners got involved in blended environments interviews and focus groups, they paid attention to the researcher's questions and to the talk, they reflected and they learned what blended learning really is and how it should work to benefit learners. Then, learners were able to speak about their learning experience and exhibit their levels of satisfaction as well as their lacks. Data reflected the developmental process of the learners who reported increased confidence in the use of technology as they settled into the modality, as it is discussed in 4.2.1. Learners were able to perceive the usefulness of the course design as a critical factor for their satisfaction. Online interaction seemed to be the weakest behavior they can perceive in blended learning. The low levels of interaction between learners with teachers and learners with learners are perceived as a lack of support from their teachers, and consequently an impediment for meaningful learning in the online component of the blended course. Evidence of these behaviours are presented in the following subheadings.

4.2.1 Technology to support learners' learning process

This subsection shows findings related to the confidence learners have in the use of technology and how this factor is linked to a positive attitude towards blended learning.

It was found that 52% of the learners (59 out of 114 participants) (Appendix E question 32 *Blended learning courses are more meaningful for my learning than traditional learning*) think access to technology represents an opportunity to enrich their learning. The following extracts taken from some of those 59 learners illustrate how they feel about learning through the blended modality of their university. These learners expressed a positive attitude overall about blended learning, since they mostly find technology relevant for their future. In addition, they expressed their appreciation for the variety of activities they perform online, as a learner from ELT who feels the content of the online course is enjoyable and intellectually challenging. Moreover, learners were able to perceive the usefulness of the course design as a critical factor for their satisfaction. The following extracts shows this last finding:

"I feel smarter in the platform, there are so many different kinds of tasks like reading, mind maps, essays, videos, presentations; so we can enjoy the tasks a little bit more and it also helps us to develop our creativity" (L-60).

Language learners said that they learn best when they learn using written and spoken materials in videos rather than in abstract visual information (see Appendix A and see 1.3.1). They prefer activities that are based on language reasoning. Likewise, Software Engineering learners are satisfied with the blended modality because they consider the LMS enhances their future careers, as this learner said:

"Este proyecto es un buena idea porque todo está cambiando a la tecnología" "This project is a good idea because everything is changing to technology. THANK YOU!" (L-30 translated).

"Siento que tomar este tipo de educación nos ayuda demasiado dado que como ingenieros de software tendremos que pasar largos días frente a la PC" "I feel that taking this type of education helps us too much given that as software engineers we will have to spend long days in front of the PC" (L-45 translated).

Despite the fact that language learners and software learners have different profiles, they find in blended environments flexibility, cognitive engagement and opportunity factors that enhance their learning.

In addition to satisfaction, 66% (75 out of 114) of the learners also reported feeling confident working online from their houses, which makes them feel in control of the technology used in the course. An ELT learner found blended settings very convenient to her lifestyle:

“I feel comfortable working on the platform because nobody will judge me if I say something and I can do it everywhere as long as I have a laptop, computer or just my phone with me. I can listen to music while I use it or maybe watching tv, I can use it while I am in my pj’s in my bedroom so I really like that fact” (L-76).

She describes a context free of boredom and anxiety. The positive emotions expressed by this learner are an indicator of the potential blended learning has to improve learning by activating attention and engagement.

To feel confident when using a computer did not seem to mean absence of technical issues. From the learners who claimed to feel confident using a computer, 66 learners had experienced technical issues at some point of the semester. All of them considered that they have had a pleasant experience and adequate attention from the technical support staff at the university to solve their issue or doubt in regards to the use of the LMS. Teachers also experienced technical issues as Grace expressed in her journal that her learners have not complained about the technical support offered by the university:

“When my students have a problem with their platform, I send them to receive help from Adrián or whoever is there to help them in the technical support, and he quickly solves out his problem” (TJ_Grace).

The quantitative and qualitative evidence gathered indicate that learners and teachers know where to find help if they have technical issues. Teachers and learners have faced constraints in teaching and learning online. However, the training and help they have received at the university have been of great help. Identifying these issues have led the technical staff to a better understanding of what types of training promotes better support for learners and teachers.

Interaction was found to have very different implications online and face-to-face. 66% (75 out of 114 participants) (see Appendix E question 17. *I do not feel close to my teacher on the online component of the course*) of the learners do not feel their teacher is close to them in the online component of the course. Learners feel the companionship of their teachers in the classroom rather than online, as expressed by this International Commerce learner:

“Me gusta más la educación radicional porque los profesores no resuelbven didas en línea”
“I like a little more the traditional education because teachers do not solve doubts online”
(L-18 translated).

In the first focus group conducted with ELT learners, they expressed that they feel the help and companionship of their teacher in the classroom more than online:

“When I do the tasks on the platform, sometimes I do not understand them and I do not have the help or support from the teacher to say “teacher I did not understand”, because sometimes it's too late. Moreover, that does not happen in face-to-face; they tell you “everyone understood? “No, I do have a question” And the teacher explains what happens”
(Grace_Fg).

75% of the learners reported they have received more meaningful feedback in the classroom than online. A learner from ELT gave this opinion when he participated in the first interview conducted for this study:

“From the platform I don't get to see it as feedback, I just see it as “You have to do this, you are missing this, you have to do better”. That isn't feedback for me. Feedback is having the teacher telling me “You did good, you did bad, you have to do better, you are doing well in the classroom, try to do a little better so you can improve grades, or you can be better”. If they see that you are doing excellent, “Hey good job, you are doing well in the class, keep it up”. You know, in the platform they just give us a straight answer “you have to do better” and that's it. I do not accept that as feedback” (LSI_Morris_Grace).

As mentioned in 4.1.3.1 learners needed to receive online feedback in a timely manner in the same way as they received it in the classroom, with explanations about the quality of the task, otherwise they reported feeling discouraged and losing interest in learning through the online activities of the course.

54% (62 out of 114 participant) (Appendix E question 26. *I perceive the teacher's performance is the same in the face-to-face component than in the online one*), of the surveyed learners perceived, their teacher's performance is different in the classroom than online. In the first focus group conducted for the present study, one of the ELT learners expressed:

“You notice another way of teaching in both environments. It is like working with two persons at the same time” (Grace_Fg).

This study was never planned to be an interventionist research (see 3.4) but when this last extract was collected from an ELT learner, I tried to provide empirical evidence that could show what

happens when the teacher redesigns the online activities of a core course. I changed the instructions of the activities of my own online course with the objective of reporting the changes in the way they perceived my online teaching presence. To my surprise, that same English learner told me that when she read the instructions for the activities in my course she could even hear the word "sweetie" with which I always address them. She said:

“Even in the online part of your course, when I am reading the activities I can feel the warmth of my teacher telling us “sweetie (Grace_Fg)”

With this test, I was able to create a real impact in the perception of my teaching presence since my learners heard their teacher’s “talking head” in their online course too.

63% of all the learners (72 out of 114 participants) reported their teacher is stronger in the classroom component. A learner from ELT commented in the post questionnaire:

“Teachers sometimes are the ones who don’t get to manage/organize the online course; I have asked my teacher for some activities that she doesn’t know where they are or what I am talking about” (Grace_PostQLs).

24% of the participants (27 learners out of 114 participants) said their teacher is equally strong in both components; and 4% (4 learners out of 114 participants) reported their teacher is stronger online. However, the researcher was unable to gather further information to support these statements neither in the interviews, nor in the focus groups.

75% of the learners (86 out of 114 participants) are not satisfied with the level of interaction they have with other learners in the online component of the course. An International Commerce learner wrote this comment on the pre-questionnaire:

“El trabajo en equipo online es difícil y agonizante porque no son los compañeros de equipo que vemos a diario” “Online teamwork is difficult and agonizing because they are not the teammates that we see daily” (L-18 translated).

Her perception around the online work was very interesting, not only did she not consider she interacted online, but also, she felt she did not learn from the online component. Another ELT learner during an interview conducted in the middle of the semester reinforced this same lack of online interaction:

“I do not interact with my classmates, as I said before; I feel that the platform is only for learning content” (Morgan_LSI).

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59% of the learners (67 learners) reported that they interact online with their teacher; however, data gathered by other means such as interviews with teachers and learners, focus groups, and screenshots from the platform did not show any argument that could support this percentage. In the opposite sense, an ELT learner commented in a focus group that there is zero participation from his classmates on the discussion boards:

“When a teacher publishes an announcement, not even a few of my classmates make comments” (Morgan_Fg).

In the post questionnaire, a Software Engineering learner wrote a comment related to his/her preferred learning environment for interacting:

“Prefiero el aprendizaje tradicional que es interacción directa con el profesor” “I prefer traditional learning that is direct interaction with the teacher” (Mark_SLs translated).

A learner from English commented in a focus group upon discussion boards as a means of interaction with the teacher:

“Forums are good, but they could be better if students could share opinions with other students. Sometimes we just answer the questions without reading other comments. You only do what is required and do not take advantage of others’ comments” (Morgan_Fg).

Screenshots from one of the two English courses showed the question posted by the teacher and the answers from the learners that do not form any answer thread:

The screenshot shows a web-based discussion forum. At the top, there is a navigation menu with items: Courses, Communities, Calendar, Tutor, Library, Manuales. A search bar and a user profile icon are also present. Below the navigation, there is a breadcrumb trail: / Courses / LEIH 2. The main content area is titled "sharing your experiences in conducting a class." and includes a "Back to Discussion" link. A post by a user is displayed, dated 4/14/2016 5:16 PM. The post text reads: "It is really fun conducting a class, taking over the group and have them participate in the activities is really fantastic. Also I get to learn new experiences and ideas for future teaching." The post includes options for "Print", "Sort by Date", "Reply with quote", "Edit", and "Delete". A blue smiley face icon is overlaid on the post. The Windows taskbar at the bottom shows the time as 2:26 PM on 6/3/2016.

This learner answered the question posted by the teacher without any previous or later response neither from her teacher, nor from her classmates.

The screenshot shows a discussion board interface. The title of the post is "My experience teaching a class." The post content reads: "At first when we berley started presenting and giving our own class i felt nervous and shy , but then i started feeling confidant about myself and imagined myself giving a real class to children. I know i need more practice because our career as ELT teachers is about to start , it was a great experience because i felt happy thay everyone pays attention to everything you say and gets involved with the presentation , class and activities it was great." The post is dated "posted 4/14/2016 7:09 PM". The interface includes a navigation menu with "Courses", "Communities", "Calendar", "Tutor", "Library", and "Manuales". A search bar is visible. A blue arrow points to the right in the top right corner. A blue smiley face icon is overlaid on the post content.

Likewise, this other learner posted her comment with no further interaction.

The screenshot shows a discussion board interface. The title of the post is "My experience teaching a class." The post content reads: "The clases were really helpful because I was able to make lesson plans for children, adolescents, and for adults. That gave me and my classmates an idea of what it takes to be an ELT. I also enjoyed each of the clases that were given by my teacher and I found the information very helpful." The post is dated "posted 4/15/2016 8:30 PM". The interface includes a navigation menu with "Courses", "Communities", "Calendar", "Tutor", "Library", and "Manuales". A search bar is visible. A blue arrow points to the right in the top right corner. A blue smiley face icon is overlaid on the post content.

English teachers decided not to participate in the discussion boards so their learners express their thoughts freely (see 4.1.2.1).

4.2.2 Instruction

76% of learners (87 learners) reported that the web resources in the online courses helped them in their learning (see Appendix A). The materials available on the online component were considered a good source of learning as International Commerce learners expressed in an interview at the end of the semester:

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“Los cursos de aprendizaje mixto son buenos porque te ayudan en muchas cosas. Uno de ellos es aprender mejor y más rápido” “Blended learning courses are good, because they help you in many things. One of them is to learn better and faster” (Lee_ILs translated).

“Son útiles para aprender mejor” “They are useful to learn better” (Lee_ILs translated).

Evidence showed that Lee’s effort in updating the online course content is fruitful for his learners.

87% of the learners (99 learners out of 114) reported they did not have to spend many hours in campus as a result of the implementation of the online courses, which was something they valued, as stated by English learners in a focus group organized at the end of their course:

“I believe it’s a better way of learning because we have time to do other activities as well, and also to schedule study time. We can make other plans in our life besides attending classes” (Morgan_Fg).

“Blended learning is more helpful because it gives you plenty of time to do other activities” (Morgan_Fg).

50% of the learners (57 learners) reported to have a better understanding of key concepts in blended learning courses because they learned at their own pace. English learners gave these opinions when they were interviewed in the middle of their course:

“Overall, I have enjoyed blended learning courses; they give me the opportunity to pace myself and come up with research on my own” (Morgan_ILs).

“I think that blended learning suits my needs because of the academic level I have. Works great for university students” (Morgan_ILs).

Also 50% of the learners feel that blended learning courses suit their learning style; there was no further evidence to support this claim.

36% of learners (41 learners out of 114) considered blended learning courses more meaningful for their learning than traditional learning. An ELT learner mentioned in an interview conducted at the end of the semester:

“At first I thought that blended learning was not that meaningful and helpful but now that I have experienced it, I like it and I find it meaningful and helpful” (Morgan_ILs).

The researcher could realise that Morgan’s learners changed their perception about blended learning because they understood their role and their responsibility to take the initiative to keep

up with their online work. They learned how to stay organised and deal with the flexibility that came with the online component of their blended course. Another learner commented the following:

“I now love blended learning because I can do things that I was never able to do before, like going to the movies on weekdays” (Morgan_ILs).

To the same question, the 27% (31 learners out of 114) that disagreed gave further comments such as these ELT learners that were interviewed towards the end of the semester:

“I feel more satisfied and motivated to have face-to-face classes, to have the class that we need in class. On the other hand, I don't like blended courses because I end up with too many questions when I do my homework” (Grace_ILs).

Grace's learners were the ones that complained the most about the support and feedback they received from their teacher. In the same round of interviews, an International Commerce learner expressed his disagreement with blended learning. The following extract shows a different perspective from the majority of the other participants. This learner began his major when classes at the university were fully face-to-face:

“Siento que no es lo mismo y que no aprendes lo mismo porque tomé clases totalmente presenciales antes de la modalidad semipresencial y te puedo decir que no es lo mismo” “I feel that it is not the same and you do not learn the same because I took classes fully face-to-face before the blended modality and I can tell you that it is not the same” (Lee_ILs translated).

The missing 37% of the learners (42 learners out of 114) that answered the question about how meaningful and helpful their blended learning courses are for their learning remained neutral. This category according to what the researcher was able to establish during the focus groups or interviews together with her personal observation, can be added to the percentage of answers which disagree with the statement, which makes it that 64% of learners (74 learners) consider their blended learning courses more meaningful and helpful than their traditional courses.

57 learners (50%) agreed that the questions posted on the discussion boards triggered their insight and encourage them to dive into the material to learn. However, there was no evidence gathered that could support the results of this item. On the contrary, the screenshots presented previously (see 4.1.2) reflect that there is not discussion triggered after a teacher's post.

4.2.3 Course Design and technical support

61% of the learners (70 learners) reported that their courses online are well organized; however, they could tell when their teacher struggled to manage the online component, as an English learner who shared her opinion in the post questionnaire:

“Teachers sometimes are the ones who don’t get to manage/organize the course”

(Grace_PostQLs).

78 out of 114 learners, 68%, (see Appendix E question #6 *The courses in the platform are easy to navigate*) said their online courses are easy to navigate, and 97 learners, 85%, agreed that the material they found on the courses is meaningful to their learning. However, for this last claim, the researcher did not collect any further evidence relating to this point either in the interviews, or in focus groups with learners.

Regarding the technical support, they have received, 76 learners, 67%, agreed that it has helped them to solve their problems and doubts regarding the use of the LMS. According to what the researcher asked to the technical support staff, the service provided was basically to help users retrieve forgotten passwords. Their job profile is such that their knowledge is purely technical, and they are not acquainted with any pedagogical knowledge that could aid course design.

4.3 Attitude of teachers towards blended learning

This section reports the perceptions that teachers have towards the blended learning modality used in the university. These results were processed from the questionnaire for teachers (see 3.3.1.2 and Appendix E), and were grouped and reported according to three different factors: 1) Teachers’ perceptions of blended learning, 2) Teachers’ pedagogical skills in blended learning, and 3) Blended learning as a teaching enhancer.

4.3.1 Teachers’ perceptions of blended learning

Findings suggested that teachers had a positive attitude towards blended learning which helped them to be favourable towards the usage of technology. All of the participant teachers in this case study (4 teachers) reported a high level of positive perceptions of blended learning. In 16 of the 21 items (see Appendix F questions 1, 14, 20, 4 and 5 were the exception) they reported a 100 % positive agreement/strongly agreement. A typical overall response in regards to the use of blended learning was given by the International Commerce teacher in his journal. As reported earlier, Lee had supported and used blended learning even before this approach became institutional:

“Estoy a a favor de los cursos de aprendizaje blended” “I am in favour of blended learning courses” (Lee_TsJ translated).

Also, it was discovered a significant correlation between their perception of self-efficacy and their willingness to work with technology. To the question (# 1) *I am in complete control when I use blended learning*, Grace showed behaviours that neglected the redesign of her courses and she rather closed the activities. This is an extract of what she said:

“Since I didn’t design the online course that I teach, it is sometimes impossible to understand how the activity should be done. So, I avoid problems with my students and just close the activities and make them invisible” (Grace_TsJ).

Findings also showed teachers’ concerns and fears as they integrated technology into their teaching. Issues such as lack of knowledge and skills on how to integrate ICT into their courses or how to manage the LMS had an effect on their perceptions and beliefs towards blended learning, therefor, teachers realised they have to learn how to use technology. To question # 4. *I feel my knowledge regarding blended learning is limited compared to my peers*, and # 14. *I intend to participate in blended learning courses*, Grace wrote in her journal that she needed training in the use of technology in the classroom:

I think the training that we need is for the teachers to take advantage of the full potential of the platform...the type of training that is not for beginner teachers” (Grace_TsJ).

This study allowed reflection on the teachers’ behaviours in blended learning environments. Lee commented in regards to question 10. *Blended learning in the classroom will help me become a better teacher:*

“Se necesita tiempo para comprender cómo reaccionan los estudiantes en línea. Mi experiencia con Moodle me ayudó mucho a trabajar con su aprendizaje. Sé cómo hacer que mis alumnos hablen en clase, pero no es lo mismo conseguir que participen en la plataforma” “It takes time to understand how students react online. My experience with Moodle helped me a lot to work with its Learning. I know how to make my students talk in the class, but it is not the same to get them to participate on the platform” (Lee_TsJ translated).

4.3.2 Teachers’ pedagogic skills in blended learning

Two of the four the teachers reported neutral positions on their blended learning skills. These teachers were the English teachers (see 4.3.2) who gave a neutral answer to the questions “I

enjoy talking with others about blended learning”, “Blended learning in the classroom will help me become a better teacher”, “I want to learn via blended learning courses”, and “I intend to participate in blended learning courses” (see Appendix E).

The ELT teachers expressed on different occasions during interviews, informal talks, and in their journals that this programme should be delivered entirely face-to-face, because of the nature of the content that is more practical than theoretical. They do support the use of an LMS as extra help, but not to substitute class hours. These are the words of Morgan, one of the two ELT teachers:

“I am a blended learning advocate, but I do not agree with the way the institution has arranged the class hours. Classes should be completely delivered face-to-face with extra support of an LMS to upload material” (Morgan_TsJ).

However, neither Lee nor Mark reported a neutral position. Both teachers either agreed or strongly agreed. There were two statements which were strongly disagreed with by the two English language teachers. On the statement, *“I am in complete control when I use blended learning”*. Grace had this to say the first time she was interviewed:

“I wish the institution gave us more training to work on the platform, as well as to design the courses as the activities most of the time, do not match the learning sequence” (Grace_TsJ).

And the second statement that they disagreed with was *“I enjoy talking with others about blended learning”*.

Lee and Mark agreed or strongly agreed on this last item. Lee is always likely to help his colleagues in the use of the LMS. From several sources such as the teacher evaluation, Lee is well-known among other teachers to be very strong in the online component. Lee expressed the following thoughts the first time he was interviewed:

“El aprendizaje blended ha facilitado la comunicación entre docentes y alumnos. Al principio prevalecía la resistencia al cambio porque somos docentes que hemos tenido una práctica presencial y que nos gusta establecer contacto visual con nuestros alumnos en el aula. Hoy, aunque no todos los profesores lo han aceptado, este aprendizaje nos ha aportado muchos otros beneficios como menos trabajo de escritorio y menos consumo de papel. Las sesiones de formación han permitido a los profesores descubrir los beneficios del aprendizaje blended” “Blended learning has facilitated the communication between teachers and learners. At the beginning, resistance to change prevailed because we are teachers that

have had a face-to-face practice and that we like to establish eye contact with our students in the classroom. Today, although not all teachers have accepted it, this learning has given us many other benefits such as less desk work and less paper consumption. Training sessions have allowed teachers to discover the benefits of blended learning” (Lee_Tsl translated).

On the statement, *“Teacher education programmes should include how to deal with blended learning”*, one teacher agreed and three strongly agreed. In her last interview, Grace expressed this comment related to teacher education and the use of technology as a footnote to the question *“I am in complete control when I used blended learning”*:

“We need more training but not the type of training that we have received so far...the training we receive is like the basics to use the platform. I think the training that we need is for the teachers to take advantage of the full potential of the platform...the type of training that is not for beginner teachers” (Grace_Tsl).

The researcher was able to capture how she was more emphatic about the need for receiving teacher education the second time she was interviewed.

4.3.3 Blended learning as a teaching enhancer

Three of the four teachers reported to the question *“I want to learn via blended learning courses”* (see Appendix F) their wish to receive training through blended learning courses; the fourth of them, an English teacher, rated it neutral. Lee commented in his first interview that it would be very beneficial for teachers to use a blended approach for teacher training. This is what he said:

“Si los cursos a los que debemos asistir en lo que respecta al modelo educativo, por ejemplo, combinan horas en línea, podríamos impartir nuestras clases, lo que beneficia a los estudiantes. Podríamos tener un curso de 20 horas con pocas horas presenciales sin necesidad de cancelar las sesiones de docencia” “If the courses we need to attend in regards to the educational model for example, combine online hours, we would be able to teach our classes which benefits students. We could have a 20-hour course with few face-to-face hours without the need of cancelling teaching sessions” (Lee_Tsl translated).

Two of the four teachers reported that they do not enjoy talking about blended learning, both are the ELT teachers. Again, the reason seems to be related to the reduced number of face-to-face hours some subjects have once the university changed to blended learning.

To the question *“Blended learning in the classroom will help me become a better teacher”*, Mark rated it neutral; however, Morgan commented the last time he was interviewed:

“Blended learning will help me become a better teacher. Because it is through the possibilities offered by this learning modality that teachers can make informed decisions about when, where and how to use technology and balance their teaching practices both, classroom and online to achieve pedagogical purposes” (Morgan_Tsl).

To the same statement *“Blended learning in the classroom will help me become a better teacher”*, Grace considered blended learning could help her become a better teacher, and she commented the following the last time she was interviewed:

“My answer is yes. The reason is simple, updating my skills and combining them with the help of technology has improved my ability to teach and to make learning meaningful to my students. We cannot pretend technology has nothing to do with education. Students and everybody else are learning from those sources. We, teachers, need to guide them to the correct usage” (Grace_Tsl).

The other two teachers, Lee and Mark, rated strongly agree with this statement, and expressed the following comment in their journals:

“Mi respuesta es sí. ¿Por qué? Como docente, me permite tener más interacción con mis alumnos a través de las diferentes herramientas tecnológicas disponibles. Con el aprendizaje blended puedo ir un paso más allá en mis tareas de clase, porque a través de recursos (videos, presentaciones, documentos, imágenes, foros, chat, etc.), los estudiantes pueden prepararse con anticipación para las clases que se impartirán como parte de un trabajo. Planificar y cumplir de manera oportuna con el plan de la clase. El compromiso se hace más fuerte al aceptar el uso de la tecnología, por un lado, utilizarla para nuestro beneficio personal, pero también para el alumno; y por otro lado, la plena convicción de que ahorra tiempo de calificación si lo aprovechamos al máximo. Pero sobre todo, la retroalimentación que debemos darles a nuestros alumnos les llega de manera oportuna. Finalmente, nos obliga a mantenernos actualizados, a estar conectados y conscientes de las necesidades de nuestros alumnos y su trabajo. La tecnología nos permite aclarar dudas o dar respuesta a cualquier tipo de duda que puedan tener nuestros alumnos. Tanto el trabajo presencial como el online hacen que nuestro trabajo sea más agradable y productivo en términos de aprendizaje significativo” *“My answer is yes. Why? As a teacher, it allows me to have more interaction with my students, through the different technological tools available. With blending learning I can go a step further in my class assignments, because through resources (videos, presentations, documents, images, forums, chat, etc.), students can prepare in advance for classes that will be taught as part of a work plan and comply in a timely manner with the class plan. The commitment becomes stronger when accepting the*

use of technology, on the one hand, use it for our personal benefit, but also for the learner's; and on the other hand, the full conviction that it saves grading time if we take full advantage of it. But above all, the feedback that we must give our students reach them in a timely manner. Finally, it forces us to keep ourselves updated, to stay connected and aware of the needs of our students and their work. Technology allows us to clarify doubts or answer any kinds of questions our students may have. Both, face-to-face and online work make our job more enjoyable and productive in terms of meaningful learning" (Lee_TsJ translated).

During class observations, Lee always showed his support to help his learners build their knowledge and his awareness of the impact he had on his learners' motivation to learn and achievements. He identified and practiced the behaviours that enhanced their learning process such as providing timely feedback and meeting their needs.

Mark also supported the point that blended learning has improved his teaching practice:

"Yes, because I can teach in many different ways my class; for example, if I explain a new topic my students can use technology to research in depth a topic and then, we can comment the results. On the other hand, technology is something that students really like nowadays, so if I use technology in my classes, I can encourage them to become independent learners" (Mark_TsJ).

Mark was aware of the teacher's behaviors that influence the response of his learners in the learning environment. He was aware of the affordances of technology and used them to encourage his learners to achieve their learning goals.

4.4 Teaching presence and disciplinary differences

This data is extracted from an analysis of the learners' pre and the post questionnaires which showed learners' perceptions about their teachers' teaching presence (see Figure 4), as well as from other data sources. A correlation was established between the perceptions of certain behaviours associated with the three categories of the component of teaching presence (Instructional Design and Organisation, Facilitating Discourse and Direct Instruction) and the three different fields of study.

The International Commerce learners and the English Language Teaching learners ranked the subcategory of Instructional Design and Organisation most highly. Their answers on both

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questionnaires (see Appendix E and Appendix F) impacted this concentration and scored the highest for both teachers.

These learners ranked their teachers outstanding for their ability to communicate important course goals and important features of the course like due dates, and time frames from learning activities. Also, their learners find them able to help them identify the areas of agreement and disagreement on the course topics that helped them to learn.

This correlation was established by Morgan's and Lee's openness to work with blended learning; and their intention to participate in blended learning courses. The fact that they do not believe that working online is a cause of getting low grades in the teachers' evaluation also contributed to this point. Lee and Morgan believe that blended learning is not a waste of time, on the contrary, they believe blended learning courses make learning easier. Both beliefs also had a clear impact on their learners' answers.

Another concentration of answers was found for the category of Facilitating Discourse for one group of ELT learners, Grace's, and Software Engineering learners. They ranked their teachers outstanding in their ability to guide the class towards agreement/understanding about course topics that helped them to learn. These learners also perceived that their teachers acknowledged their participation in the course.

The four teachers in this study drew their teaching practice upon their experience and beliefs around blended learning environments rather than because of a disciplinary difference.

Chapter 5 Discussion of the findings for teaching presence in blended learning environments

This chapter provides a summary of the key research findings along with a discussion of related research in the field. In addition, I return to and provide answer to the research questions, which I laid out in Chapter 1 (see 1.4). The chapter is organised according to the key concepts of *ownership, immediacy, discussion and agency* (see 3.4) which have emerged from the findings and which have all been associated with the construct of teaching presence from the Community of Inquiry framework, which has been used to support the present study.

The first section 5.2.1.1 returns to a topic which has been particularly highlighted in this research; that of the teacher's responsibility for designing and delivering their courses in such a way that they avoid their learners feeling a disconnect between the face-to-face and the online environments. The process of examining the design and redesign of the online courses and their delivery alongside the face-to-face component has allowed the researcher to collect useful evidence from teachers about their experiences and expertise in teaching with technology in order to better understand their attitudes to the value of ICT for teaching and learning, as well as their own experiences of the involvement of ICT as part of their own teacher education (see 1.3.1).

5.1 Teaching presence results and research questions

The research questions focus on how teachers perceive and manage their presence in the VLE and face-to face in their courses; what perceptions learners have of their teachers in terms of presence; and what behaviours and processes their teachers are performing to support their teaching in the VLE and in the classroom.

To date, research conducted to establish or compare how the teaching presence construct of the Community of Inquiry exists in the VLE and in the classroom environments is still emerging. The background to this study has been that of a public institution committed to a blended learning approach that blends face-to-face instruction with online work using an electronic platform (VLE), an instructional pattern that many other universities have according to researchers such as Arbaugh (2010) (see 2.2).

For this purpose, the behaviours in class of four teachers and their blended learning courses were studied to test the research questions, and to gain a better understanding of the teaching presence construct online and face-to face.

5.1.1 Research questions and findings

The data collected and analysed presented evidence about teachers' experiences, both in the VLE and face-to-face, in the use of technology, their attitudes to the value of technology, their expertise and use in teaching, and the training they had received. This study had three main implications related to the teachers' behaviours which were: 1) to design, organise and deliver the content face-to-face and in the VLE (Instructional design and organization), 2) to engage and maintain learners in active learning face-to-face and in the VLE (Facilitate discourse), and 3) to guide the instruction and the material face-to-face and in the VLE to support learners to make sense of the course and of the program objectives (Direct instruction). These three implications are reflected in research question one, two and three, and are focused on teachers:

1. How do teachers design and organise the content of their blended courses both, face-to-face and in the VLE for a meaningful educational experience (DESIGN & ORGANISATION)?
2. How do teachers engage and maintain learners in active learning face-to face and in the VLE for a meaningful educational experience (FACILITATING DISCOURSE)?
3. What are the teachers' roles in managing the teaching and learning process using face-to-face and online teaching strategies to support learners make sense of the course and of the programme objectives for a meaningful approach to learning (DIRECT INSTRUCTION)?

The other two research questions are focused on learners and are reflected in research questions four and five:

4. How do learners understand their role in the teaching in blended learning both, face-to-face and in the VLE for a meaningful educational experience?
5. How do learners understand the VLE teaching presence as a support for their learning process?

The answers to these questions are to be found in the discussion beginning in 5.1.1.1.

Hitherto, there has been a significant amount of evidence (e.g.Ladyshewsky, 2005 and some other researchers mentioned in 2.2.4) that online learning can be as effective as face-to-face learning. Researchers such as Schachar & Newman (2010); Yuki Toyama, Murphy et al (2009) and more

recently Tokareva et al (2019) (see 2.2.4) have affirmed that online education can even provide superior learning outcomes to more traditional forms of education. Of course this claim will depend on who is teaching and what is being taught since learners cannot handle the independent nature of the online delivery model (see 2.2.4). Stein & Graham (2014) have argued that blended learning is as effective as or even more effective than face-to-face courses since blended learning goes beyond the capabilities of each separately (Garrison and Vaughan, 2008) (see 2.2.5).

However, it is argued that there are still many questions remaining around teaching behaviours (what teachers do) and the interactions teachers initiate (how they support dialogue) in blended learning environments in order to create a meaningful teaching presence (Bair & Bair, 2011). Bush et al and Ladyshevsky (2013) maintain that teaching presence is a relevant factor in the success of online and blended learning contexts, and it can be argued that it is this presence which will prevent the pedagogical space (between the online and the classroom environment) from becoming an obstacle between the teacher and the learner (Benson & Samarawickrema, 2009).

Results from the present study indicate that a number of teaching behaviours were not replicated in the online and classroom components to the same extent, or with the same purpose. The responses to the surveys, the observations made in the classroom, and the interviews with both learners and teachers show that there is still a challenge to be met in terms of full technological integration which would lead to successful and effective teaching presence in both components of the blended learning courses. Participant teachers proved to have strong teaching presence in the classroom, but were less capable of making their presence noticeable in the online component of the course (see 2.2.5). They felt less capable of building a class atmosphere online compared to the atmosphere they perceived to exist in the physical classroom. These results accord with those of Heckman & Annabi (2005) who found that the different aspects of the Col teaching presence construct were articulated more strongly in the classroom component than in the online component.

The following subsections present a detailed discussion of the findings of this case study, the possible reasons for them and the emergent topics related to the teaching presence construct in blended learning environments.

5.1.1.1 Skills teachers use to design and organise the content of their courses both, face-to-face and in the VLE

This subsection examines research question one that addresses the way in which teachers design and organise their blended courses. It explores a range of data from the four blended learning courses to try to understand how teachers design and organise the content of their courses both in the VLE and face-to-face:

1. How do teachers design and organise the content of their blended courses both, face-to-face and in the VLE for a meaningful educational experience (DESIGN & ORGANISATION)?

The data collected in the surveys, interviews and focus groups with teachers and learners indicated that teachers have not managed to design and organise their blended courses, which has impacted learners' self-motivation and has challenged the use of the VLE (see 2.2.6). Findings showed that teachers have a lack of skills and knowledge to design and organise their blended courses and potentially skills, which would overcome the problem. Also, the findings showed a lack of awareness by teachers of the issue. This lack of skills to design and organise their courses, has made the learners perceive an absence of coherence in the blend, and a negative perception of the VLE since they cannot find a visible thought-through pedagogical relationship (Motteram, 2006) between the face-to-face and the VLE of a blended course.

Researchers such as Salmon (2011) have claimed success in online learning depends on teachers and trainers acquiring new competencies. Similarly, Ghavifekr & Rosdy (2015) considered it is highly desirable for teachers to be not only generally computer literate but to have skills and knowledge in the use of ICT (see 2.2.7). Additionally they will need to know how to improve their teaching strategies in order to enable effective learning otherwise they will not be able to meet the challenge of the 21st century teaching.

The majority of the learners reported on the surveys to have liked working with blended learning; however, in the interviews and focus groups conducted most of them said they prefer face-to face learning (see 4.1.1). The major issue expressed by learners in the study was the disconnection they found between both environments, face-to face and the VLE, which is a result of their teachers' lack of knowledge and skills to design their courses and to integrate both environments (see 2.2.6).

Some years ago, Ryan et al (2004) among other researchers held that teaching online involved a shift from being a visible centre of attention in the classroom to become the designer and facilitator of online educational experiences. For this shift, as they suggested, teachers were

unprepared. These following comments expressed the thoughts of the EFL students around what they saw as a disconnection in their blended courses:

-“I feel that I have two different teachers, the one that I see in class and the one that orders me to do the activities on the platform. Activities that I do not understand how to do”.

-“I do not see the connection between my morning classes and the activities on the platform”. “If I ask my teacher about the activities on the platform, most of the time he doesn’t know about them”.

These considerations bring the researcher to one of her major overarching inquiries, what makes teaching presence effective in blended learning courses? According to Stein & Graham (2014), there are no complete answers, but according to them these factors include an enriched instructional redesign of the course. Course Design is one category of teaching presence that has been reported to directly contribute to student’s perception of being able to be successful (Kupczynski et al, 2012).

The research literature supports the pivotal evidence found by researchers such as Salmon (2000), Stodel et al (2006) and others that a well-organised online course offers learners the opportunity to gain competence and confidence. Fink (2013) remarked that course design defines learning goals, promotes significant and active learning, and educative assessment. Moreover, course design provides powerful tools to analyse and reshape one’s teaching practice (Fink, 2013). Three participant teachers did not have the opportunity to reshape their teaching practice at the outset since the VLE was designed for them and they felt no ownership. The point being is that policy holders must recognise these issues.

The evidence collected by the researcher, agrees with Fink’s ideas, since I was able to observe how Grace’s engagement with her online work grew once she began redesigning her online courses (4.3.1). Her learners, and in general all the participant learners of this study strongly believed that they learned more when their teachers were involved and interacted with them in the online course. The responsiveness to the needs of her online learners encouraged Grace to redesign and facilitate the course. Gradually, I observed how her learners undertook a more active role in the co-construction of the learning elements (see 4.1.2.4). Of course, she practised these behaviours once she felt confident and acquired the skills to redesign the online course. Later in the chapter (see 5.1.1.4), I discuss teacher agency in enhancing learning in blended courses.

Teachers’ behaviours online and face-to-face seem to differ as they see the online education as separated from their learners (see 4.1.1). As a result, teachers try to communicate in an efficient

way. According to the Community of Inquiry developers Garrison et al (2000); and then by Arbaugh et al (2008), Cleveland-Innes & Fung (2010), teaching presence influences the quality of the course given that all the course content needs to be thoughtfully considered including learning activities, evaluation activities, and a course calendar which is congruent with the online and face-to-face modes. Learners participating in this study indicate that they receive guidance from their teachers in the classroom but in the VLE the guidance comes from a syllabus. A blended course should be expected to provide a clear path through all the resources, activities, and assessment every step of the way.

Bair & Bair (2011) specified that for blended learning teaching to be an effective instructional modality, teachers need to develop a better understanding of the online and the face-to-face strengths and weaknesses. In either studies, it is generally accepted that online teachers experience a change in their role from instructor to guide (Coppola, Hiltz, & Rotter, 2002; Ryan, Carlton, & Ali, 2004). According to the findings of this study, participant learners expected their teachers to be more a guide than an instructors in the online component, VLE, of the blended course.

This better understanding of the online and the face-to-face strengths and weaknesses becomes highly relevant in educational contexts like the prevalent in the target university where the blend reduced the number of face-to-face meetings to open spaces for meeting the learning experience of the VLE. For the four teachers of this study, as well as for the rest of the faculty, it represents a challenge to fill the hours in the VLE in a way that the blend of both environments completes the learners' educational experience.

I have found in the literary revision of blended learning, what instructional design and organisation provide to learners. Shea et al (2003) and Liu et al (2007) report high levels of satisfaction and learning. Titsworth et al's (2010) study also shows that students learning online place relevance on course design as an enhancer of students' positive emotional response to the educational context as well as to the whole educational learning experience.

While the researcher examined the evidence of one of the factors of the Instructional design and organisation category (see 4.2.1.1) the clarity in the instructions in the VLE showed to be of great impact to establish teaching presence in the online environment, since this same factor had no issue attached to it face-to-face. Grace expressed the following sentiment in the second round of interviews conducted for this study:

“Since I didn’t design the online course that I teach, it is sometimes impossible to understand how the activity should be done. So, I avoid problems with my students and just close the activities and make them invisible” (Grace_Tsl).

Evidence shows that for Grace the core course was not of great help since she found it unclear and difficult to follow. In addition, it was evident during the first two rounds of interviews, that Grace did not consider redesigning the course to suit her and her students, rather more, she closed the activities. This reinforces evidence as to the impact of the Instructional Design an Organisation category in terms of establishing teaching presence online. The study by Brooks & Young (2011) also highlighted this factor as a key to success in the online environment. When blended courses are taught by teachers who were not part of the online course design process, also referred to as non-designer instructors by Richardson et al (2016), the learners are less likely to be in contact with their teachers and their participation and perception of learning suffers a negative impact.

In line with the evidence collected in the classroom in this study, clarity did not emerge as a significant issue in the face-to-face environment, because learners working in the classroom receive direct guidance from the teacher during class time. Titsworth et al’s (2010) study found similar results, showing learners emphasise the importance of clarity in the VLE not in the face-to-face environment.

Certainly, the findings of this study show that online teachers can enhance their learners’ educational experience by emphasising an organised instructional design in their courses. Researchers that have studied online teaching presence support the relevance of the instructional design and organization component. Anderson et al (2001) identified this task as a primary function of the online teacher. Arbaugh’s (2010) study suggested the need of teachers to structure and organise their courses beforehand, so they can later stay focused on their learners’ engagement in the course. Budhai & Williams (2016) talked about purposeful design to make the online session as relevant and focused as possible.

The results in this show that in order for teachers to have a presence in the course beyond live sessions and written communication, they must be willing to design or redesign the core course and select and organize the course content integrating the learning activities, assignments, and assessments in meaningful ways. Anderson et al (2001) identified this component as a primary function of the instructor. When teachers design their online course, they should think through the process, structure, evaluation and interaction components of the course before its delivery to convey a sense of community and teaching presence (Anderson et al, 2001).

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Bair & Bair (2011) mentioned the tasks that most likely help teachers establish their online teaching presence: facilitate online discussions; check e-mail from the course management system frequently and respond to concerns as they arise; prepare materials and dosage course activities; structure to show the contents and objectives; and write the documents with clarity to prevent confusion in their learners. These activities differ from the activities performed by the participant teachers, especially those concerning the facilitation of online discussions.

However, in the case study university, as has been mentioned previously, the designer of the core course is normally a different teacher from the instructor of the online course. Redesigning the course online is the stance by which the teacher can engage with their learners and take ownership of the online course to display their presence in the online environment too. The lack of appropriation perceived by learners seems to be related to some sort of teachers' resistance or barriers to working online. This situation was portrayed in the English Language program, where the two participant teachers openly expressed their disagreement with the online hours' materials. They claimed that due to the nature of the program, and that learners are still improving their command in English, classes should be entirely face-to-face with little online work.

The findings of this section reveal that despite the participant teachers having a positive attitude towards working online, there are still contradictory areas specifically in designing or redesigning the course to be taught. A surprising result in itself is discovering based on the evidence collected (see 4.2.1) that the teachers' major engagement in online work in terms of frequency and scope of use occurs outside of the teacher education program, which is the ELT program. The data clearly show that teacher educators use the LMS less frequently and with a less scope compared to the other two participants not involved in the teacher education program. This result is contradictory to other findings as in Ekman's (2015) study, which addresses a direct correlation between the attitudes and use of the ICT in the teacher education program.

There is much to learn by examining teaching presence online. To gain understanding into how learners make sense of the disconnection they feel due to the lack of contact when they work online provides important insight into how online learning environments can be designed and facilitated. The following section provides an analysis of teachers' perceived immediacy behaviours displayed online and face-to-face. Immediacy relates to course design in the way a teacher consciously organises the content of the online course to be close to support the learners' learning process.

5.1.1.2 Teachers' immediacy in providing interaction face-to-face and in the VLE to engage and maintain learners in active learning

This subsection answers research question two as it explores the concept of immediacy (see 2.3.3. A) and the geographical gap between the learner and the teacher that may lead to a decreased sense of presence (Anderson, 2008) (see 2.3.3 B) if it is not properly cared:

2. How do teachers engage and maintain learners in active learning face-to face and in the VLE for a meaningful educational experience (FACILITATING DISCOURSE)?

The evidence found in this study suggests that teachers do not use strategies or best practices that can be incorporated into the design and organisation of the VLE to foster a high level of learner engagement based on various pedagogies, and to create an atmosphere where learners actively participate in learning activities. The evidence found in this study suggests a lack of skills to design and organise the VLE, and a perceived lack of immediacy (see 4.1.3.1) in the direct instruction (see 2.3.3.3) performed by the teachers in the VLE, which decreased learners' satisfaction with the online component and made them less attached and identified with it. In the face-to-face component of a blended learning course, learners in this study see their teacher almost every day for a scheduled time. During this time, the teacher displays direct instruction, explains tasks, and the content of the subject. However, there is a geographical distance in the other component of the blended course, the VLE.

Just as in a face-to-face class, active learning must be emphasised in the VLE. The ability of searching for new information, organise it in a meaningful way and be ready to explain it to others is according to Allen & Tanner (2005) active learning. Studies have shown that incorporating strategies of active learning improves both learners' learning and their attitudes towards learning (Vygotsky, 1978; Armbruster et al, 2009). Many faculty still struggle when integrating active learning into their courses, however, this effort must be made to keep learners actively engaged in their learning (Khan et al, 2017).

Verbal immediacy behaviours (see 2.3.3 A) seem to be the fastest and most efficient way learners use to define the extent of attachment to their teachers and to the blended course. Christophel & Gorham (1995) established that there is a positive correlation between verbal immediacy behaviours and learner satisfaction and in addition, these behaviours encourage them to be more participative.

This suggests that teachers have not been able to extrapolate their classroom "eye contact" (a deeper understanding of human interaction) to an audience of online learners that are geographically and temporally separated. Learners in the online component wanted to make a

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connection with their teachers; however, not being able to see their teacher appeared to negatively impact their sense of immediacy with their teacher since immediacy is created when they can put a face on their teachers (see 4.2.1).

Learners during the first round of interviews and focus groups were not fully aware of the role their teachers had in the VLE. Due to their inexperience in blended environments, they seemed to have had insufficient knowledge to have evaluated their teachers' strategies to deliver the online course. Also they lacked the elements to have taken informed decisions so as to identify what worked better for them and how to foster online interactions. It was not until the third round of interviews and focus groups that they were able to verbalize their teachers' behaviours and responses, and evaluate them. All the information that we addressed during these sessions seemed to have promoted the developing of a critical awareness of their teacher's presence in the VLE.

Learners considered that the responsibility for the quality of the interaction is firstly that of their teacher, a finding that coincides with the opinion of a number of researchers such as Eisenring & Margana (2019) and Gorham (1988) and Christophel (1990) who were the first ones in developing a verbal immediacy scale.

According to researchers such as Lowenthal & Parscal (2008), Bolkan et al (2017) and Kalat et al (2018) teachers' immediacy behaviours have a strong influence on learners' affective, behavioural and cognitive learning areas and increase learners' motivation, reason why, learners do not feel engaged to the VLE activities.

The findings here are consistent with the behaviours framed by Christophel and Gorham (1995) and Jeder (2015) in relation to how greatly learners value to receive verbal behaviours that can provide not only guidance and feedback, but also rapport and other appropriate approaches not necessarily of an instructional context. These behaviours among other consist of humour, calling by name, giving personal examples and conveying experiences. Learners in their interviews expressed that they feel close to those teachers that communicate with them in person and provide examples from their own lives (see also Walker, 2008). Learners mentioned that Lee used to tell them anecdotes about his job at a federal institution, and that they enjoyed it. This extract was said in the second focus group conducted with Lee's learners:

“When Mr. Lee tells us about how all this knowledge is applied in real life, we pay close attention, everyone listens in silence” “Cuando el Mtro. Lee nos cuenta cómo se aplica todo este conocimiento en la vida real, prestamos mucha atención, todos escuchan en silencio”.
(Lee_Fg translated).

Grace's learners in the last focus group also commented:

"Miss Grace speaks very differently when she tells us about the job she had in the university that she worked as an English teacher" (Grace_Fg).

Findings also showed that some learners were ill-prepared for the independent work and the flexibility of time and space allowed in blended online courses. Many learners are not engaged in their own learning, resulting in high attrition and in low interest, motivation, and academic outcomes (Rumberger & Rotermund, 2012). Janosz (2012) stated, "To develop new skills and acquire new knowledge, individuals must consciously mobilize and devote some of their physical and psychological (cognitive, emotional) energy; they must engage themselves in the learning situation" (p. 695). Learners seemed not to fully accept the fact that the teacher will not always be available to help or guide them, so they must be capable of learning on their own and taking responsibility for their own learning as well. According to researchers such as Benson & Voller, (2013) and Esch (2013) autonomous learners take control of their learning when they look for strategies to learn more and instead of being passive learners they become active builders of their own knowledge.

Autonomy is a key element in the ELT programme since these learners later will become English teachers. Carter (2005) suggested teacher training programmes to teach autonomous teachers. If learners have a better understanding of what autonomy is and of the role it plays in the development of their teaching professional skills, they will effort in developing their autonomy faster. And in general for the other participants, becoming autonomous learners will allow them to control what and how they learn, and to be more motivated to continue learning throughout their lives.

Findings show that confirming understanding, receiving feedback, presenting content and redirecting the discussion are teachers' behaviours exhibited mostly in the face-to-face component (see 4.1.3.1).

According to the evidence collected, teachers devoted their direct instruction techniques and efforts to the classroom, and about where they declared themselves to be irreplaceable, and of immediate relevance. As for the online component of the course, all the participant teachers relied on their presence being perceived in the materials and in the activities made available in the VLE. It is for this reason that the majority of the learners perceived an absence of purposeful teaching in the online component of the course and of teaching techniques which would foster interaction. For example, one of Mark's learners commented about his teachers:

“Publican foros y explican bien las instrucciones, pero a veces se encuentran en lugares escondidos.” “They do post forums and explain the instructions well, but sometimes they are in hiding places”. (Mark_Fg translated).

It can be inferred that the teacher make the effort to open spaces for discussion, but that there is no follow-up activity from the teacher. This comment indicates that learners feel the need to be supported when working online; but they learn to assume that they have to handle online activities on their own.

There are a number of factors that impact students’ performance. However, teachers’ attributes and behaviours have proved to be very important in the teaching and learning process (Barnes and Lock, 2010; Kember et. al, 2004). Researches like Raza (2014), Clotfelter, Ladd, & Vigdor (2007), have suggested that teachers’ attributes lead to teaching quality, which have a positive impact on learners’ achievement.

Teachers with high teaching quality in terms of appropriate professional attributes are found to have a greater impact on students’ achievement in line with the number of teaching years of experience. Teacher attributes and hence teaching presence, pave the way to teaching quality and a positive impact on student academic achievement (Raza, 2014; Clotfelter, et al, 2007).

This was no less the case in the present study as these extracts from Grace’s learners show. They also indicate the difference in how teaching presence is experienced in the VLE and face-to-face:

“Just some teachers leave comments on the activity that I submit” (Grace_IL).

“Yes, in the classroom teachers support my learning by giving importance to the activities, revising the activities” (Grace_IL).

“In the classroom I get more from my teacher, I understand that they have a lot of work to give feedback online” (Grace_Fg).

This last extract, collected in the second focus group of learners, sheds light on how learners perceive the lack of teaching presence online. They acknowledged the different behaviours their teacher had in both environments justifying her absence of presence in the online environment of their course, and assuming it was due to the heavy workload related to proving feedback online. However, there was no evidence collected that reflected that learners knew what behaviours besides checking their assignments were expected from their teachers online. Presumably because they had no other positive experience to judge by.

According to the evidence gathered, learners missed contact with their teacher when learning online as this extract from Grace's learner:

"I feel more satisfied and motivated to have face-to-face classes, to have the class hours that we need. On the other hand, I don't like online courses, because I end up with too many questions doing my homework, and my teachers don't answer the messages I send with my questions" (PreLQ_ELT_Grace).

Learners indicated that they enjoyed the blended course and met the learning objectives. However, they seemed to be longing for something else when they worked online so that they could declare that it had been a successful learning experience, but they could not identify what it was (see 4.1.1).

In the last interviews of this study, learners had a clearer idea of their unfulfilled needs online. This was particularly the case of Grace's learners who displayed self-regulated learning behaviours forcing their teacher to become online visible. Despite the fact that the internet creates a reality of nowness and immediacy and other people, information and events are a click away (Stodel et al, 2006), learners missed the closeness to their teachers. One of Mark's learners described this closeness as "the warmth of my teacher" (see 4.2.1).

Learners needed the support and acceptance of their teachers, factors that according to the data collected, they did not receive. They missed feeling encouraged in their learning. They missed feeling the personal caring of their teachers, and their quick responses to their questions. Learners missed the sense of community between them and their teachers. Evidence showed that learners needed in the online component some of the interaction that they had in the classroom (see 4.1.2.3).

A number of researchers such as Cho & Kim (2013) and Garrison & Arbaugh (2007) found that interactions between learners and their teachers are essential to fostering positive learning experiences in learners. Kang & Im (2013) went even further in their studies and found that interaction besides being one of the most critical elements to impact learning, it also predicts the learners' learning outcomes in the online environment and their course satisfaction as well. In the present study, coincidences were found with Kang & Im's arguments (see 4.2.1).

Gedik et al (2013) in his study concluded that teachers need to build a new understanding of how to interact with their learners when working with technology; since teachers are responsible for the quality and efficacy of the interaction. Teachers have to be aware of their behaviours and their learners' responses to those behaviours. Inceelli & Candemor (2016) studied that nonverbal behaviours such as eye contact, smile, head movements, gestures, mimics; and verbal behaviours

such as calling learners by their name, using humor, praising a positive comment have a strong influence on learners' motivation. In addition, teacher's affinity with their learners creates engagement, since they share aims and interests, and learning is self-directed (Kenyon & Hase, 2010). The present study was not intended to be an intervention research, however, very interesting data were found when the researcher used her own way of teaching in the online environment. She modified the instructions of the online tasks of the core course to investigate whether the perception of her learners changed, and they became hyperaware of the online presence of their teacher (see 4.2.1).

Evidence collected in the present study, also reported that learners were not satisfied with the online feedback they received, for it was limited to one or two words, which did not improve their performance (see 4.1.3.1). They argued that in the classroom, they received instant feedback that guided their learning and made them feel they had better connections with their teachers. Hwang & Yang (2008), and more recently, O'Bannon et al (2013) found that classroom communication has more impact on the learner compared to online communication because teachers and learners are more skilled face-to-face, resulting in a better understanding of learners' attitudes. This reflects the finding in this study since the teachers were unaware of the impact they had in the online environment.

Scholars like O'Sullivan et al (2004) have argued that it is problematic for teachers and learners to establish positive relationships through computer mediated communications; the reason why Brooks et al's (2015) research, suggests that face-to-face interaction remains crucial for learning. In this regards, and to prevent these difficulties, a number of qualitative studies such as Gharacheh et al (2016) and Nanclares & Rodríguez (2016) have worked to build a conceptual framework, which is pedagogically sound and this includes the Community of Inquiry model that emphasises the importance of teacher-learner online interaction.

Extensive feedback seems to stimulate the learner's confidence since it uncovers the gaps of knowledge learners may have. Other researchers as Theile (2003) have considered shared timely and frequently feedback as one of the main contributors to learners learning on and off. For Bonnel (2008), feedback from teachers keep learners engaged and able to gain skills like auto-reflection, that they can apply in other contexts.

However, in this study learners repeatedly expressed their frustration in not receiving this feedback from their teachers online and that would be effective on encouraging them to keep working online because they would know their online performance is as valued as it is in face-to-face (see 4.1.3.1). This is also reported by Goldsmith (2014). They expected their teachers to also correct their mistakes online in a helpful manner (see also Zsohar & Smith, 2009) to direct their

work, to be informational and instructional; this is, in a corrective function as it is in face-to-face environments (Spink, 1997). But this was not a common occurrence.

Learners here felt that they could not establish a connection with their teachers due to the lack of proper feedback (see also Bonnel, 2008). Even more in some cases, they felt abandoned in the online course which resulted in learners also abandoning the course. Galicia, Mark's learner shared this thought during the second round of interviews:

"I feel that I work with no purpose when my teacher only writes "Completed homework", and I have skipped activities after this kind of feedback".

This lack of effective feedback to learners shows the need for new teaching skills in this area, as found in Makawa's study (2006) and Gore et al's intervention study (2017) which state that feedback is efficient when learners reflect and take an active role in their own learning interacting with the information provided by the teacher.

Despite some of the negative points made about the lack of teacher presence online, learners like the flexibility of their blended courses and they value choosing the time and place to learn (see 4.2.1). Also blended courses have provided additional chances to participate in other activities besides attending university. Learners confirmed that learning in the online component at home was comfortable, and safe especially for introverted learners (see 4.1.2.5). However, such flexibility might also cause online learners to feel less connected with their teachers according to Ladyszewsky (2013). Participant learners expressed their concerns that despite the affordances of technology, it will never be as good as being in the classroom. It was observed that their participation in the online component was rather low and did not meet the quality expected by their teachers (see 4.1.2.6).

It seems that learners in this context needed their teachers to better involve and engage them in the online component. Grace's learner commented in an interview:

"We do our homework on the platform and we know that our teacher will grade it without comments on the content. Sometimes I have questions to ask about the activity, but I don't ask them in class because the teacher never mentions the platform activities..."

(IL_Grace_ELT).

This finding aligned with RQ3 (see 5.1.1.3) is in agreement with the recommendation of Stewart et al (2011) that the teacher must accommodate instructional activities without assuming that pedagogical practices used in the classroom will function equally online. Findings from this study suggest that classroom instruction is the learner's ideal environment to learn because they have

immediate feedback from their teacher and receive personal support. Based on the findings of this case study, it can be concluded that facilitating feedback has significant effects in enhancing learners' engagement in the online environment.

According to Gore et al (2017), feedback is efficient when learners reflect and take an active role in their own learning interacting with the information provided by the teacher. Learners based on the evidence collected needed to feel that someone was "out there" interested in their learning, and they seemed to be truly motivated to work online only if they were able to perceive their teacher. My study reinforces the fact that instructional design practices enhance teacher credibility and teacher immediacy; as a result, learners seem to increase retention and learning (see 4.3). This conclusion is supported by recent research carried out by Dixon et al (2017) who argue that nonverbal communication and social presence into the online environment can be enhanced by instructional design. The study Brooks et al (2015) performed, precisely emphasises the need for examining in more detail teachers' communication behaviours and their impact on learners' feelings in online learning; since there seems to be a direct relationship between communication, emotion and learning outcomes. Learners seem to respond better in learning situations when they have a positive perception of their teacher in the online environment. These results are consistent with other research findings that conclude that the design of online courses could foster immediacy and lead to enhanced motivation and learning effectiveness (Frisby et al, 2013).

5.1.1.3 Teachers' roles in the learning process to support learners make sense of the blended course

One of the premises of the Community of Inquiry is the need to create a critical online community to promote high-order thinking skills in learners (Garrison et al, 2000, 2002). Through this model, Garrison et al, proposed three constructs or presences -social, cognitive and teaching presence- to help educators support critical thinking in higher education (see 2.3). Stodol et al (2006) suggested later that reflection and a skilled teacher are required to construct meaning in online learning environments.

This subsection answers the research question three as it explores how teachers support learners to make sense of the content of the blended course. It explains by what means teachers provide ways for learners to acquire content, process and make sense of ideas in this study:

3. What are the teachers' roles in managing the teaching and learning process using face-to-face and online teaching strategies to help learners make sense of the course and of the programme objectives for a meaningful approach to learning (DIRECT INSTRUCTION)?

The evidence collected by the researcher in personal interviews with teachers and in the asynchronous observations in the VLE (see 4.3.1) showed that teachers consider effective time and resources management one of their main roles. Also, other roles mentioned were the efficient implementation of teaching tools used to deliver the online course and methods of encouraging learners interactions.

According to Khan, et al (2017) a growing body of literature has shown that discussions are great opportunities to increase learner ownership and participation in the course. The findings of this study in regards to the role of the teacher in online discussions was unexpected, especially in regards to teachers from the English language teaching program who expressed particular ideas about the pedagogical skills that teachers should exhibit (see 4.1.2.1). In their interview, Grace and Morgan from the English programme claimed that there was a departmental agreement ‘from years ago’ not to participate in the discussion boards. They believed that learners would not express with freedom if they knew that their teachers were going to participate as well (see 4.2.2.1). This idea does not seem to have much foundation in the research literature. According to a number of researchers, learners expect to receive more than just feedback from their online teachers (Crisp & Bonk, 2018; Vesely et al, 2007). Learners expect their teachers will conduct class discussions and build a classroom community, as Vesely et al (2007) found in their study. Rasheed et al (2020) (see 2.2.6) reported in their systematic literature review that the challenges that exist in the online component of blended learning have a greater impact on teachers, and they are related to the use of technology for teaching.

The amount of interactions in a course appears to be a pivotal constituent of course effectiveness. Dzuiban et al (2005) concluded that effective online teaching entail high levels of teacher-learner interaction, and learner-learner interaction. Rovai & Barnum (2007) found that a course that promotes interactions predicts successful learning. Moreover, researchers like Ellis et al (2009) and Swan et al (2005) found a strong correlation between the teacher’s and the learner’s number of online responses made.

In the blended learning courses analysed, the primary form of online communication was asynchronous (scheduled activities and one or two discussion boards per course). There was no evidence of synchronous communications like chatrooms. For some learners, as for one of Morgan’s learners, discussion boards were more spaces for reporting than for discussing topics:

“Los profesores preguntan siempre lo mismo en un foro: publique su comentario y comente el comentario de otra persona; entonces alguien repitió lo que dijiste en otras palabras y eso fue todo” “Teachers ask always the same in a forum: post your comment and comment on

someone else's comment; then someone repeated what you said in other words and that was it" (LI_Morgan translated).

The discussion boards the researcher was able to read and analyse were used as a means of "reporting in" (Stodol et al, 2006) rather than as a medium for discussion. For Pilar, Morgan's learner, the way discussion boards were handled was even repetitive and boring, as she expressed to the researcher:

"All the forums are the same, and I feel my classmates don't make any effort in their answers; teachers just check if you commented on other's posts to grade you"

(Morgan_Pilar_Lsl).

Ginns & Piggott's (2009) study that explores how e-learning is used to support the face-to-face experience, had similar findings in regards to the interaction between learner and teacher which is seen as part of the construct of teaching presence. In order for learners to value the interaction with the teacher or with other learners, it is seen as necessary that teachers start some awareness raising as a teaching strategy to unlock the value of online interactions. This clearly has not happened for the teachers in this study. Learners' characteristics and perceptions about their learning have a great impact on the effectiveness of online discussions. Learners lacking experience with online discussions have reported a less satisfactory learning experience according to Cho & Tobias (2016). The present study confirms the relevant role of teachers in providing a proper orientation about how to participate and use online discussions. Once more, this verifies the richness of integrating the face-to-face work with the online work in order to offer a mix of ways to involve most learners, as the results of this study showed. Those who learn or process information by talking to others and enjoy the "give-and-take" of the face-to face setting; and those who require reflection to learn or to elaborate and answer (Meyer, 2003, p. 62). This was not something that the English department in this study had taken into account. They did not change their perspective or showed any interest in reconsidering their position towards their null participation in online discussion not even after sharing with these ELT teachers empirical evidence that proved that the role of the teachers is critical in online discussion because they promote and facilitate the discussion.

Given the evolution and flux in the behaviours and attitudes observed during this longitudinal study and after revising the literature in this regards, the researcher considers that for the most part both teachers and learners were in the beginning stages of understanding how efficient online communication could be and the value of working with technology (cf. Holt & Palmer, 2014). In the case of the research site, any change in practice has been initiated by the learners themselves. Lonn & Teasley (2009) concluded that whilst learners fail to see the relevance of these

interactive tools for their learning, they, like their teachers, will continue to view the use of the VLE as a quick and accessible means to retrieve course documents and get messages from their teachers.

5.1.1.4 Role of the teacher in helping learners co-construct the virtual and classroom environments

The traditional ideas about teaching have to be questioned to build a new paradigm about the transformative potential of blended learning (Motteram, 2009). Unintentionally, this may be what teaching in times of the COVID-19 pandemic has forced many teachers to do. Teachers and their trainers need to make reasoned choices about their teaching to develop their awareness of current thinking in the area of technology and perhaps revisit their assumptions about teaching.

This subsection discusses the research question four as it discusses teacher education in support of helping learners be aware of their role in blended learning environments:

4. How do learners understand their role in the teaching in blended learning both, face-to-face and in the VLE for a meaningful educational experience?

In the evidence collected in this study, learners showed not to recognize which was their role in blended environments. Learners were positive about blended learning; however, they did not acknowledge the interdependencies between face-to-face learning and the VLE. The findings did not show any behaviour in learners that could indicate that they had an active and participatory role as actors and co-constructors of the virtual space. Also there is not any evidence that learners contribute with their inputs to increase knowledge and to strengthen the links among all the participants of the course. Learners seemed not be aware that the success of blended learning requires learners to be more accountable for their actions (Huang, 2016).

In the face-to-face classroom, the teacher directs instruction, asks questions and sets the pace of the class; but in the virtual classroom, the center is the learners and it is required another role of the teacher that emphasizes the learner's own intellectual process and collaborative learning (Harasim, 2000). According to Silva (2010) the role of the teacher is critical to the successful experiences using VLEs, who starts being the transmitter, later the facilitator and lastly the guide through the constructor of meaning, which is the result of individual development and social interaction.

In a constructivist-learning environment (see 2.2.8) a meaningful teacher encourages learners by analysing their performances, stimulating reflection and articulation on the learned material

(Jonassen, 2000). Silva (2010). Researchers such as Kurek & Müller-Hartmann (2019) support the fact that teachers working in blended environments must be equipped with adequate and new teaching competencies to assist learners to have a positive learning experience. They believe that teachers by being self-reflective can understand and possibly change their teaching practices and impact learners' online work by modeling online working competencies.

In the context of teacher preparation, staff development includes activities that are designed to support and give new skills to teachers in the different roles they perform in blended learning environments. The teachers who participated in this study have at least ten years of teaching experience, and they have been trying to develop their knowledge in their fields, as well as to acquire a new skillset to work in blended environments. However, this interrelationship between knowledge and skills need to be reflected in a different order of ideas to compare how their teaching presence has evolved. Teachers as shown in this study need to develop a greater sense of efficacy to solve problems of their teaching and connect it to the knowledge they receive about blended learning. To accomplish this, universities need structures and practices that allow staff to develop expertise about teaching and learning in blended learning environments.

As found by Garrison & Vaughan (2013) in their case studies, staff development can also be used as a tool to engage teachers in the process of institutional change associated with blended learning. They found that leader teachers collaboratively create strategic direction and commitment to implement and sustain action plans, as blended learning innovation does demand. In this regard, before the research site embarked on this change, all the full time teachers were required to participate in a faculty development program that had a module on the use of ICT. The aim of this program was not only to empower teachers in the use of ICT, but also to promote a self-reflection and self-awareness of the impact technology has in learners' learning.

Researchers advocate teaching and learning with a blended approach. Nonetheless, the dynamics of teaching changes and issues occur when teachers migrate from a face-to face teaching to a blended teaching mode (Garrison & Kanuka, 2014; Oh & Park, 2009) as this study has shown. This has resulted in a new understanding of the skills that are central to teaching across the two environments and universities need to take this into account in their strategic planning. In the study of Mendieta & Barkhuizen (2020) findings indicate that changing to a blended learning approach involves not only getting the exact blend, but also considering institutional factors that come to shape teachers' implementation experiences. Depending on how aligned their aspirations and behaviours are to the organisation, teachers can find it more or less complex to assimilate the change and serve as a modelling actor to strengthen learners' belonging to a blended learning community.

A study conducted by Motteram (2005) demonstrated how blended learning can play a role in helping teachers teach in blended environments. Building on the knowledge and experience gained during their own learning, teachers in this study were able to take ideas from courses they had taken in order to teach their own learners. Motteram (2005) sees this process as a balance of knowledge, skills and reflection.

Researchers have concluded that teacher attributes pave the way to teaching quality having a positive impact on student academic achievement (Raza, 2014; Clotfelter, Ladd, & Vigdor, 2007). It seems that teaching presence is much more than managing the learning process. As Grace commented “*we need training in advanced content to fully exploit the potential of the platform tools*”. This reflects the need to receive training in online teaching that is not just a review of the use of the interface to the course management system, or the instructions for uploading or posting materials to the course. The teaching education program needs more than just technical tools to participate in online discussions, or the technical creation of online assessments, although the technical components of online teaching are necessary it seems that they are not enough to sustain quality in the development of online learning environments. This study has found that teachers need to gain more understanding of the pedagogy of online learning to compensate for the lack of physical presence in an online environment. Since blended learning uses online instructional technology, better understanding of its strengths and weaknesses are needed to turn this environment into an effective instructional tool.

Chang et al (2012), and Wilhelmsen et al (2009) point out that teacher education programmes are commonly criticized for their failure to provide teachers with the necessary experiences on how to use educational technologies in their teaching practice, and for not focusing sufficiently on developing teachers’ digital competence (Wilhelmsen et al, 2009). In addition, evidence collected in this study showed that there is still a low level of acceptance of online education which means that teachers still have a barrier towards adopting online instruction. In this study only Grace recognises that her knowledge of online instructional strategies is not enough to become an effective online teacher. These findings echoed with Fernández (2020) who found that the lack of knowledge of easy-to-use online resources constitutes a barrier in the use of ICT, as well as the issues that teachers still face when using technology have to do with the lack of technical support. This gap in technology-related skills necessary to teach and learn according to Fernández (2020) makes it necessary for the elaboration of programs for continuing professional development to enable teachers to be up-to-date. Researchers like Gagne and Walters (2009) suggest that this lack of acceptance is related to the increased amount of work online instruction entails and the different kinds of activities teachers have to perform compared to face-to-face instruction.

However, other researchers like Andersen & Avery (2008) report in their study that there is no difference between the workloads and time required to teach online or face-to-face.

Online instruction is like working in constant motion. Staff participants at the case study university feel it is hard to keep up with technology, and to deal with ever-newer resources that they only vaguely know how to use properly and vaguely know the effect that they have on their learners. In fact, some ELT teachers left the program because of the adoption of the blended approach and instead they are teaching English courses in institutions where classes are delivered face-to-face.

The results of this study have shown two different experiences of teachers learning and growing in their journey as teachers using technology. In Grace's case, she is still learning to pave her way through online instruction, and in Lee's case he has moved towards efficient online learning using his ideas about education to connect his classroom with online instruction. Lee has understood and accepted quickly that teaching in blended learning involves a shift of roles that is continuously developing in a blended learning course, from being the centre of attention in the face-to-face classroom to being the designer and facilitator in the online environment in order to build an online experience.

The purpose of this last discussion area has been to explore the issues raised in order to find a way to encourage the making of decisions based upon the data that has emerged in order to enhance the educational experience. The attractiveness of blended learning is not just in terms of improved effectiveness and efficiency, but it is also because it opens up access to aspects of the academy that have never been explored.

5.1.1.5 Blending face-to-face and online components through teaching presence

Beetham (2012) and many other researchers and educators such as Kola & Ayinde (2015) and King & South (2017) concur that technology should be at the service of effective learning. However, there is a lot that educators have to rethink to consider technology pedagogically effective (Beetham, 2012).

This subsection of the chapter presents a discussion of the answer to research questions five as it explores the ways in which learners understand their interaction with the teaching presence construct in the online environment and how supportive it can be to their learning process:

5. How do learners perceive teaching presence in the VLE as a support for their learning process?

Learners in this study reported that they perceived lower levels of teaching presence in the VLE than in the face-to-face component of their blended courses. The feeling that their teacher is

there with them is experienced only in the classroom not online (see 4.1.3.1). This absence perceived online did not facilitate their engagement as online learners, and the integration of the VLE and the classroom component.

Learners do not experience continuity and wholeness in their blended learning courses (see 5.1). They mostly do not see that elements of the online component and the classroom component fit together in a way that each one adds strength and reinforces the other. This lack of continuity prevents learners from perceiving teaching presence in their blended courses as a whole.

The results are supportive of the importance of teaching presence and the impact it has on students' satisfaction in blended learning environments. Researchers such as Dhawan (2020) and Draling-Hammond et al (2020) who support specific teacher's behaviours for a meaningful educational experience, reinforce the need for integrated, guided and purposeful interaction in the online and classroom learning. This is, teaching presence can be strengthened on the level of interpersonal interaction through the modification of the design and organisation (see 2.3.3.1) of the VLE (Kurek & Müller-Hartmann, 2019). Also, through the dimension of direct instruction (2.3.3.3) teaching presence is used to enhance self- and co-regulation to help learners handle the challenges of the different methodological approaches.

Rasheed (2020) highlights the need for purposeful teaching learning techniques to bridge the perceived physical and psychological gap between teachers and students in blended learning environments. To alleviate this frustration and dissatisfaction associated with lack of continuity, it seems that institutions need to carefully allocate face-to-face and the VLE hours so as not to overwhelm teachers and learners at least in the first instance. To do so, Bates (2005) identifies two key questions concerning the blend in both environments, "what is educationally advantageous in face-to-face teaching, and "when can face-to-face be replaced with gain or without loss by online teaching" (p. 136). Also, quality dialogue and quality interaction, it is argued, are necessary to allow a better communication in order to create a meaningful learning experience. Gedik et al (2013) in his studies concluded that teachers need to purposefully interact with their learners with a new understanding of how to work with technology.

According to Avgerineu & Anderson (2007) working in blended learning environments demands that teachers develop technologically-based pedagogies that utilises asynchronous learning to enhance student learning. This is, successful blending requires an understanding of the pedagogical attributes and affordances of emerging learning technologies, the most desirable aspects of face-to-face teaching and the ways in which these aspects can be properly integrated into the VLE. King & South (2017) found that the number of roles is reduced when technology is integrated into the curriculum. Gilbert (2015) identified delayed feedback as an online learning

limitation, since this environment does not provide sufficient opportunities for social interaction. As a result, online learning tends to create a sense of separation between learners and teachers (Hodges et al, 2020).

The data from this study shows that these issues need to be overcome by teachers purposefully supporting and encouraging engagement, interactions among learners and with teachers and learning (see 2.2.7). Blended learners in this study said that they would benefit from teachers that facilitate course activities and resources, and direct instruction intentionally designed to integrate the two components of a blended course.

As far as the current study is concerned, the results suggested that there is a need for integrating the VLE and the classroom component. Empirical data has shown learners often feel a disconnection between the online and the classroom environments; yet both environments are perceived as separated. And this separation often reduces participation, learning outcomes and in some cases, retention (Ladyshevsky & Pettapiece, 2015).

The experiences teachers shared with the researcher are evidence of the need for research about faculty teaching in blended environments. Teachers require the proper training on how to adapt pedagogy to the technology they use in their blended courses to establish teaching presence online (Rhen et al, 2016) and to offer equivalent learning experiences both in the classroom and online (Bower et al, 2015); as well as to interact and discuss with their learners in both components to learn from each other (Anastasiades et al, 2010). While learners do not know which pedagogical tools might best serve their learning this is still an important factor in their satisfaction. This discussion has identified issues that can continue to be reflected and explored since there are clearly no quick solutions to fix them.

Chapter 6 Conclusions

In this final chapter, the research study is reviewed from its early stage through the collection of data, reaching at a summary of the findings. Reflection on teaching presence and on the findings and the contribution to research in the area of blended learning are also presented. Finally, this chapter describes the limitations of this study and makes concluding comments for further research.

6.1 Reflections about teaching presence and the implementation and use of the VLE based on the results

Seven years after having launched the first blended learning courses, there is evidence of the transition process of the university. In many ways, the institutional policy has been successful. Perhaps the most important sign of advancement in this transition is the fact that the new academic programs recently opened at the university are teaching under the same blended learning approach. The update and redesign of all the programs of the university planned for the 2020 are also contemplating blended learning as the delivery modality. Both academics and learners have been receptive to blended learning; although there is clear evidence collected, and presented by the researcher that indicates there is not yet a clear understanding for some teachers or for some learners about the nature of teaching presence in blended learning environments.

Lee and Grace's example is useful to highlight what is happening with teaching presence in this transition. Some teachers like Lee, teach with confidence in blended learning, and are also exploring innovative ways to enhance their learners' learning experiences. Lee mentioned that redesigning his courses has always given him the certainty of delivering a meaningful online learning experience. The other group of teachers, like Grace (see 4.3.2), are building their teaching skills in the best ways they can manage to teach their learners online. Learners generally have a positive experience in blended learning; however, they still perceive a disconnection between their face-to-face class and their online class.

The blended learning approach at the university still aims to improve people's access to education, benefiting learners that find it difficult to attend classes in a full shift. The population of the university has been doubled without adding new facilities and this was possible through blended learning. At the outset, attending fewer class hours was difficult for learners; even parents contacted the university to complain their children were having too much "free time" as

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parents said. For the whole university community getting used to the way the schedule looked like represented a challenge. For learners and their parents, online hours meant free time. Now, more learners are taking advantage of the flexibility of online environment.

The new modality transformed the conventional structures of delivery at the university. This change fits into what Alammery et al (2014) call *high impact blend*, a redesign of the units of the course where its interaction, assessment, activities and content incorporated digital technology. Nonetheless, the integration of the online with the classroom environments is still troubled (see 4.1.1). Consequently, evidence provided points out that the evolution toward blended teaching is in its early to mid-stage.

My findings indicate that according to the blend used at the institution where this study was held, it would be beneficial for teachers to receive academic course design support, and technical and personal support to enhance their teaching presence handle the VLE (see 1.4). The developer staff provided teachers with some important teaching tools in preparation to adopting the blended approach, but now those tools have to be renovated.

The administration organised monthly sessions with teachers to provide feedback related to their teaching experience in blended learning environments. One of the common questions in those meetings was the definition of blended learning and how it contributed to the learning process of the university learners. According to the research of McGee (2014) it is very important for an institution to provide teachers with a definition of blended learning, thus teachers can have clearer objectives. We missed involuntarily to provide teachers with a working definition of the blended learning approach used; the staff was unaware of its importance. After seven years and according to my results, some teachers like Lee are aware that for the whole learning experience part of it happens in the classroom and the other part happens online.

The developer staff rather focussed on the design of the online core courses, and invested a great deal of resources to deliver to their teachers more than twenty online design courses. The institution provided guidelines to academics related to the basic elements of the courses online. The designer of the core course was the most experienced teacher in the subject; and his course design was duplicated to be used by all the teachers that taught the same subject. The institution supported enthusiastically these academics, they were even given some privileges for being the designers of the online core course; for example, they were not required to teach summer courses.

At the beginning, this design arrangement seemed to work for the institution. Teachers were reusing the courses without any redesign. Some novice teachers in the use of digital technologies

felt less overwhelmed recycling a course since the management was easier. Teaching online turned into opening and closing activities and checking who delivered them or not.

The teacher preparation program at the university, now I see, separated pedagogical instruction from technology training. The developers of the online course were the teachers that received course design instruction, the rest of the faculty received technical training to manage the online course. However, none received knowledge on how to deliver a blended course. Teachers need to be engaged in their blended learning course to have an efficient online teaching presence and to provide a meaningful blended learning experience to their learners.

Moreover, understanding blended learning certainly requires some knowledge around course design. Currently at the university, teachers that do not have a strong teaching presence online need to feel enabled to redesign the course they receive to teach, otherwise they will continue lacking ownership of the online component, the VLE. The researcher collected evidence showing that teachers who adjust the VLE to their needs, are able to blend the face-to-face and the online components successfully.

There is a gap between the design and the course implementation that was not anticipated. As a researcher, staff of the developer team and now as a teacher in the English Language Teaching program, I have evidence to say that it is necessary for future teachers to live the experience of blended learning as learners to be able to provide a meaningful blended learning experience as teachers. This is, if teachers live the experience as teachers-as-a student of a blended course, the study and reflection upon it, will make they gain knowledge to understand the benefits and the challenges of teaching in blended learning environments.

6.2 Teaching presence and its impact on the VLE

At the case study university, blended learning courses were planned as a cost-effective means of increasing access to higher education. Nonetheless, while technology has been found to facilitate ease of access to more learners at the same time there has turned out to be a persistent digital divide for teachers between both environments, the online and the face-to-face.

The purpose of this study was to examine the role of the teacher and the perceptions of the learners through an analysis of teaching presence in blended learning environments both in-person and online using an online learning environment, and to understand how teachers and learners make sense of that blend. The lens of the Community of Inquiry was used to examine and analyse the teaching presence component, and for this case study, the CoI turned to be a useful tool to be employed in the higher education context as a meaningful guide to study

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teaching presence and for the design and delivery of blended courses as well. The teaching presence categories and subcategories of the Community of Inquiry model are useful to build teaching presence in the course design and organisation, instruction and direction of activities in blended courses as well as to keep learners engaged in the blended learning experience. The knowledge gained from this study can be applied to assist teachers, researchers, instructional designers and administrators to assess and build teaching presence in blended learning environments

In the research site, the university policy started as a top-down initiative from the central administration that allocated a significant investment in providing its faculty with the resources they needed to face the change. The researcher as part of the developer staff (see 3.4) was assigned to lead the team of experts that worked with the full-time teachers of the university to help them transit smoothly into the blended learning environment.

As part of the developer staff of *Modalidad 2012* one of my recurring thoughts was the extent in which we were able to support and prepare teachers to become confident users of blended learning. Questions around what else we could have done for the teachers' empowerment, or what we missed and affected their teaching were all the time in my mind. Now, after conducting this research, collecting data and presenting the results I have a better understanding of the duties the administration has and the duties teachers have to gain the knowledge needed to feel confident teaching in blended environments.

Switching to a blended learning modality is a complex enterprise that goes beyond mixing the face-to-face and the online environments especially if the change is not voluntary (Mendieta & Barkhuizen, 2020). According to Moskal et al (2013) a successful blended learning approach that benefits teachers and learners, is achieved when an institution, faculty and learners share their goals. This study highlights the importance of considering new ways in which teachers can perform their professional identity and develop ownership of their practice while institutional policies lead to the implementation of blended learning. Shelley et al (2013) (see 2.2.6) claim that the switch to blended environments has the potential to affect teachers both cognitively and emotionally, since the change impacts their identity as teachers and their beliefs about pedagogy. The ELT teachers were always reluctant to the adoption of blended learning, since they consider that the English Language Teaching program requires to be delivered entirely face-to-face with just little online work (see 4.1.1.1). This attitude towards change has meant a barrier to advance in the efficient development of their teaching presence in their blended courses. Mendieta & Barkhuizen (2020) concluded that teachers who do not believe in the value of online activities will be less motivated to implement it, as the perceived benefits would not outweigh the effort, time

and risk involved for themselves and their learners. According to Shelley et al (2013) (see 2.2.6), teachers' ability to deal with negative emotions related to the adoption of new pedagogies can have an impact on their sense of ownership of the change.

Findings suggest that teaching in blended learning environments requires different pedagogical approaches and methodologies than teaching on a single environment either face-to-face or online. These are methodologies and pedagogies that change according to the unique needs of learners, maximizing the benefits of both face-to-face and online methods, using the internet for what it does best and using class time for what it does best. These approaches include also learner-centred learning theories that can help learners progress through the process of deep learning (Garrison & Vaughan, 2013). Nevertheless, faculty needs to be willing to experiment and change their pedagogy accordingly in response to the transitioning digital higher education environment. The level of teachers' preparation influences the quality of the learning experience. Teaching presence is essential to achieve learning goals, learner and teacher satisfaction and persistence online, and to improve the perception of quality in the online environment (Garrison et al, 2000; Stavredes, 2010). Understanding how to be present with students online can influence the perception of a quality educational experience for both teachers and students.

Teachers have become one of the key factors for this institutional change towards a pedagogical model supported by technology. The new educational models have defined the active and agentic role of teachers as change agents in professional development, institutional reform and institutional improvement (Imants & Van der Wal (2020). The data from this study showed that learners' needs and perceptions have increased the awareness in their teachers to rethink their teaching presence behaviours especially in the online environment (see 5.1). This evidence challenged the most generally accepted ideas that teachers find motivation to change their methods after receiving formal training. Training makes teachers feel more confident in facilitating learning, it would seem, but the real change in their teaching pedagogies to support their learners' needs may be part of those faculty experiences of online teaching that are still to be understood and explored.

Through teaching presence behaviours, learners receive guidance in the process of building knowledge, encourage collaborative learning, and can reduce learners' sense of isolation offering social and emotional support to those learners who lack confidence (Cleveland-Innes & Campbell, 2012). However, it is first necessary to understand how learners and teachers perceive teaching presence and its associated behaviours to prepare faculty to teach in blended learning environments. Evidence collected in this study suggests that teachers have not reflected sufficiently about their level of teaching presence to be able to improve it. Traditional methods

that used to prepare teachers are now insufficient and inappropriate to help teachers teach in blended learning environments (Alammary et al, 2014). This study supports the fact that teaching in blended environments requires different approaches than teaching face-to-face and online. Teachers that perceive themselves as expert teachers in face-to-face environments, often believed that they could transfer their skills to online environments and become expert online teachers as well (Rapanta et al, 2020). Except for Grace, this was the case of the other three participant teachers, who never mentioned in any interview or in their journals that they needed training to enhance their teaching in their blended learning courses.

The data from this study showed that teachers needed to reconceptualise their teaching role in their transition to teach in blended learning environments, and receive specific preparation for this modality (see 5.1); yet this preparation was found to be lacking. According to Gurley (2018) it has been demonstrated the importance of preparation to teach in blended learning environments through assessing faculty's perceived level of teaching expertise in online environments. When teachers realise about their level of teaching presence, they are able to reconceptualise their role, rethink and redesign their teaching practice in order to teach efficiently in blended learning environments. They move forward into their teaching and exhibit teaching behaviours that are perceived by their learners as a sign of teaching presence. Interviews and asynchronous observations from this study showed that this was the case of Grace, who became more aware of her own level of teaching presence as the study went by, and at the end of the study, she seemed to have identified how relevant it is for a teacher to be present with learners. Grace suffered tensions that are natural to the process of change; however, in her case, she used her issues as a catalysis that lead her teaching presence development through reflection.

In the first stages of this study, teachers expected administrators to provide support and teaching development programmes not only to use technology properly but also pedagogical strategies that will help them to incorporate technology in their teaching. Later, learners' pressure expressed in different ways, ignited behaviours in their teachers leading to a perceived teaching presence. These findings support the need of teacher development programmes to teach faculty how to establish their presence in blended learning environments so learners do not feel they work with two different teachers and two different courses. Findings uncovered a lack of connection between the face-to-face component and the online component due to low levels of teaching presence especially online.

Learners in this study described very accurately how visible or invisible a teacher can be online. When learners could not feel the presence of their teacher online, this caused learner-related issues that impacted the confidence of the teacher and also caused institution-related issues that

according to evidence, had serious consequences in the teachers' evaluation. This evaluation is one of the principal tools the institution uses to measure faculty's productive levels. Findings suggest that the instructional efforts and teaching presence very often occurred outside the online environments, during informal communications that were imperceptible for learners. This is why there is a need to explore faculty perceptions of their teaching presence to determine when and where these instructional efforts take place.

6.3 Building teaching presence in blended learning environments

Findings indicate that teachers are transitioning from a face-to-face learning to a blended learning environment, and this transition entails an institutional change where administrators, teachers and learners are facing a challenge. This change must be understood to fix the gaps that affect teaching presence and to support faculty development programmes to teach in blended learning environments.

Evidence showed the relevance of the course design process to establish teaching presence. Teachers that taught a blended course reusing a master or a core online course without redesigning it, must know that it caused a feeling of disconnection in their learners (see 5.1). Although the opportunities to receive support to teach in blended learning environments were always available, these were often limited to only learning how to use the interface of the LMS. This study shows that faculty development programmes are needed to support teachers that are involved in the design or in the teaching of a blended learning course. Before implementing these support programmes, administrators need to assess the needs of faculty teaching blended learning courses, and then provide the support to meet those needs. This study revealed a positive correlation between teachers' perceived teaching presence and the feeling of preparedness to teach in blended learning environments. However, it is important to note that only Grace reported the need to receive training to work in blended environments. Gurley (2018) points out that there is a statistically significant difference between perceived teaching presence for faculty that completed certification courses in preparation to teach in blended learning environments, as compared to faculty that only received on-the-job training. In addition, the development of these skills to teach in blended environments according to Geng et al (2019) may be beneficial to creating presence online, especially when it comes to encouraging students to become more self-directed learners.

The study supports the fact that teaching presence is built on good interaction between the teacher and the learner. Learners transformed their feelings of isolation and helplessness into a sense of self-efficacy when their teacher displayed teaching presence behaviours. The presence of

the teacher was important to provide feedback, which reinforced the learning process of many learners. This study also proved that when teachers monitored their learners they became more independent learners. Face-to-face interactions were a common practice among the participant teachers; however, in the online environment, it was difficult for teachers to adjust feedback to each learner and guide them to develop learning strategies. Online activities were usually perceived as one-size-fits-all activities especially for learners that feel isolated in the online component. Moreover, when teachers planned online activities that demanded higher-order thinking skills, learners easily confused “getting the answer from the teacher” which is what they usually expect, with “building the answer with the teacher’s guidance” which is what happens online, situation that often confuses and discourages learners. For the participant learners, it was not easy to find their teacher’s teaching presence displayed in the design of those activities (learners were not able to identify their teacher presence in the online activity) but learners wanted their teacher to support them when they had difficulty coping with tough online tasks.

The study showed three principal areas that exposed lack of teaching presence, a feeling of disconnection between the face-to-face and the online component, problems in understanding instructional goal online, and the lack of real-time and meaningful feedback. This study found that learners value many actions, attributes, behaviours in general, of their teachers and develop the perception of their teaching presence. Teachers that were receptive to their learners’ voices faced the need to enable the integration of the environments of their blended courses where learners were looking forward to finding support and care from their teachers.

6.4 Institutional change

The word innovation in higher education suggests the inclusion of technology and change. At the time the Rector indicated in the research site the implementation of the blended learning approach, his closest staff members were surely foreseeing the daunting road ahead of us, for higher education institutions are notorious resisters to innovation (Mendieta & Barkhuizen, 2020). For this reason, the adoption of a transformational approach as blended learning demands clear organisational goals, strong leadership, and sustained commitment (Garrison & Vaughan, 2013). According to the stages proposed by Graham, Woodfield, and Harrison (2013) in their framework for institutional adoption and implementation of blended learning in higher education, the research site is in stage 2, adoption/early implementation; and according to the evidence collected, there is still too little evidence of critical self-reflection needed to bring about the required organisational change to stage 3, an enhanced blended learning environment.

Most of the staff that took part of the change had been working at the university for more than 20 years and they knew how their faculty and how the different areas of the university will react. I remember it was November 2011 when we had our first meeting and after it we found enthusiasm in the fact that we were the first university nationwide to implement a blended learning approach in all its academic programs and in all its campuses.

Early adopters of technology may not experience the rush towards teaching with technology, but there is the case of traditional teachers who may discover that using technology is more satisfying and rewarding than they have ever anticipated. Additionally, blended course development can provide compounding dividends for the institution, such as increasing its overall student population by maximising its physical classroom space, which means a significant resource-saving as no extra buildings are needed (Stein, 2014). Teachers who redesign and teach blended courses can serve as mentors or advisers to other teachers, which can lead to sharing of innovative practices across campus. All of this can add to the institution's body of knowledge and experience supporting good practices in teaching and learning. And, by growing blended courses, an institution may increase its attractiveness to students who increasingly favour blended and online modes.

6.5 Contributions and implications of this study

The results of this study contribute to the body of knowledge of teaching presence in the Community of Inquiry model, which as Lambert & Fisher (2013) said, supports and encourages higher levels of inquiry and meaningful collaboration within the online learning environment. Thus in the light of the literature and these results, the researcher recommends the addition of a fourth category to the construct of Teaching Presence of the Community of Inquiry model to integrate and reinforce one modality in the other. This category should be explicit in making the connection between both environments by acknowledging and extending the interaction in each to create a model specific for blended learning that actually blends the best of face-to-face and online learning. The real test of blended learning is the effective integration of face-to-face and online components so that the latter is not simply adding on to the "existing dominant approach" (Garrison, 2004).

We cannot assume that the mere existence of e-learning activities and materials supporting a face-to-face experience of learning will improve the quality of the experience and create a blended learning environment. How students perceive and use the activities and materials designed, facilitated and directed by teachers is one of the key aspects to unlocking the value of blended learning in the student learning experience in higher education.

It is intended that the addition of a fourth category suggested can advance the progress of assessing and building teaching presence in blended learning environments and respond to the needs identified in the literature. This study has generated evidence that demonstrates its potential use across an institution given the importance blended learning has in higher education institutions.


With a global health crisis going on, it is natural to focus on the present but as the world begins to feel the relief of the emergent measures against Covid-19 and moves into “normal” again, blended learning that has been pushed forward in schools worldwide, offers teachers and learners an alternative to create an enabling environment for learning with technology. Through blended learning, educators, parents and learners have understood that schools are not the only place where learning can happen. Blended learning could offer the first steps towards an ICT-based education reform.

6.6 Limitations of this study and concluding comments for further research

This longitudinal study has allowed the researcher to see the changes in the behaviours of teachers and learners, users of blended learning courses, and the institutional change that needs to happen. The data collected in the surveys, the personal interviews, the synchronous and asynchronous observations, and the focus groups indicated that there is need for a reconceptualisation and reorganisation of the teaching and learning. In addition, teachers and learners need to reflect in the betterment of their own growth in the use of technology.

The limitations of this study suggest some important directions for further research. First, future research should explore the possibility of course design as a mediating factor for the betterment of teaching presence. Next, this study identified how teachers project their presence and the way it is perceived by learners; but further research should consider how teachers perceive their teaching presence and should identify the extent to which the teachers’ perceptions coincide with their behaviours. Future research should also seek to identify the learners’ perceptions and attitudes toward teaching presence to the extent to which it impacts their perceived or actual learning and possibly allowing teacher leaders and administrators to determine ideal profiles.

Appendix A Example of Didactic Sequence

Universidad Estatal de Sonora Secuencia Didáctica 	
Course: English for Academic Purposes Clave: AE104C1	Classroom hours: 2
Antecedent: None	Online Hours: 2
Competence of the area: Design educational plans and programmes for teaching English for specific and academic purposes, considering the pedagogical models and practices for teaching English in accordance with the standards framed in the competency-based learning models.	Competence of the course: Design a programme of teaching English for academic purposes that develops in higher education students the linguistic and cultural skills necessary to participate in academic and cultural contexts based on the Common European Framework of Reference for Languages.
Elements of competence:	
<ol style="list-style-type: none"> 1. 1. Examine the four elements present in an EAP course to learn how to integrate them into its design; Analysis of student needs, assessment of language proficiency, contemporary methodologies and techniques in the learning-teaching process, and development of materials that adapt to the contexts and needs of the students; and evaluation of the materials, based on the standards of the Quality Assurance Agency for Higher Education (QAA). 2. 2. Carry out an analysis of the student's linguistic and cultural needs to apply the learning-teaching methodologies and techniques and prepare materials that develop in higher education students the linguistic and cultural skills necessary to participate in academic and cultural contexts based on the standards of the Common European Framework of Reference for Languages. 3. 3. Establish evaluation methods of the EAP course based on the standards of the Common European Framework of Reference for Languages, to increase its efficiency and effectiveness. 	
Profile of the Teacher :	
Master's Degree in English Language Teaching, or in some other related area, with a minimum teaching experience of 2 years in any of the mentioned areas. Evaluate teaching and learning processes with a formative approach, with an attitude	

of change to pedagogical innovations. Build environments for autonomous and collaborative learning. C1 competence according to the European Reference Framework.	
Mtra. Emma Lilia Fierros Pesqueira	June 2017
Revised:	
Updated:	
Authorised:	
<p>Element of competence 1: Examine the four elements present in an EAP course to learn how to integrate them into its design: Analysis of student needs, assessment of language proficiency, contemporary methodologies and techniques in the learning-teaching process, and development of materials that adapt to the contexts and needs of the students; and evaluation of the materials, based on the standards of the Quality Assurance Agency for Higher Education (QAA).</p>	
<p>EC1 Phase I: Needs analysis.</p> <p>Content: Information gathering activities that will serve as the basis for the design of an EAP course that meets the learning needs of students.</p>	
<p>EC1 F1 Learning activity 1:</p> <p>Introduction to SD course and review</p> <p>The facilitator welcomes students and exposes the generalities of an EAP course.</p> <p>The didactic sequence of the course and the rubric of values are reviewed</p> <p>1 hr</p>	<p>Type of activity:</p> <p>Classroom (X) Platform ()</p> <p>Group () Individual () Team ()</p> <p>Resources:</p> <p>Didactic sequence and rubric of values (Available on platform)</p> <p>Activity evaluation criteria:</p> <p>Active listening and participation</p>
<p>EC1 F1 Learning Activity 2:</p> <p>Round table</p> <p>Students in the brainstorming will identify in the target participants the needs of the language and academic skills, as well as any other contextual factor that has an impact on decisions in the design of an EAP course.</p> <p>The triggering question is What tasks will non-native students find in university classrooms and what skills</p>	<p>Type of activity:</p> <p>Classroom (X) Platform ()</p> <p>Group (X) Individual () Team ()</p> <p>Resources:</p> <p>Based on their own experience, draw on their prior knowledge of the needs of non-native language higher education students in an English-speaking context</p>

<p>do they need to develop to successfully complete them?</p> <p>With the shared information, students create a synthetic table.1 hr</p>	<p>Activity evaluation criteria: Round table rubric</p>
<p>EC1 F1 Learning Activity 3:</p> <p>Class notes</p> <p>The teacher introduces the topic of Student Needs Analysis, point number one in the design of an EAP course.</p> <p>Students take note of what the teacher has said.</p> <p>The teacher also explains the dynamics of the field research they will carry out.1 hr</p>	<p>Type of activity: Classroom (X) Platform () Group () Individual (X) Team ()</p> <p>Resources: Exposure of the facilitator and support material used</p> <p>Activity evaluation criteria: Classroom Rubric</p>
<p>EC1 F1 Learning Activity 4:</p> <p>Round table</p> <p>Students in the brainstorming will identify in the target participants the needs of the language and academic skills, as well as any other contextual factor that has an impact on decisions in the design of an EAP course.</p> <p>The triggering question is What tasks will non-native students find in university classrooms and what skills do they need to develop to successfully complete them?</p> <p>With the shared information, students create a synthetic table.1 hr</p>	<p>Type of activity: Classroom () Platform (X) Group () Individual () Team (X)</p> <p>Resources: http://ctb.ku.edu/en/table-of-contents/assessment/assessingcommunity-needs-and-resources/conducting-needsassessment-surveys/main</p> <p>Activity evaluation criteria: Research work rubric</p>
<p>EC1 F1 Learning Activity 5:</p> <p>Field research</p> <p>The student will review the instructions of the activity that are located on the platform for the conducting and reporting an investigation of field about the academic needs that</p> <p>Target students of an EAP course have:</p>	<p>Type of activity: Classroom (X) Platform () Group () Individual (X) Team ()</p> <p>Resources: Exposure of the facilitator and support material used</p>

Appendix A

<p>a) Relevant skills (needs) b) Skills to reinforce (wants) c) Skills to acquire (lacks) Search for three different articles. 5 hr</p>	<p>Activity evaluation criteria: Classroom Rubric</p>
<p>EC1 F1 Learning Activity 6: Presentation of the research results The teams will present and explain the results of your research supported by a Presentation in Power Point. Reinforcement of the topic by the facilitator. 1 hr</p>	<p>Type of activity: Classroom <input type="checkbox"/> Platform <input checked="" type="checkbox"/> Group <input type="checkbox"/> Individual <input type="checkbox"/> Team <input checked="" type="checkbox"/> Resoruces: http://ctb.ku.edu/en/table-of-contents/assessment/assessingcommunity-needs-and-resources/conducting-needsassessment-surveys/main Activity evaluation criteria: Research work rubric</p>

Appendix B Item Discrimination Analysis

#	Question or Statement	r_{ij}	α
1	I feel confident using a computer	.586	.769
2	I enjoy taking classes that have both online and face-to-face components.	.640	.764
3	The experience with blended learning courses have improved my opportunity to use class content.	.547	.771
4	The online and face-to-face course components of blended learning increase the value of each other.	.577	.768
5	The online courses in the platform are well organized.	.460	.773
6	The courses in the platform are easy to navigate.	.706	.762
7	The web resources in these courses are helpful to my learning.	.525	.773
8	The technology support service at UES effectively helps learners to solve problems or doubts regarding the use of the platform.	.635	.767
9	Blended learning courses do not increase the amount of hours I spend in campus.	-.052	.797
10	I am more engaged in blended learning courses.	.426	.775
11	I do not feel comfortable asking questions through the platform.	-.106	.799
12	I feel the amount of my interaction with other learners in these courses increased.	.470	.775
13	I feel the quality of my interaction with other learners is better in blended learning courses.	.421	.776
14	I feel less connected with other students in blended learning courses.	-.117	.799
15	I feel isolated during the online component of these courses.	.068	.790
16	I feel the amount of my interaction with the teachers of these courses increased.	.611	.767
17	I do not feel close to my teacher on the online component of the course.	-.224	.802
18	I find I make more friends during blended learning component of the course.	.415	.776
19	I feel that the quality of my interaction with the teachers of these blended learning courses is better.	.458	.773
20	The teacher provides better feedback in the online component than in the face-to-face component.	.175	.787
21	I get overwhelmed with information and resources in blended learning courses.	-.195	.796

22	I have trouble using the technologies in blended learning courses.	-.084	.801
23	I feel more anxious in blended learning courses.	-.154	.801
24	Blended learning courses require more time and effort.	-.347	.807
25	Blended learning courses have improved my understanding of key concepts.	.448	.775
26	I perceive the teacher's performance is the same in the face-to-face component than in the online one.	.402	.776
27	My role as a learner is different in the online component than in the face-to-face component.	-.222	.800
28	In the online component, I feel like I have distinct needs and goals than in the face-to-face component.	.106	.790
29	The discussion board and questions in the online component provoke thought and encourage me to really dive into the material we learn.	.522	.770
30	The discussion board and questions in the online component help me feel an active participant in the course.	.521	.772
31	Blended learning courses suit my style of learning.	.553	.770
32	Blended learning courses are more meaningful for my learning than traditional learning.	.565	.769

Appendix C Pearson correlations between the degree of satisfaction of blended learning courses and each of the questions in part 2

	SP10	SP2	SP3	SP4	SP5	SP6	SP7	SP8	SP9
SP10 Pearson correlation	1								
Sig. (bilateral)									
SP 2 Pearson Correlation	.328**	1							
Sig. (bilateral)	.000								
SP 3 Pearson Correlation	.683**	.427**	1						
Sig. (bilateral)	.000	.000							
SP 4 Pearson correlation	.576**	.423**	.680**	1					
Sig. (bilateral)	.000	.000	.000						
SP5 Pearson Correlation	.580**	.267**	.609**	.498**	1				
Sig. (bilateral)	.000	.005	.000	.000					
SP6 Pearson Correlation	.400**	.422**	.424**	.407**	.396**	1			
Sig. (bilateral)	.000	.000	.000	.000	.000				
SP7 Pearson Correlation	.469**	.402**	.427**	.438**	.388**	.680**	1		
Sig. (bilateral)	.000	.000	.000	.000	.000	.000			
SP8 Pearson Correlation	.505**	.416**	.576**	.593**	.460**	.490**	.545**	1	
Sig. (bilateral)	.000	.000	.000	.000	.000	.000	.000		
SP9 Pearson Correlation	.428**	.279**	.370**	.400**	.447**	.405**	.488**	.528**	1

Sig. (bilateral)	.000	.003	.000	.000	.000	.000	.000	.000
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**Appendix D Pearson correlations between the degree
of satisfaction of blended learning courses over face-to-
face courses.**

		SP35
SP35	Pearson correlation	1
SP11	Pearson correlation	.236
	Sig. (bilateral)	.013
SP12	Pearson correlation	.585
	Sig. (bilateral)	.000
SP13	Pearson correlation	-.304
	Sig. (bilateral)	.001
SP14	Pearson correlation	.135
	Sig. (bilateral)	.163
SP15	Pearson correlation	.278
	Sig. (bilateral)	.003
SP16	Pearson correlation	-.215
	Sig. (bilateral)	.024
SP17	Pearson correlation	-.233
	Sig. (bilateral)	.014
SP18	Pearson correlation	.328
	Sig. (bilateral)	.000
SP19	Pearson correlation	-.307
	Sig. (bilateral)	.001
SP20	Pearson correlation	.241
	Sig. (bilateral)	.011
SP21	Pearson correlation	.503

	Sig. (bilateral)	.000
SP22	Pearson correlation	.182
	Sig. (bilateral)	.059
SP23	Pearson correlation	-.267
	Sig. (bilateral)	.005
SP24	Pearson correlation	-.325
	Sig. (bilateral)	.001
SP25	Pearson correlation	-.290
	Sig. (bilateral)	.002
SP26	Pearson correlation	-.430
	Sig. (bilateral)	.000
SP27	Pearson correlation	.579
	Sig. (bilateral)	.000
SP28	Pearson correlation	.296
	Sig. (bilateral)	.002
SP29	Pearson correlation	-.196
	Sig. (bilateral)	.040
SP30	Pearson correlation	-.267
	Sig. (bilateral)	.005
SP31	Pearson correlation	.288
	Sig. (bilateral)	.002
SP32	Pearson correlation	.416
	Sig. (bilateral)	.000
SP33	Pearson correlation	.640
	Sig. (bilateral)	.000
SP34	Pearson correlation	.625
	Sig. (bilateral)	.000

Appendix E Pre Questionnaire Blended Learning Scale for Learners (Classroom Survey of Student Engagement)

Thank you for taking the time to complete this survey and help me to meet your previous experience with blended learning, classroom teaching supported by the *its Learning* platform.

If you have any questions about this research, please contact elfp2e14@soton.ac.uk


Thank you again for your help!

Part one.

Instructions: Please tick the appropriate box, only one answer.

1. Which one of the following most closely describes the place where you usually access the platform:

<input type="checkbox"/>	House
<input type="checkbox"/>	University
<input type="checkbox"/>	Internet café
<input type="checkbox"/>	House of friends/relatives

	Other, specify please _____
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Part 2.

Past experiences on blended learning.

Instructions: Please indicate your reaction to each of the following statements by circling the number that best represents your level of agreement or disagreement with it. Make sure to respond to every statement.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

1. I feel confident using a computer.	1	2	3	4	5
2. I enjoy taking classes that have both online and face-to-face components.	1	2	3	4	5
3. The experience with blended learning courses have improved my opportunity to use class content.	1	2	3	4	5
4. The online and face-to-face course components of blended learning increase the value of each other.	1	2	3	4	5
5. The online courses in the platform are well organized.	1	2	3	4	5

6. The courses in the platform are easy to navigate.	1	2	3	4	5
7. The web resources in these courses are helpful to my learning.	1	2	3	4	5
8. The technology support service at UES effectively helps learners to solve problems or doubts regarding the use of the platform.	1	2	3	4	5

Overall, I was satisfied with my blended learning courses

Dissatisfied	Slightly satisfied	Average	Satisfied	Highly satisfied
1	2	3	4	5

Part 3.

Comparison to typical face-to-face courses I have taken...

9. Blended learning courses do not increase the amount of hours I spend in campus.	1	2	3	4	5
10. I am more engaged in blended learning courses.	1	2	3	4	5
11. I do not feel comfortable asking questions through the platform.	1	2	3	4	5
12. I feel the amount of my interaction with other learners in these courses increased.	1	2	3	4	5
13. I feel the quality of my interaction with other learners is better in blended learning courses.	1	2	3	4	5

14. I feel less connected with other students in blended learning courses.	1	2	3	4	5
15. I feel isolated during the online component of these courses.	1	2	3	4	5
16. I feel the amount of my interaction with the teachers of these courses increased.	1	2	3	4	5
17. I do not feel close to my teacher on the online component of the course.	1	2	3	4	5
18. I find I make more friends during blended learning component of the course.	1	2	3	4	5
19. I feel that the quality of my interaction with the teachers of these blended learning courses is better.	1	2	3	4	5
20. The teacher provides better feedback in the online component than in the face-to-face component.	1	2	3	4	5
21. I get overwhelmed with information and resources in blended learning courses.	1	2	3	4	5
22. I have trouble using the technologies in blended learning courses.	1	2	3	4	5
23. I feel more anxious in blended learning courses.	1	2	3	4	5

24. Blended learning courses require more time and effort.	1	2	3	4	5
25. Blended learning courses have improved my understanding of key concepts.	1	2	3	4	5
26. I perceive the teacher's performance is the same in the face-to-face component than in the online one.	1	2	3	4	5
27. My role as a learner is different in the online component than in the face-to-face component.	1	2	3	4	5
28. In the online component, I feel like I have distinct needs and goals than in the face-to-face component.	1	2	3	4	5
29. The discussion board and questions in the online component provoke thought and encourage me to really dive into the material we learn.	1	2	3	4	5
30. The discussion board and questions in the online component help me feel an active participant in the course.	1	2	3	4	5
31. Blended learning courses suit my style of learning.	1	2	3	4	5
32. Blended learning courses are more meaningful for my learning than traditional learning.	1	2	3	4	5

Overall, I feel more satisfied with blended learning courses than with typical face-to-face courses

Dissatisfied	Slightly satisfied	Average	Satisfied	Highly satisfied
1	2	3	4	5

Please make any comments here:

Adapted from CLASSE (n.d). Classroom survey of student engagement. Retrieved November 20, 2014, from http://assessment.ua.edu/CLASSE/Documents/CLASSE_Student.pdf

Appendix F Questionnaire Blended Learning Scale for Teachers (based-on El-Dehaidy, A. Nouby 2008)

Attitude towards blended learning

Instructions: Please indicate your reaction to each of the following statements by circling the number that represents your level of agreement or disagreement with it. Make sure to respond to every statement. The term 'blended learning' refers to any electronic learning media such as: computers, CDs, and PowerPoint presentations.

Statement	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
	1	2	3	4	5

1. I am in complete control when I use blended learning.

1 2 3 4 5

2. I find that dealing with blended learning makes me nervous

1 2 3 4 5

3. I feel confident learning necessary skills to use blended learning

1 2 3 4 5

4. I feel my knowledge regarding blended learning is limited compared to my peers

1 2 3 4 5

5. I get distracted when I use blended learning techniques

1 2 3 4 5

6. Blended learning increases cooperation with peers

1 2 3 4 5

7. I get scared when I operate blended learning

1 2 3 4 5

8. I enjoy talking with others about blended learning

1 2 3 4 5

9. I cannot solve problems regarding how to manage blended learning

1 2 3 4 5

10. Blended learning in the classroom will help me become a better teacher

1 2 3 4 5

11. Teacher education programmes should include how to deal with blended learning

1 2 3 4 5

12. I want to learn via blended learning courses

1 2 3 4 5

13. I think learning via blended learning courses will not help my future work

1 2 3 4 5

14. I intend to participate in blended learning courses

1 2 3 4 5

15. I fear being taught via blended learning courses

1 2 3 4 5

16. I wait eagerly for learning via blended learning courses

1 2 3 4 5

17. I enjoy learning via blended learning courses

1 2 3 4 5

18. I get low grads if taught blended learning courses

1 2 3 4 5

19. I think learning via blended learning courses is a waste of time

1 2 3 4 5

20. Introducing blended learning courses makes learning easier

1 2 3 4 5

22. I avoid learning via blended learning courses

1 2 3 4 5

Adapted from EL-Deghaidy, A. Nouby / Computers & Education 51 (2008) 988–1006

Appendix 3

Appendix G End of Semester Post Questionnaire for Learners (The Col Validated Survey for Learners)

Teaching Presence, Instructional Design and Organization

Questionnaire for learners end of the semester. Ordinal responses, strongly disagree 1, strongly agree 5

1. The instructor clearly communicated important course goals.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

2. The instructor clearly communicated important course topics.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

3. The instructor provided clear instructions on how to participate in course learning activities.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

4. The instructor clearly communicated important due dates/time frames for learning activities.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

5. The instructor helped me take advantage of the online environment to assist my learning.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

6. The instructor helped students to understand and practice the kinds of behaviors acceptable in online learning environments.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

7. The instructor was helpful in identifying areas of agreement and disagreement on course topics that helped me to learn.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

Facilitating Discourse

8. Other participants were helpful in identifying areas of agreement and disagreement that helped me to learn.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

9. The instructor was helpful in guiding the class towards agreement/understanding about course topics that helped me to learn.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

10. The instructor acknowledged student participation in the course.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

11. The instructor encouraged students to explore concepts in the course.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

12. The instructor helped to keep students engaged and participating in productive dialogue.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

13. The instructor helped keep the participants on task in a way that helped me to learn.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

14. The quality of interaction with my online instructor was very high in this course.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

Direct Instruction

15. The instructor presented content or questions that helped me to learn.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

16. The instructor helped to focus discussion on relevant issues in a way that helped me to learn.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

17. The instructor provided explanatory feedback that helped me to learn.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

18. The instructor helped me to revise my thinking.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

19. Other participants helped me to revise my thinking.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

20. The instructor provided useful information from a variety of sources that helped me to learn.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

The Community of Inquiry instrument, developed by [Garrison et al. \(2000\)](#)

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