Title:

The use of social media platforms for foreign language learning

in adult and community education

Dimitrios Vogiatzis

Faculty of Wellbeing, Education and Language Studies

The Open University

31 August 2022

Abstract

The ubiquity of digital technologies in everyday life have transformed the landscape of education. Emerging digital tools are often used to facilitate teaching and learning in a range of ways, arguably providing opportunities for inclusion and access to diverse sources of information and knowledge. The advent of social media platforms like Facebook and WhatsApp has attracted scholarly attention both in terms of the ways in which people communicate in everyday life as well as in their potential in language learning settings. Although a lot of research has been conducted on the use of social media in higher education, there is no evidence on the impact of these digital platforms in the Adult and Community Learning (ACL) context. This thesis contributes to the under-researched field of ACL by investigating the use of Facebook and WhatsApp by two groups of language learners in an adult education centre in the UK. It explores the opportunities that social media (in this case, Facebook and WhatsApp) can provide in terms of student-to-student and teacher-to-student interaction and also points to their limitations. Following a case study design, pre- and post-questionnaires, online observation, and semi-structured interviews were used to elicit data for the study. A key methodological contribution of this thesis is the systematic combination of two analytical frameworks (i.e. the Community of Inquiry framework, and the framework for the analysis of sharing practices) to analyse teachers' and learners' online contributions. This study examines students' perceptions of using these digital platforms for language learning purposes and provides an empirical account of the extent to which (and how) learners and teachers interact with each other in these online environments. The analysis pointed to a mismatch between students' perceptions of the benefits of digital platforms for language learning and their online behaviour and foregrounded the importance of a set of contextual factors in the effective use of social media affordances for language learning.

Acknowledgements

This thesis represents the end of a long, difficult but extremely rewarding journey. This journey started back in 2017 when I decided to leave Greece and move to Milton Keynes. I embarked on a PhD as a personal challenge: I wanted to prove to myself that I could do it.

My doctoral journey was an emotional rollercoaster, and the experience was extremely challenging at times. A severe COVID-19 illness in 2019 and its long-term effects significantly disrupted my studies, and a few months ago I had a domestic accident that Left me in hospital with severe burns. In hindsight, using hot water bottles while writing a PhD thesis is not a good idea! However, during these unfortunate events I was not alone. My beloved partner Evdoxia, my family, my friends, my colleagues, and my supervisors were there for me, and I managed to overcome all these challenges and become stronger.

This thesis would have been an impossible feat without the invaluable help and support of several people. First and foremost, I need to wholeheartedly thank my supervisors Dr Timothy Lewis, Dr Korina Giaxoglou, and Dr Koula Charitonos for their patience, guidance, and unconditional support during this long journey. I could not have asked for a more supportive and understanding supervisory team. Thanks for our thought-provoking discussions, your detailed and critical feedback, and your valuable suggestions. I wholeheartedly thank you not only for your academic guidance which enabled me to grow as a researcher, but most importantly for your continuous moral support during the unfortunate events that rumbled through my life.

I would also like to thank the Open University and the Leverhulme Trust for providing me with support and resources that made this work possible.

Of course, special thanks go to all my dear friends who started their doctoral journey with me (Quan, Barbara, Gosia, Irina, Vasudha, Vicky, Shi Min, Maina, Saman, Jake, Jess, Jo, Lesley, Pin, and Khadija). Milton Keynes would not have been the happy memory it is today without you all. A huge thanks to my friend Dr Tina Papathoma for her unconditional support. Thanks for your constant encouragement and for consistently reminding me to take it easy and stop complaining.

Special thanks are also most certainly warranted to my beloved family. My parents, Kostas and Anna, and my sister, Fenia, who endured the distance and were there whenever

I needed them. I am so happy that my mother will now stop asking me when I will finish this PhD.

Finally, to my partner Evdoxia. You have always been there for me. Back in 2017, I told you about this PhD, and I asked you to move to the UK with me and live a new adventure. You said Yes! I think it's now time to write another chapter together! Let me ask you the following question: "Ευδοξία, θέλεις να γίνεις γυναίκα μου;"…

Declaration of Authorship

I declare that the work presented within this thesis is my own. Some sections of this thesis have been edited and published. Other sections are in the process of being prepared for publication. References to work relevant to this thesis are listed below:

Vogiatzis, D., Charitonos, K., Giaxoglou, K., & Lewis, T. (2022). Can WhatsApp facilitate interaction? A case study of adult language learning. In *Open World Learning* (pp. 44–62). Routledge. https://doi.org/10.4324/9781003177098-5

Vogiatzis, D., Charitonos, K., Giaxoglou, K., & Lewis, T. (manuscript in preparation). Using Facebook and WhatsApp in the adult language learning context. What could go wrong?

Table of Contents

List of Figures

List of Tables

Acronyms and Abbreviations

ACL	Adult and Community Learning
CoI	Community of Inquiry
CoP	Community of Practice
DCOE	Discourse-Centred Online Ethnography
EFL	English as a Foreign Language
L1	Mother Tongue
L2	Second or Foreign Language
L2 WTC	Willingness to Communicate in a Second Language
LMS	Learning Management System
MIM	Mobile Instant Messenger
SNS	Social Network Site
VCoP	Virtual Community of Practice
VLE	Virtual Learning Environment
WTC	Willingness to Communicate

1   Introduction

This PhD thesis investigates the use of social media platforms for language learning in the Adult and Community Learning (ACL) context. Following a case study design, pre- and post-questionnaires online observations and semi-structured interviews were used to elicit data for the study. This doctoral research examines learners' perceptions of using Facebook and WhatsApp for language learning and investigates the efficacy of these digital tools in adult language learning by examining their affordances and constraints. As regards, the concept of "affordance", even thought the term is widely used in the literature on learning and technology, this concept is a problematic and contested one (Bucher & Helmond, 2018; Oliver, 2005). Initially conceptualized by Gibson (1977, 1979), "affordances" are defined as *"properties of artifacts that can be recognized by users and contribute to their function or items that present an action possibility"* (Moreno & D'Angelo, 2019, p. 1). Besides the affordances and constraints of social media platforms in the ACL context, this study also analyses student-to-student and teacher-to-student conversations in these platforms and investigates to what extent and how learners and teachers participate in these online environments and interact with each other.

This chapter provides the background to this research, outlines the study's main research aims and the structure of the thesis, and also explains the research motivations for pursuing this study.

1.1   Research Motivation and Background

It's far beyond question that social media nowadays impact on people's everyday lives. They have also entered the world of education, though it is too early to judge how significant their impact there will be. This impact was intensified during the COVID-19 pandemic in 2019. The recent pandemic forced the closure of the physical sites of schools and universities and caused disruption to traditional classroom-based provision. Due to the massive spread of the virus, educational institutions had to shift from in-classroom learning to online learning. The urgent move to remote delivery brought considerable challenges to educators worldwide who did not feel adequately equipped and trained to engage fully with this sudden digital transformation of education. This significant shift reminded educators, learners, and researchers of the opportunities as well as the challenges that online teaching and learning entail, and it also reinforced the importance of investigating how social media are used in educational settings.

This thesis particularly focuses on adult education. My interest in this area begun back in 2012 when I started working as a teacher in a prison in Greece. In that context and for more than 2 years, I was helping inmates from various countries learn the Greek language. Since then, I have been teaching Greek in various adult education centres in Greece and the United Kingdom. In addition to my teaching experience with adult learners, in my postgraduate studies for a Master's degree back in 2017, I carried out a research study to examine the differences in perceptions of and expectations for mobile language learning between young learners and their parents (see Vogiatzis, 2017). In that study, four surveys were administered to 1046 young students (undergraduate and high school students) and parents in Greece to examine their use of mobile devices for non-educational (i.e., personal), educational and language learning purposes (Vogiatzis, 2017). The survey results revealed that participants predominantly used their mobile devices to access social media platforms (e.g., Facebook, WhatsApp, Twitter, Viber, etc.) and they preferred to communicate via these platforms rather than making calls and/or sending SMS and emails (Vogiatzis, 2017).

Based on my teaching experience, my genuine interest in adult education and the findings from my master's dissertation I was motivated to study the use of social media platforms in the field of adult language learning. More intriguing questions arose in the process: How teachers (including myself) can be supported in integrating social media in their language classes? How do teachers and students perceive using social media for foreign language learning? How do they participate in social media-based groups and how do they interact with each other to facilitate their language teaching and learning?

All these questions aroused my curiosity and I was intrigued to study the use of social media for language learning purposes. In particular, this PhD thesis investigates the use of Facebook and WhatsApp by two groups of language learners and their teachers in an adult education centre in the UK.

1.2 Research Context

The advent of social media and their sheer popularity has drawn scholarly attention to the potential of these tools in various educational settings (Barrot, 2021a, 2021b; Manca, 2020). In addition, attempts have been made by many scholars to investigate the potential of Facebook (Barrot, 2018; Sancar et al., 2021) and WhatsApp (Baguma et al., 2019; Kartal, 2019) use for pedagogical purposes and their place in language pedagogy.

Despite the growing number of studies in the field of social media and language education, recent systematic reviews have highlighted that most of the existing research focused on the use of social media in higher education (Barrot, 2018, 2021a; Kartal, 2019). At the time of writing this thesis, research has been limited to specific educational contexts and to my knowledge no research has been contacted in adult education centres. Adult education is a lifelong process defined as *"a practice in which adults participate in methodical and organized activities through which they can facilitate their understanding and learning"* (Kapur, 2019).

Many agencies and institutions are dedicated to adult education. These include regular educational institutions which offer part-time classes in schools, colleges, community centres, educational associations and voluntary organisations (Kapur, 2017). Across the world, informal educational institutions (e.g. forums, camps, study circles and coaching centres) recreational centres (e.g. acting groups, fairs, clubs, societies, etc.) and other institutions (e.g. religious associations, cooperative societies and associations, and other government departments) also work towards implementing adult education (Kapur, 2017). This doctoral research was carried out in an Adult and Community Learning (ACL) centre in the UK.

ACL is a different environment from higher education in important respects. ACL is part of adult learning and takes place in a wide range of settings usually provided by local authorities (Callaghan et al., 2001). ACL is learning with people in their communities *"somewhat removed from more formal educational provision"* (Coare & Johnston, 2003, p. xi). In the UK, ACL encompasses a social purpose focusing on the promotion of equalities, social justice, and critical democracy (Coare & Johnston, 2003; Lewis, 2012). Even though a clear definition is elusive, Callaghan and his colleagues (2001, p. vii) defined ACL as adult learning with a presence of *"social action or regeneration"*, while learning in this context is *"non-vocational and non-accredited, though by no means unconcerned with the skills and employability of individuals; and this mode of learning is particularly suitable for outreach to disadvantaged people"*. Hunter (2000, p.6) also observed that there are definitional issues related to ACL and used this term to refer to *"all types of informal and non-formal adult learning"* excluding further and higher education. According to Hunter (2000, p. 6) this term also excludes work-based learning which *"whilst informal in nature, is defined by its vocational orientation"*.

In practice, ACL plays a crucial role in community development by bringing adults together and providing various courses covering crafts and creative arts, computer skills, health, literature, history, foreign languages, creative writing, music and science (Lewis, 2012). Even though ACL is non-vocational and non-accredited, it helps adult learners to develop skills (Boyadjieva & Ilieva-Trichkova, 2021; Callaghan et al., 2001; Hunter, 2000). Participation in ACL also brings social and personal benefits such as health and active ageing, self-esteem, communication skills, and improvements in family relationships (Callaghan et al., 2001). Another important benefit of ACL is that in some cases it acts as *"a way back into more formal learning for individuals who would not initially consider entering such an environment"* (Callaghan et al., 2001, p. vii). ACL is also flexible (in time and location), while its non-formal approach to learning can diminish social exclusion by helping adults overcome the fear and mistrust of education that many of them may feel. However, there are certain barriers related to adults' participation in learning. These include pressures on time at home and/or at work, location, domestic and caring responsibilities, lack of information and/or absence of opportunity as well as perceptions that learning in these contexts has little to offer (Callaghan et al., 2001). Adult learners' unpleasant memories of formal education can also restrain their participation in ACL.

The two studies that comprised this thesis (see Section 3.3) were carried out in an ACL centre in the UK, that includes language lessons in its provision. In this ACL centre, learners attend language classes once a week (90 minutes to two hours), running for three terms of ten weeks each (September-December, January-April, April-July). Adult learners in this educational context typically attend 30 lessons a year and are not exposed to language on a daily basis, while communication with native speakers is infrequent. In addition, learners receive only traditional face to face instruction inside the classroom and the long breaks between the terms make it difficult for them to recall and assimilate knowledge.

Participants in the first study (see Chapter 4) were L1 speakers of English who were learning French as a foreign language and for the purposes of this research were using Facebook outside their classroom time over a period of 12 weeks. The second study (see Chapter 5) explored the use of WhatsApp (over 22 weeks) by a group of learners of German in the same ACL centre. Participants in both studies (n= 13) were adults and were studying French and German out of personal interest, rather than for the prospect of being awarded a formal qualification. The reasons why participants were interested in learning a foreign

language became apparent at interviews that were conducted as part of the study. Most of them (n= 9) were studying French or German to communicate with friends and family members. Such reasons are demonstrated in the following quotes:

"I am retired and [...] my [daughter/son] who has a partner who is French and although I don't need to speak French with [her/him] [her/his] parents don't speak English and if they come to visit I wanted to be able to be at least polite" (Juliette)

"I have a German friend ehm who lives in the centre of Germany with her family ehm and I want since I am now retired to carry on learning a language partly as a social thing" (Otto)

"my daughter/son in law is French and they live in France so I need to learn French so I need a better understanding so that I can converse with her family and when I go to visit them I can go to the shops and not need to take them with me so" (Amélie)

Two participants were interested in learning the language because their partners are L1 speakers of their target language. One revealed that her partner is *"French so I am trying to learn how to speak the language"* (Marion). On similar lines, Emma stated:

"my husband/wife is German and then that gives me reason to try to learn when I was still at work it was difficult to find the time to do it properly" (Emma)

Finally, two participants stated at interview that they are learning the language out of personal attachment: "[I] *have an affinity with German speaking countries I like the countries I find the people friendly [...] it's a much overlooked country for tourism and yeah I just feel very comfortable there"* (Louisa). In addition to that, Matthieu was learning French *"with a view to buy a house there in a few years' time so half of it was for hobby and travel and the other half was for business and you know eventually living in France"* (Matthieu)

Overall, it is clear that the context in which this doctoral research was conducted is both under-researched and unique. To my knowledge, and at the point of writing, no research has been conducted to examine the use of social media in ACL contexts. In addition, ACL is a different environment from that of mainstream higher education, emphasising the importance of exploring these unique educational contexts. Learners in this ACL centre were mature (often of retirement age), and they were studying the language in pursuit of various personal interests. Their learning was not formally assessed

or graded, and they were much less exposed to the target language than they would be at university.

1.2.1 Formal, non-formal and informal education

A distinction is often made between formal, non-formal and informal education. The distinction between these terms is complex and regularly debated (Lafraya, 2011; Norqvist & Leffler, 2017). Coombs and Ahmed (1974, p.8) were the first to introduce the term non-formal education and conceptualised the three terms as follows:

- Formal education: *"the highly institutionalised, chronologically graded and hierarchically structured 'education system' spanning lower primary school and the upper reaches of university"*

- Non-formal education: *"any organised, systematic educational activity carried on outside the framework of the formal system to provide selected types of learning to particular sub-groups in the population, adults as well as children"*

- Informal education: *"the lifelong process by which every individual acquires and accumulates knowledge, skills, attitudes and insights from daily experiences and exposure to the environment"*

Lafraya (2011, p. 8) also attempted to define these terms arguing that formal education is *"intentional, planned and structured"* and *"involves all the educational provision known as compulsory schooling, from the first years of primary education to the end of secondary education and university"*. Non-formal education *"takes place outside the sphere of compulsory schooling but where there is educational intent and planning of teaching/ learning activities"* (Lafraya, 2011, p.8). Examples of these educational contexts include adult education courses, leisure, or sporting activities. Informal education *"takes place on an unintentional and unplanned basis in the individual's everyday interaction with others"* (Lafraya, 2011, p.8).

However, some scholars argue that these conceptualisations of learning cannot be seen as discrete categories since their boundaries remain blurred (Rogers, 2005; Werquin, 2010). For instance, the term *non-formal* education is adaptable to various educational needs and can take place in a wide variety of educational contexts (Werquin, 2010). Manca and Ranieri (2016) also argued that the concepts of formality and informality need to be understood as a continuum and as strictly interrelated. Nonetheless, according to Manca (2020, p. 4), actual learning experiences can be classified into two distinct categories: *"by*

a prevalence of pre-structured learning content and pre-defined learning objectives, with mostly teacher- initiated or teacher-led learning activities (formal), or by ill-structured learning content and negotiated learning objectives (informal)" (Manca, 2020, p. 4). In that respect, both formal and informal approaches may be operationalised within various formal educational settings (e.g. a classroom, a lecture hall, an online course, etc.) (Manca, 2020). Similarly, Colley and her colleagues (2003) argued that most learning involves a combination of formal and informal elements, while the concepts of formality and informality are related to four areas, namely, the *location*, the *purposes*, the *processes*, and the *content* of learning. Rubenson (2019, p. 299) also emphasised that the triad – formal, non-formal and informal – *"is really about the context in which learning takes place and does not say anything about learning as such"*. Therefore, he defined formal education as *"intentional and systematic learning in a (state-run) institution which is dedicated to education and provides certificates"*; non-formal education as *"intentional and systematic learning outside of a state-run institution"* and informal education as *"non-intentional and non-structured learning in a life context such as the workplace, the family, etc"* (Rubenson, 2019, p. 299).

Based on the above definitions (Coombs & Ahmed, 1974; Lafraya, 2011; Rubenson, 2019), in ACL contexts learning can be described as non-formal education, i.e. as intentional and taking place outside the sphere of compulsory education, with no intent of formal qualifications, and provided for a particular sub-group in the population (i.e. adult learners). Although this is the term that is predominately used in the thesis, it is nonetheless acknowledged that learning within this educational context can involve elements of both formal and informal education. The two studies conducted in the context of this thesis were carried out in the context of ACL, and therefore the focus of this doctoral research lies within the sphere of non-formal education.

1.3   Research Rationale

Current research suggests that both Facebook and WhatsApp have the potential to facilitate education and language learning (Barrot, 2018; Kartal, 2019; Manca & Ranieri, 2016). Nonetheless, the limited number of empirical studies that investigate the use of these digital tools in language education along with their methodological limitations discussed in Section 2.1.4 suggests that there is still scope for a better understanding of how these platforms can be integrated into language learning contexts (Barrot, 2021a,

2021b; Manca, 2020). In addition, a clear pedagogical framework that sets out how social media platforms can be used to facilitate language learning is still lacking.

In addition to an absence of focus on adult education, systematic literature reviews have also pointed out that most of the existing research on the use of social media platforms in language learning relies heavily on self-reported data to examine the effectiveness and suitability of both Facebook and WhatsApp in educational and language learning contexts (Barrot, 2018; Kartal, 2019; Manca & Ranieri, 2016; Sancar et al., 2021). The widespread use of single methods, such as surveys and pre- and post-tests, cannot provide insights into other variables affecting language learning such as the implementation processes, students' online participation and interaction, and so on. In other words, existing literature offers few reliable insights into participants' online activities in social media spaces because of the methodologies commonly adopted when investigating the use of Facebook and WhatsApp for language learning. In that respect, Barrot (2021a) emphasised the need for qualitative research designs, particularly so for observing participants' online activities and providing an in-depth understanding of how these tools can be used in foreign language teaching and learning practice.

Another area of research that has so far been neglected is the examination of learners' interaction patterns that occur in social media platforms when used as learning environments. Due to their communicative and interactive nature it may be assumed that social media support the basic language development mechanisms suggested by interaction theory (see Section 2.2). According to a widely accepted body of theory, interaction is the main mechanism by which languages are learnt (Mackey et al., 2012). Concurrently, one predominant assumption behind implementing social media in L2 education is their capacity to promote participation and interaction (Barrot, 2021a; Kartal, 2019). It is therefore surprising that only a limited number of studies in the field of foreign language learning (see Section 2.1.3) examined how teachers and language learners participate in these online environments and how they interact with each other. Kartal (2019), Barrot (2018, 2021a) and Sampurna (2019) note the same gap in the current literature.

Overall, several gaps remain to be addressed in the context of social media and language education. Due to the limitations of current literature, as Section 2.1.4 will discuss further, claims related to the educational value of Facebook and WhatsApp as well as their place in language education should be treated with caution.

1.4 Research Aims and Contributions

This doctoral research aims to address the gaps in the literature around social media use in language education (see Section 2.1.4). It examines the use of Facebook and WhatsApp in the context of ACL. Following a case study research design, it investigates how teachers and learners use these digital tools to facilitate the learning of French and German respectively. This research also provides analytic insights into how teachers and learners in the context of adult education use social media platforms as language teaching and learning environments and discusses the limitations of social media use. Informed by Interaction theory, the Community of Inquiry (CoI) framework, and the framework for the analysis of sharing practices (see Androutsopoulos, 2014), this PhD research provides an analysis of the ways in which learners and their teachers participate in Facebook and WhatsApp. It also provides an in-depth examination of a specific aspect of language learning, which is student-to-student and teacher-to-student interaction. Based on the gaps identified in the current literature, this thesis addresses the following research questions:

RQ1: How do learners in the ACL context perceive the use of Facebook and WhatsApp in relation to their language learning?

RQ2: How do learners and teachers in the ACL context participate in Facebook and WhatsApp platforms for language learning purposes?

RQ3: To what extent does the use of Facebook and WhatsApp facilitate (or impede) language learning interaction in the ACL context?

To address these questions, I adopted a case study research design which involved a combination of data collection and analysis methods (see Chapter 3). To examine students' perceptions and experiences in using social media for language learning, this study employed pre- and post-questionnaires as well as interviews. Systematic online observations were used to investigate how the learners and their teachers participate in Facebook and WhatsApp as well as to scrutinise the interactions that take place in these online environments. This thesis places primary attention on the analysis of online data by adopting two established frameworks to analyse the data from online observation. The use of the CoI framework was combined with Androutsopoulos' (2014) framework for the analysis of sharing practices in order to allow for an in-depth understanding of learners'

and teachers' participation patterns in social media platforms and examine the extent to which language interactions (i.e. student-to-student and teacher-to-student) take place in these digital environments.

Summing up, this thesis offers an empirically grounded understanding of both the possibilities and limitations of Facebook and WhatsApp uses for foreign language learning in an ACL setting. It also offers empirical evidence of the affordances and constraints of these digital tools and of the processes of L2 learning in these online environments. Finally, based on the critical examination of the differences and commonalities across the two case studies (see Chapter 6) it provides recommendations and implications for practice (see Section 7.6).

1.5 Thesis structure

This thesis comprises seven chapters:

Chapter 1: Introduction

This first chapter has set the scope of this research. It has provided the motivation and rationale for investigating the use of social media in the field of adult language learning and offered an overview of the research context. It has also outlined the research aims and briefly summarised the contributions to knowledge contained in this thesis.

Chapter 2: Literature Review

This chapter synthesises and offers a critical review of the literature on the use of social media in L2 education. It identifies the gaps in the current literature and introduces the research questions. The chapter also presents the conceptual and analytical frameworks that underpinned the research for this PhD thesis.

Chapter 3: Methodology

The third chapter deals with the philosophical underpinnings of the research, details the research design of the study, and discusses the methodological choices and the decisions taken to address the research questions. After providing the rationale for the research design, it describes the procedures related to data collection, analysis, and interpretation. In addition, it offers a detailed description of the two analytical frameworks (i.e. CoI and the framework for the analysis of sharing practices) that were used in this thesis. The

chapter ends by outlining the overarching ethical considerations that guided the methodological choices and procedures.

Chapter 4 and 5: Adult learners' use of Facebook and WhatsApp for language learning

These chapters discuss the two case studies that comprised this thesis. Specifically, Chapter 4 examines the use of Facebook for language learning by a group of adult learners of French and their teacher, followed by Chapter 5, which explores the use of WhatsApp by a group of adult learners of German in the same adult education centre. Both chapters follow the same structure by providing background information on participants and exploring their perceptions of using social media for language learning purposes. Then, participants' online learning activities in terms of social, cognitive, and teaching presence as defined by the CoI framework is provided. In addition, both chapters provide an analysis of the online data based on Androutsopoulos' (2014) framework for the analysis of sharing practices and offer a view of student-to-student and teacher-to-student interactions. The chapters end with a discussion of the key insights and findings derived from each case study.

Chapter 6: Discussion

This chapter critically examines the differences and commonalities across the two case studies of this thesis. It discusses teachers' and adult learners' attitudes to and perceptions of using Facebook and WhatsApp for language learning and outlines their participation across the two case studies of this thesis. Then, it provides an in-depth understanding of how the teachers used both social media platforms to implement language learning activities as well as how the students participated and interacted using both online platforms. The chapter concludes by reviewing the affordances of Facebook and WhatsApp and discussing the extent to which their use can facilitate or impede student-to-student and teacher-to-student interaction.

Chapter 7: Conclusion

This final chapter provides a synthesis of the main findings in response to the research questions of this thesis. It discusses the novel contributions to knowledge resulting from this research and its methodological contributions. It also outlines its limitations and suggests considerations for future research. The chapter ends by discussing the implications for practitioners.

2   Literature Review

This chapter is divided into two parts. The first part contains a critical account of the literature on the use of social media for language learning purposes. It examines current research on the use of Facebook (Section 2.1.1) and WhatsApp (Section 2.1.2) as learning environments for foreign language teaching and learning. Section 2.1.3 discusses the potential value of these platforms in promoting communicative interaction, followed by Section 2.1.4 which summarises and critically discusses the limitations of the reviewed literature. Finally, the identified gaps in current knowledge which have driven the research questions of this thesis are presented in Section 2.1.5.

The second part of this chapter delves into the theoretical aspects of SLA and the analytical frameworks that informed this study. Specifically, Section 2.2 discusses the basic SLA mechanisms suggested by interaction theory and Section 2.3 provides an overview of the situational and psychological factors that shape individuals' Willingness to Communicate (WTC) in a second or foreign language. Section 2.4 discusses the Community of Inquiry (CoI) framework and its use in this thesis, followed by Section 2.5 which provides an overview of the framework for the analysis of sharing practices in social media.

2.1   Social Media and education

Technological advances in the past few decades have significantly transformed the landscape of education and provided opportunities for inclusion and access to a wide range of information, knowledge, and learning. Notwithstanding that these advances might also exacerbate digital inequalities, today, technology in certain parts of the world significantly contributes to educational environments in which emerging digital tools are used to facilitate teaching and learning in several ways. In addition, the Covid-19 outbreak in 2019 dramatically changed traditional classroom-based education and led to a distinct rise in remote teaching (Hodges et al., 2020) which required the use of various digital platforms.

The advent of social media has shaped our communication patterns in everyday life and has become an integral part of our personal lives. Due to their practical use and interactive affordances these digital platforms have attracted more than three billion active users around the globe (Statista, 2022b).

Social media is a term introduced only since 2003 (Anderson, 2009), and generally refers to *"networked tools that allow people to meet, interact and share ideas, artifacts and interests with each other"* (Ibid., p. 95). Social media are defined as (1) *"Web 2.0 internet-based applications"*, (2) underpinned by user-generated content, that (3) *"allow individuals*

and groups to create user-specific profiles for a site or app and maintained by a social media service" which (4) *"facilitates the development of social networks online by connecting a profile with those of other individuals and/or groups"* (Obar & Wildman, 2015, p. 2).

Similarly, Manca (2020) defined social media as *"Internet-based applications built on the technological foundations of Web 2.0, including social networking sites, blogs, wikis, multimedia platforms, virtual game worlds, and virtual social worlds"* (p.3). In other words, social media include social network sites (e.g. Facebook), micro-blogging (e.g. Twitter) media-sharing (e.g. YouTube and TikTok), instant messaging (e.g. WhatsApp), wikis (e.g. Wikispaces) and blogging tools (e.g. Blogger) (Greenhow & Lewin, 2016; Gruzd et al., 2012). These internet-based applications can also be clustered according to their use: image sharing (e.g. Instagram), information organization (e.g. Pinterest), video-conferencing tools (e.g. Skype and Zoom), instant messaging (e.g. WhatsApp), or a combination of all (e.g. Facebook).

Social media platforms have been conceptualized by many scholars (Barrot, 2018, 2021b; Kartal, 2019; Manca, 2020) as powerful Web 2.0-based tools that can be beneficial for educational purposes. Today, nearly half of the world's population use social media (Statista, 2022b) and their massive popularity has led educators to explore their pedagogical affordances (Barrot, 2021b). Recent systematic literature reviews of the use of social media in education show that research on these platforms continues to increase and the examination of their educational value regularly attracts scholarly attention (Barrot, 2021a, 2021b; Bodily et al., 2019; Hattem & Lomicka, 2016; Istifci & Doğan Ucar, 2021; Kartal, 2019; Lomicka & Lord, 2012; Manca, 2020; Willems et al., 2018). As Barrot (2021b) has noted, as the number of social media platforms and their active users increases, so does the research around their pedagogical uses and potential given their multiple, flexible and user-friendly features, while the fact that these digital tools nowadays offer such features increases their potential in the field of teaching and learning.

Systematic literature reviews on social media use and its implications cover a wide range of domains within educational research such as engineering education (Williams et al., 2018), medical education (Azer, 2015), educational administration (Hallinger, 2020; Hallinger & Kovačević, 2019), technology use (Heradio et al., 2016) and language education (Barrot, 2021a; Manca, 2020). In addition, recent studies in the field of educational research examined specific social media platforms such as Facebook (Barrot, 2018; Chugh & Ruhi, 2018), YouTube (Putra et al., 2021; Rudenkin, 2019), WhatsApp (Bouhnik & Deshen,

2014; Kartal, 2019), Instagram (Carpenter et al., 2020; Purnomo et al., 2020), WeChat (Montag et al., 2018; Zhou et al., 2017), Snapchat (Jeong & Lee, 2017), Pinterest (Hu et al., 2018) and Twitter (Hattem & Lomicka, 2016; Lomicka & Lord, 2012).

The widespread usage and adoption of social media among a considerable portion of the population have led to their significant presence in many educational settings (Manca, 2020). Many researchers have emphasized the pedagogical potential of these digital tools in teaching and learning (Anderson, 2009; Barrot, 2018; Duffy, 2011; Halverson, 2011; Manca & Ranieri, 2013). Scholars have argued that social media have the potential to support collaborative knowledge construction (Anderson, 2009; Duffy, 2011; Gruzd et al., 2012), since students can use these digital tools to interact both synchronously and asynchronously, receive feedback and respond to information and material generated by other students (Halvorsen, 2009; Menzies et al., 2017). Halvorsen (2009) identified their potential benefits in terms of learners' motivation, collaboration, critical language learning and social-constructivist approaches to education. The social appeal and novelty of social media can act as a motivating factor for students (Duffy, 2011), while the fact that students are familiar with social media, may raise their motivation to use them for educational purposes (Bosch, 2009). In addition, learning in an online community supported by peer contact (i.e. correction, oral and written chats both synchronous and asynchronous) appears to be one of the main motivational and socio-affective values of social networks (Zourou et al., 2017). Other authors have emphasized that the use of social media in education contributes to the hybridization of experience and opens up new learning settings (Manca, 2020; Manca & Ranieri, 2013), while their use can blur the boundaries between formal and informal learning (Greenhow & Lewin, 2016). Social media can also provide peer support and stimulate social and civic benefits (Halverson, 2011; Mazzoni & Iannone, 2014), while they can afford the broad functions of socializing and sharing in e-learning contexts (Anderson, 2009). Authors such as Dede (2008) and Halvorsen (2009) have stressed how social media practices afford social constructivist[1] approaches (Vygotsky, 1978) to education since these digital tools are decentralized, accessible and co-constructed learning environments. In addition, connectivist[2] approaches (Siemens, 2005)

---

[1] The central idea of social constructivism is that learning and knowledge is constructed through social interaction and is a shared rather than an individual experience (Vygotsky, 1978).
[2] Connectivism is a learning theory that recognizes the evolution of learning networks, their complexity, and the role of technology; and describes the process of learning which takes place through the building of online connections between people (Siemens, 2005)

to learning have highlighted the cognitive and relational functions of social media which encourage students to engage in peer to peer dialogue, share resources and develop their communication skills (Siemens & Weller, 2011). Consequently, these digital tools have the potential to *"blur the distinction between learning, social, and leisure spaces, thus providing a platform for mixing all sorts of activities together"* (Manca, 2020, p. 2).

Despite the pedagogical potential of social media platforms, Zourou (2020, p. 371) highlighted that incorporating these tools into a language classroom should not solely rely on their "*revolutionary*" or "*innovative*" technological aspects, arguing that *"several studies on social media enhanced L2 still convey a technodeterministic lens, which overlooks the need for a better understanding of how technology shapes and is shaped by human activity"*. In addition, as Warschauer (2009, p. xx) noted, technology should not be conceptualised as *"a magic bullet to solve educational problems, but rather as a powerful tool that can have both positive and negative impact, and that must be carefully exploited in line with learner needs, teacher capacity, and local social contexts"*. Similar concerns were raised by Wang and Vásquez (2012) who reviewed the literature on the use of Web 2.0 tools in L2 learning and reported that only half of the reviewed studies were empirical while most the research was not grounded in theory. Oxford and Oxford (2009, p. 8) also highlighted that effective integration of technology into the educational environment should go beyond *"introducing a software program or other innovation to the students in a classroom"* and that *"technology integration must be thoughtfully planned out based on curricular goals and instructional models"*. With regards to social networking tools, Fuchs and Snyder (2013) carried out an exploratory case study on the use of these tools in the context of higher education and reported very limited evidence of social networking amongst the participants. The authors emphasised that *"simply integrating a social networking tool into course design is not enough to produce social networking, even when students see the possibilities"* and argued that the use of these tools need to be *"an explicit part of the instructional design of the course"* (Fuchs & Snyder, 2013, p. 113).

Berker and his colleagues (2005, p. 1) metaphorically used the term *"domestication of media and education"* to describe the *"complexity of everyday life and technology's space within its dynamics, rituals, rules routines and patterns"*. The authors argued that the "*strange*" and "*wild*" technologies and innovations need to be "*domesticated*" in the sense that individuals do not simply adapt to technologies, but also shape an environment which is progressively mediated by technologies (Berker et al., 2005, p. 2). In addition,

technologies can be perceived as useful and reliable when "*domesticated*" or challenging and problematic when not "*tamed*" (Berker et al., 2005, p. 3). Building upon Berker's and his colleagues' (2005) conceptualisation of domestication of media and technology, Zourou (2020, p. 374) referred to the concept of *"domesticating social media in the language classroom"*. Zourou (2020) emphasised that even though research related to the use of social media for language learning purposes embraced the novelty of these tools, their adoption adhered to existing pedagogical practices and norms of formal education. Similarly, Sauro and Zourou (2019, p. 2) used the term *"digital wilds" to emphasise "the dynamic, unpredictable, erratic character of technologies, especially those not designed for learning purposes and warn[ed] against a pedagogical use in a way that overcontrols this wilderness"*. The authors also argued that the use of "wild" technologies for language learning purposes needs to be understood through the lens of the broader historical, semiotic, and cultural context within which language learning and socialization take place (Sauro & Zourou, 2019). In addition, as Zourou (2020, p.375) highlighted, *"by prescribing learner activity or by confining it to pre-existing scenarios or mainstream assessment practices, we limit our view of the richness of wild technologies and their value in second language (L2) learning"*. The use of social media in language learning settings is also significantly impacted by the requirements imposed by formal educational institutions and curricula (Sauro & Zourou, 2019; Zourou, 2020).

Some studies drew distinctions between learners' private and educational use of Web 2.0 tools. For instance, Clark et al. (2009) explored young learners' personal and formal (i.e., in-school) use of Web 2.0 technologies, and argued that even though Web 2.0 technologies had become an integral part of their everyday lives, only a few of them used those tools with a high degree of sophistication. In addition, the authors introduced the term "*digital dissonance*" to refer to the tension related to learners' adoption and usage of Web 2.0 technology in educational and non-educational settings (Clark et al., 2009, p. 56). The authors also emphasised that not only learners, but also teachers and educational institutions encounter that sense of "*dissonance*" related to how learners use Web 2.0 tools both within and outside the school environment (Clark et al., 2009, p. 68). With regard to social media, the existence of a "*digital dissonance*" between students' formal and personal use had also been reported by Josefsson et al. (2016). The authors explored the divide between students' private use of social media and their use for educational purposes in the context of higher education. Apart from the private and educational uses of social media,

the researchers identified another type of use, namely "*professional use*" (i.e., for career-building purposes) and introduced the term "*intersecting roles*" to describe how students' roles when using social media overlap (Josefsson et al., 2016, p. 1591). According to the authors, the boundaries of these "*intersecting roles*" cannot be easily defined, while due to these intersections, students in their study expressed the view that social media can distract them from the formal learning environment and that learners find it challenging to comprehend how these tools can facilitate their formal learning (Josefsson et al., 2016). Finally, Josefsson et al. (2016, p. 1593) concluded that even though social media have the potential to enhance student-to-student and teacher-to-student interaction, teachers' use of social media for educational purposes *"might unintentionally lead the students to perform roles that contradict the expected reaction"*. Reinhardt (2019) carried out a literature review on the formal and informal use of social media (i.e., blogs, wikis and SNSs) for language learning and teaching. In the context of SNSs, the author identified three primary research domains: *informal L2 use and learning using vernacular SNSs* (e.g. Facebook), *"formal pedagogical applications of vernacular SNSs"* (e.g. Facebook and Twitter) and *"the informal but intentional use of educational SNSs"* (e.g. Livemocha and Busuu)(Reinhardt, 2019, p. 18). With regard to vernacular SNSs, Reinhardt (2019) noted that due to their informal use in everyday life, formal activities on these platforms might not be embraced by the students (also see Reinhardt & Zander, 2011) and argued that resistance might arise due to factors such as task parameters (e.g., compulsory SNS use and top-down activities) and learner variables (e.g. students using their real identities and befriending their peers unwillingly). Concluding his literature review, the author posed a question that emerged from the reviewed studies concerning personal and formal uses of SNS: *"As social media and L2 learning apps have become everyday and widely accessible outside of classrooms, how much might learners' habitus towards them, or over-familiarity with them, present challenges for their formal use in L2 classrooms?"* (Reinhardt, 2019, p. 32).

Overall, technology in general, and social media in particular, are often domesticated to "fit to curriculum-based, institutional frameworks and requirements, occasionally leading to paradoxical and unreal learner practices" (Sauro & Zourou, 2019, p. 1). In addition, as Thorne Sauro and Smith (2015) highlighted when the structural dynamics of a classroom environment are "reproduced in online environments— well-intentioned and reasonably designed and implemented uses of technology do not always deliver on

their initial promise". In that respect, as Zourou (2020, p. 375) rightly argued, when incorporating social media into the language classroom "scholars and practitioners should be open to unconventional, unpredicted practice".

Beyond the arguments about the *"domestication"* of social media as well as the integration of these tools into formal education, social media have also been criticised for the risks and drawbacks that they may involve. For instance, U.S. military personnel were banned from accessing MySpace (Frosch, 2007) and Canadian government employees were prohibited from using Facebook (Benzie, 2007). The U.S. Congress proposed legislation banning young students' access to social media in schools and libraries through the Deleting Online Predators Act (H.R. 5319, 2006) and the Protecting Children in the 21st Century Act (S. 49, 2007). In addition, in the mid-2000s, mobile phones were sometimes banned from classrooms and schools (high school bans in New York City from 2006 to 2015 and Japan from 2009 to 2019) (Selwyn & Aagaard, 2021). Recently, bans of mobile phones in schools have been introduced in Ontario, Israel, France, and Australia, while similar discussions are taking place in other areas of the world (e.g., Denmark, Sweden, Chile, England, Wales and Madrid) based on concerns around cyberbullying, distraction and over-use/addiction (see Selwyn & Aagaard, 2021). As regards social media use, questions were also raised regarding users' privacy (Marwick & boyd, 2014) as well as copyright issues and different (or fake) online identities (Duffy, 2011). Additional challenges related to social media use in education have also been reported. Halverson (2011) highlighted three key challenges that surface when social media are used in education. First, Halverson (2011) raised concerns about privacy arguing that protecting students' privacy should be the number one concern of educators when using social media for educational purposes, since a crucial feature of these digital tools is their capacity to display information publicly (boyd, 2010; boyd & Ellison, 2008). Second, the clash between learning goals established in formal educational settings and the endogenous appeal of social media and what students learn from their engagement with these digital tools (Halverson, 2011). Finally, there might be a challenge related to identity formation in social media platforms versus institutional demands for learners to construct their identity as students. Social media accommodate a more holistic perspective on identity, while educational environments (especially in formal education) mainly focus on identity as it relates to a particular content and/or structure of a course (Halverson, 2011).

Today, numerous social media platforms are available (e.g., Facebook, WhatsApp, Twitter, Instagram, etc.) and even though they were designed to cater for a range of non-educational purposes, their use and their pedagogical value has been explored in different subfields of educational research (Barrot, 2021b; Manca, 2020). This doctoral research explored the use of two social media platforms (i.e., Facebook and WhatsApp) for language learning purposes. The following two sections synthesise and critically examine the current literature related to the use of Facebook (Section 2.1.1) and WhatsApp (Section 2.1.2) as learning environments for language teaching and learning.

2.1.1 Facebook as a learning environment

Of the various social media platforms available today, Facebook remains the most popular (Statista, 2022b). With a user base of more than 2.9 billion monthly active users worldwide (Facebook-Newsfeed, 2022; Statista, 2022b; We Are Social, 2021) and 46.3 million active users in the United Kingdom (Statista, 2022a), Facebook appears to be for now the most popular social media platform mainly used for building and maintaining a collection of social relations online (boyd & Ellison, 2008). Both scholars and practitioners have used it to support and respond to students' educational needs (see Bosch, 2009; Duffy, 2011; Menzies, Petrie, & Zarb, 2017; Wang, Scown, Urquhart, & Hardman, 2014).

Facebook is a free social network site (SNS) which allows individuals to (1) *"construct a public or semi-public profile within the bounded system"*, (2) *"articulate a list of other users with whom they share a connection"*, and (3) *"view and traverse their list of connections and those made by others within the system"* (boyd & Ellison, 2008, p. 211). Facebook includes all social media features in itself (Sancar et al., 2021). These features include status updating, text, photo and video sharing, liking, commenting, instant written, audio and video communication, live broadcasting, group creation, page creation, event creation and game play features. Facebook users can use these features to post comments, share photos, links, videos, play games, use Facebook emojis and many reaction buttons (i.e. like, love, care, haha, wow, sad, and angry. In addition, the platform offers a variety of different interaction tools (both synchronous and asynchronous) such as communication resources (i.e. walls and groups), sharing of resources (uploading videos, images, documents) and information (e.g. posting news) (Lima et al., 2021). While this social media platform is mainly used for asynchronous communication with the main mode being text-based posts, Facebook affords synchronous interaction given that the users are online and share their content simultaneously. In addition, through the Facebook Messenger app (a

free instant messaging app), users can synchronously interact by sharing text, photos, videos, documents, emojis and audio recordings, while the app also enables its user to make audio and video calls with other users (or a group of users).

Due to the *"wide readership, real-time publication, accessibility, interactive features, and practicality"* of Facebook, attempts have been made to incorporate it into language pedagogy (Barrot, 2018, p. 863). Nonetheless, the educational value of Facebook, as well as its place in language pedagogy, are still open to debate. To date, a number of systematic literature reviews have been carried out to examine the various educational uses of Facebook (e.g. Aydin, 2012; Barrot, 2018; Chugh & Ruhi, 2018; Manca & Ranieri, 2013, 2016; Niu, 2017; Tess, 2013; Voivonta & Avraamidou, 2018). These literature reviews (n=9) are discussed in the following section.

2.1.1.1   Literature reviews on the educational use of Facebook

Aydin (2012) reviewed the literature on the educational use of Facebook. In this review the studies were categorised into six groups: (a) Facebook users; (b) reasons people use Facebook; (c) harmful effects of Facebook; (d) Facebook as an educational environment; (e) effects of Facebook on culture, language, and education; and (f) the relationship between Facebook and subject variables. Aydin (2012) argued that Facebook is a viable pedagogical tool, which can be used to improve classroom practices and student participation. More specifically, he contended that Facebook promotes intercultural awareness, increases learners' self-efficacy, motivation, self-esteem, positively changes perceptions and attitudes, reduces anxiety, and improves foreign and second language learning skills in reading and writing (p. 1101). Some harmful repercussions which may occur with Facebook use for educational purposes such as inappropriate behaviours, abuse, cyberbullying, and invasions of privacy within friendships were also identified. In his literature review, Aydin (2012) emphasised that research on Facebook's use as an educational resource is still lacking and that future research should aim to examine the various uses of Facebook within educational contexts. He concluded that there is no comprehensive understanding of how Facebook can be effectively used in education.

Tess (2013) carried out another literature review to investigate the role of social media in education, with special focus on higher education. More specifically, Facebook, Blogs and Twitter were examined to establish their affordances and drawbacks as well as their appropriateness for educational use. From a methodological standpoint, he argued that the existing literature on the integration and effectiveness of social media into higher

education is limited to self-reported data (e.g. responses to surveys). These methodological limitations as well as the pervasiveness of convenience sampling, which was identified in most of the studies reviewed, constrained the generalisability of the results. Tess (2013) concluded that his review raised more questions than it had answered since there is a lack of evidence to support an authoritative statement that social media can be satisfactorily integrated into higher education. He also supported his scepticism by emphasising that educators were still in an experimental stage of implementation, since the landscape regarding priorities, decision making, design, functionality as well as the place of social media in the curriculum remains blurred.

Similar reviews were conducted by Manca and Ranieri in 2013 and 2016. Both critical reviews aimed to identify the emerging educational uses of Facebook by focusing on empirical studies of the use of Facebook as a learning environment. They also examined the extent to which the three affordances of Facebook, namely, (a) mixing information and learning resources, (b) hybridization of expertise (i.e. to what extent are peripheral and emergent interactions occurring on networks through the contribution of current and past learners exploited, thereby encouraging the development of social capital) , and (c) widening the context of learning were exploited by the studies reviewed (Manca & Ranieri, 2013). Manca and Ranieri's first review encompassed 23 articles and revealed that almost all the studies reported were carried out in higher education settings. Their analysis also identified five main educational uses of Facebook: (a) supporting discussion and interaction among students, (b) developing multimedia content, (c) sharing resources, (d) delivering content, and (e) supporting self-directed learning. Manca and Ranieri (2013) highlighted the fact that Facebook allows access to a rich profusion of resources usually unavailable in closed group learning systems and both learners and instructors are aware of these affordances. However, the majority of the learning approaches reported in the reviewed articles tended to reproduce existing educational settings through the adoption of the metaphor of the classroom (Manca & Ranieri, 2013). From this point of view, Facebook offers little more compared to other online environments such as Learning Management Systems (LMS) and Virtual Learning Environments (VLEs), since it has been mainly used to replicate many of the characteristics of in-classroom (or campus-based) education. As for the reasons for using Facebook for educational purposes, most of the studies (16 out of 23) used this digital platform because of its popularity, arguing that learners are familiar with it and its features can be applied easily. From this perspective, Facebook has been used in

most cases owing to its popularity rather than its educational and pedagogical value. Manca and Ranieri (2013) concluded that the vast majority of the studies focused on student satisfaction rather than actual learning and thus, they suggested that the educational value of Facebook should be treated with caution.

The second critical review by Manca and Ranieri (2016) extended and updated the first one by reviewing 147 articles in an attempt to identify the educational uses of Facebook as well as how its potential can best be translated into practice (Manca & Ranieri, 2016). In this review, the articles were clustered according to three types of educational Facebook use, namely, (a) formal use in formal learning settings (FUF), (b) informal use in formal learning settings (IUF), and (c) use in informal learning settings (UI). Among the articles reviewed, 69 were coded as FUF, 68 were IUF, and 10 were UI. The paper also took geographical distribution into consideration, and the analyses showed that the majority of the studies were conducted in Asia (36.7%), followed by North America (19%) and Europe (18.4%). As regards the educational setting, the demographics derived from this literature review indicate that most of the studies (66.7%) were of Facebook use in Higher Education, while none of the studies were carried out in adult educational settings (Manca & Ranieri, 2016). The updated critical literature review also suggests that in most of the studies examined (43.5%) Facebook was chosen because of its popularity and familiarity among young people. On the other hand, 44.2% of the studies used Facebook for pedagogical reasons and emphasised that Facebook can be used as an educational tool since it enables "peer feedback, communication, discussion and learning, and facilitates collaboration and learners' construction of knowledge through social interaction" (Manca & Ranieri, 2016, p. 511). Manca and Ranieri (2016) argued that current pedagogical and teaching practices could not be reshaped simply by exploiting the familiarity and popularity of social media. However, the authors acknowledged that the popularity of social media platforms might have a positive impact on students' motivation and engagement, while familiarity with the medium entails that learners are in a position to use these tools effectively and they need less support to become autonomous and self-directed (Manca & Ranieri, 2016, p. 520). Their study also identified that Facebook use still tends to replicate that of traditional LMS, and that there is a lack of evidence about the effectiveness of the medium in promoting real learning gains, since studies predominantly measured learners' perceptions and their responses to the learning experience (Manca & Ranieri, 2016). Finally, Manca and Ranieri (2016) concluded that even if Facebook is a dynamic and flexible platform for teaching and

learning, its affordances in many cases were underexplored and only partially implemented.

Niu (2017) carried out a similar review focusing on the use of Facebook for academic purposes. The studies reviewed were categorised in four groups, namely, (a) use as a teaching and learning tool, (b) perception studies, (c) influence on learning outcomes, and (d) student-initiated use of Facebook. The analysis of 57 empirical studies revealed that the majority of them reported the positive effects of using Facebook as a learning platform mainly in terms of enhancing communication, collaboration, information sharing and promoting student-centred learning. From a methodological perspective, the results coincided with the findings of other review articles (see Manca & Ranieri, 2013, 2016; Tess, 2013), which emphasise that most of the existing research relies on self-reported data. Niu (2017) also argued that measurements such as reviews of students' course work, observation of their online activities as well as content analyses of students' online comments and other communications need to be included in future research to provide a more objective and concrete understanding of the learning process and/or outcomes. Finally, Niu's (2017) review highlighted the lack of an in-depth examination of the process and the quality of learning using Facebook.

Following a similar approach, Voivonta and Avramidou (2018) examined the educational value of Facebook and more specifically how it can be used in formal educational settings. They argued that Facebook could provide a valuable pedagogical tool that enhances student learning and improves students' interactions, engagement and performances. Their research also identified potential challenges in using Facebook mainly in terms of privacy and teacher training. As regards teacher training, there are serious gaps in our understanding of how teachers are trained to use social media and particularly how Facebook can be integrated into educational settings (Voivonta & Avramidou, 2018). Even though Voivonta and Avramidou (2018) highlighted the educational value of Facebook, they also argued that future research should focus on producing empirical evidence to identify the ways in which Facebook could be used to enhance learning. They also concluded that further debate is needed on how Facebook can be integrated into educational contexts.

Multiple benefits of Facebook were also identified in another study carried out by Chugh and Ruhi (2018) who examined the role of Facebook as an educational tool. Their review of the literature suggests that the use of Facebook can increase teacher-student

and student-student interactions, improve students' performance, ease of learning and engender higher engagement. Concerns about privacy were also highlighted in this paper, coinciding with the findings of other studies (see Blattner & Lomicka, 2012; Duffy, 2011; Lomicka & Lord, 2016; Marwick & boyd, 2014; Niu, 2017; Voivonta & Avramidou, 2018). For these privacy issues to be diminished, Chugh and Ruhi (2018) suggested that Facebook groups should be used since these features provide more privacy settings (e.g. closed and secret groups). Chugh and Ruhi (2018) concluded in favour of the pedagogical, social and technological benefits of Facebook, but they also contended that its ability to provide educational value is still debatable and the ways in which it can be integrated into the educational mainstream remain uncharted.

Another literature review was carried out by Barrot (2018) who focused on foreign language pedagogy. In this review, 41 scholarly papers were retrieved and analysed to identify the role of Facebook as an environment for language teaching and learning. The results revealed that, in terms of geographical distribution, most of the studies (63.4%) were carried out in Asia, while only 17.1% were conducted in Europe. In terms of educational context, almost all of the studies (87.8%) were carried out in higher education, followed by secondary (9.8%) and primary (2.4%) education. No studies were identified with respect to the integration of Facebook in adult education contexts. These results coincide with the findings reported in other studies reviewed in this section (see Manca & Ranieri, 2013; 2016). Regarding the foci of interest, almost half of the studies reviewed by Barrot (n=18) used Facebook as a supportive and interactive tool for language pedagogy, while the rest focused on students' perceptions of Facebook as a learning environment (n=13) and its efficacy for language teaching and learning (n=10) (Barrot, 2018). More specifically, in the field of language pedagogy, studies focused on (a) general language learning, (b) productive skills (i.e. writing and speaking), (c) interaction analysis, (d) knowledge of language (i.e. grammar and vocabulary), (e) intercultural communication and critical pedagogy, (f) metacognition and (g) Facebook-based applications (Barrot, 2018). The analysis concluded that research on the use of Facebook as a learning environment for teaching and learning mainly focused on general language learning, productive skills (mostly writing) and interaction analysis. From a methodological perspective, findings similar to those of other studies (see Manca & Ranieri, 2013, 2016; Niu, 2017; Tess, 2013) were identified, namely that most of the articles relied on self-reported data which lessens the conclusiveness and generalisability of findings. Finally, after having reviewed the

literature, Barrot (2018) suggested the viability of integrating Facebook into language pedagogy and argued that Facebook is a dynamic and flexible tool which can afford productive language activities and is readily adaptable to changing contexts. This review also provides insights into the use of Facebook in language pedagogy, but a clear theoretical framework for the integration of Facebook into the language classroom was not forthcoming in this review.

More recently, Sancar et al. (2021) carried out a literature review to examine the educational potential of Facebook in higher education. After reviewing 30 articles, they concluded that this digital tool has significant potential for educational use, since it can increase students' motivation, social awareness, relations, and self-efficacy. In addition, Sancar et al. (2021) argued that Facebook can be the best LMS for higher education since it can help students' smooth transition and adaptation to higher education and facilitate the development of student-to-student and teacher-to-student relationships. Nonetheless, in line with the reviews discussed above, they also contended that most of the existing research is based on self-reported data (mainly derived from questionnaires) and argued that future research should integrate mixed-methods approaches and adopt qualitative methodologies to study the use of Facebook in educational contexts (Sancar et al., 2021).

The literature reviews examined above indicate that most of the existing research concerning the effectiveness and suitability of Facebook in educational contexts is based on self-reported data (Barrot, 2018; Manca & Ranieri, 2013, 2016; Niu, 2017; Sancar et al., 2021; Tess, 2013). This raises questions about the reliability of the results. Moreover, most of the studies have focused on student satisfaction and perceptions rather than actual learning processes and outcomes. For these reasons, some scholars (Manca & Ranieri, 2013, 2016; Tess, 2013) remain sceptical concerning the educational value of Facebook. Nonetheless, some studies around the use of Facebook for language learning purposes went beyond the examination of students' perceptions and attempted to analyse the ways in which students and teachers participate in Facebook by incorporating online data into their analyses. These studies are discussed in the following section.

2.1.1.2 Facebook and language learning: Attempts made to analyse online data

The literature reviews examined above emphasised that existing research around Facebook use for educational and language learning purposes relies heavily on self-reported data. Nonetheless, some scholars incorporated online data into their research designs and used a variety of techniques to analyse students' and teachers' online activities, though not always adequately described or guided by a specific theoretical framework, as will be discussed below (also see Table 2.1: A summary of research that used online data). This section critically examines these studies (n=9). Table 2.1 summarises the nine studies discussed in this section, presenting them in publication order.

Table 2.1: A summary of research that used online data

Study/Authors	Focus	Educational setting/Sample	Methods	Analytic framework	Main Findings	Limitations
Razak et al. (2013)	Opportunities and challenges of using Facebook as a learning environment for ELF writing	Higher education / 24 EFL learners from different Arab countries	Online data / open-ended questions	Unspecified	Learners' motivation to generate ideas, carry out their writing tasks and scaffold each other in paragraph writing. / Facebook enhanced learners' writing skills through interaction, information sharing, communicating and developing a sense of belonging.	Unspecified characteristics of the learners (i.e. age, L2 proficiency). / The role of instructors is not clearly indicated and not fully analysed. / Unspecified method of data analysis.
Lantz-Andersson et al. (2013)	Students' framing of language learning activities in Facebook groups as extended spaces	Secondary education/ 60 students from Colombia, Finland, Sweden and Taiwan aged between 13 and 16	Online ethnographic approaches	Interaction Analysis (frame analysis)	Facebook groups could generate "extended spaces" for collaborative language learning. / These "extended spaces" are difficult to maintain and need to be constantly negotiated.	Small amount of data captured (106 posts from 60 students over a period of eight months). /Predominant focus on how interactions are framed.
Lantz-Andersson (2016)	Facebook use for the practice of mundane communication	Secondary education/ 131 students from Colombia, Finland, Sweden and Taiwan aged between 13 and 16	Online ethnographic approaches	Interaction Analysis (frame analysis)	Students typically interact with already-known users. / Audience awareness plays a major role in maintaining interaction. / Facebook can offer opportunities for colloquial communication.	small amount of data captured (Group A: 106 posts from 60 students over a period of eight months; Group B: 109 posts from 71 students over a period of six months). /Predominant focus on how interactions are framed.
Annamalai (2016)	Facebook use for online narrative writing and interactions	Unspecified/ 6 ELF learners and their teacher	Online observation/ Scores for narrative writing	Unspecified	Students' positive attitudes towards the use of Facebook for writing instruction. / Improvements in learners' writing competence and confidence.	Unspecified characteristics of the learners (i.e. age) and the educational context. / Unspecified method of data analysis. / No evidence related to students' perceptions.

Naghdipour & Eldridge (2016)	Affordances of Facebook to support EFL learners' vocabulary acquisition	Higher education/ 25 first-year undergraduate students	Quantitative analysis of online contributions/ Focus groups	Unspecified	The use of Facebook facilitated students' vocabulary acquisition. The level of student-to-student interaction was very low. Students preferred to interact more with their teachers rather than their peers	Unspecified method of data analysis (both for online data and focus groups). / Unspecified duration of the study and implementation process.
Karal et al. (2017)	Impact of Facebook on students' proper usage of language.	Secondary education/ 30 high school students from Turkey	Questionnaire/ Online observation/ interviews	Content Analysis	Students improved their usage of Turkish language. Facebook increased collaboration and interaction among students and teachers, and enhanced learners' writing skills.	Insufficient details of online data analysis. / Unspecified teacher's and learners' levels of participation and contribution rates
Peeters (2018)	Facebook as an online collaborative writing space to develop peer interaction	Higher education/ 231 undergraduate students from Belgium	Online data	Grounded theory	Peer interaction processes positively affected students' writing competence with respect to cognition, metacognition, organisation and social functioning.	Unspecified duration of Facebook use. / Unspecified learners' levels of participation and contribution rates.
Sirivedin et al., (2018)	Use of Facebook to enhance English writing and learning	Unspecified/ 17 teachers of English from Bangkok (Thailand)	Surveys/ Online observation/ Pre- and post-tests/ Interviews	Statistical analysis (t-tests)/ Content analysis	Facebook had a positive effect on teachers' English writing skills and learning attributes.	Unspecified duration of Facebook use. / Unspecified characteristics of the learners (e.g. age) and the educational context. / Unspecified method of online data analysis. / Unspecified learners' levels of participation and contribution rates.
Peeters & Pretorius (2020)	The roles that emerge in VCoPs when learners interact with their peers in Facebook	Higher education/ 157 university students from Belgium	Online data	Social network analysis	The ways in which activities are integrated and materials are disseminated influence the degree to which learners may participate in Facebook.	No examples nor analysis of learners' actual online interaction/No evidence related to students' perceptions.

Razak, Saeed and Ahmad (2013) aimed to investigate the opportunities and challenges of using Facebook as an online Community of Practice (CoP) which focused on the development of learners' writing skills. For the purpose of this research, a Facebook group was created and 24 EFL learners from different Arab countries were involved in the study. Nonetheless, this article did not provide any information about learners' age groups, language learning processes and L2 proficiency, while it is not clear whether the Facebook group was used to supplement their in-classroom learning or if students were only supported by this online group. The use of Facebook in this study involved pre-writing, writing and post-writing activities which were introduced by the instructors and prompted learners to write paragraphs on different topics and provide peer-feedback. However, the role of instructors was not clearly indicated and not fully analysed. Following a mixed-methods approach, instructors' and learners' online contributions were collected and both quantitatively and qualitatively analysed, while open-ended questions were also used to capture learners' perceptions of using Facebook for language learning. The findings indicated that the use of Facebook motivated the EFL learners and enabled them to generate ideas, write paragraphs using the target language and scaffold each other in paragraph writing. As regards learners' perceptions, the Facebook group was perceived as an interactive learning environment which contributed to the development of learners' writing skills by engaging in learner-to-learner and teacher-to-learner interactions. Participants also perceived the Facebook group as an effective environment for enhancing their writing through communication, socialization, information sharing and developing a sense of belonging to the group. Notwithstanding that this research contributes to the study of Facebook use for language learning and offers actual evidence of participants' online contributions, it also has some methodological weaknesses. First, even though the authors argued that their research adopted the CoP framework, it was not clear how the CoP informed the analysis of the online data, while the qualitative analysis did not follow a particular analytical framework. Second, whilst this study offered examples of student-to-student and teacher-to-student interactions in the online environment, no rationale was offered for the selection and analysis of these online exchanges. Finally, the authors also state that "*participants were invited to answer and discuss several open ended questions*" (Razak et al., 2013, p. 191) to capture their perceptions of the opportunities and challenges in writing in this Facebook group. Nonetheless, the data collection methods employed were

not clearly specified (for instance these might have been one to one interviews, focus groups and/or survey open-ended questions).

One study that placed analytic attention on the online data from Facebook was conducted by Lantz-Andersson, Vigmo and Bowen (2013). This exploratory study aimed to examine how an international group of secondary school students framed their interactions in Facebook, using English as a *Lingua Franca*. In this study, a Facebook group was created, and 60 students aged between 13 and 16 from Colombia, Finland, Sweden and Taiwan who were learning English at school joined the group. The aim of this Facebook group was to facilitate students' language learning by enabling communication with other learners of English. Specific discussion topics were given to the students who were also encouraged to introduce and share their own topics over the duration of the study (n=8 months). Following an online ethnographic approach, students' online exchanges were captured and analysed using symbolic interactionism (specifically Erving Goffman's (1974) work on frame analysis). The findings indicated that Facebook groups could generate "extended spaces"[3] for collaborative language learning where students can combine their school-based learning and their everyday communicative use of language. The authors acknowledged, however, that these "extended spaces" are difficult to maintain and that the use of Facebook for educational purposes needs to be *"deliberately, collaboratively and dynamically negotiated by educators and students to form a new language-learning space with its own potentials and constraints"* (Lantz-Andersson et al., 2013, p. 293). Even though this study offers valuable insights in terms of students' behaviour and interaction in these online spaces, it also has some limitations. First, the amount of data captured appears to be relatively small (106 posts from 60 students over a period of eight months) and therefore conclusions need to be treated with caution. Second, this study focuses mainly on how interactions are framed, based on the assumption that participation, interaction, and collaboration in an online space can lead to language learning. However, there is no actual attempt to examine in detail the micro-processes by means of which this may occur.

A few years later, Lantz-Andersson (2016) carried out another research study with the aim of exploring how interaction in social networking environments might enable learners to practice colloquial communication and how students frame specific encounters.

---

[3] According to the authors "extended spaces" refer to spaces where personal participation in communication across cultures can benefit foreign language learning without imposing the necessity to conform to all the pedagogic norms of institutionalised education.

In this study, two closed Facebook groups were examined. Participants of the first group were 60 students aged between 13 and 16 (from Colombia, Finland, Sweden, and Taiwan), while the second group consisted of 71 students (from Colombia, Finland, Sweden). In this study, the same methods (i.e. online ethnographic approaches) and analytic framework (interaction/frame analysis) used in Lantz-Andersson, Vigmo and Bowen (2013) (see previous paragraph) were adopted. The findings indicated that despite the potential of a larger audience, students typically interact with already-known users as a way of recognising one another in an online space. In addition, this study showed that audience awareness plays a major role in maintaining interaction since interaction in these online environments is understood both as communicative exchanges among the active interlocutors and most importantly as a social connection with a broader networked audience. Lantz-Andersson (2016) concluded that Facebook can offer opportunities for colloquial communication, while acknowledging that in her study, despite the potential of international communication, many posts received no responses from the networked audience.

In another study, Annamalai (2016) examined the effects of using Facebook for students' online narrative writing and interactions. Specifically, this study investigated the approaches adopted when revising narrative writing via Facebook and how these contribute to the quality of students' writing. A closed group was created for the purposes of this research and six students (half of them at advanced level and the other half at intermediate level) and their teacher joined the group. It is regrettable that the study did not provide any information about the educational setting in which this research was conducted. Students were asked to complete three narrative writing tasks before and after their interaction with their peers and the teacher, resulting in a total of 36 essays. Over a period of six weeks the students and their teacher interacted in the Facebook group to revise and improve the quality of students' essays. Following a qualitative approach, online interaction was observed, and students' essays were marked in terms of organization, content, language, vocabulary, mechanics, and total score. The findings revealed students' positive attitudes towards the use of Facebook for writing instruction and showed improvements in learners' writing competence and confidence. Annamalai (2016) also pointed out that the online interactions were mostly related to correcting spelling, grammar and sentence structure rather than organisation and content. Nonetheless, this study has some important limitations. First, even though Annamalai (2016) claimed that

this research followed a qualitative approach and the patterns of interaction were coded, the study did not adopt any explicit analytical framework to study the online data. Second, even though the study concluded that students positively perceived the idea of using Facebook for writing instruction, no evidence to support this claim is offered while the methods used (i.e. online observation/ scores of narrative writing) cannot capture students' perceptions. Finally, notwithstanding that the study provided some examples of Facebook use, these were not subject to any analysis and no rationale was provided for the selection of the online data presented.

Another study that attempted to analyse participants' online activities in Facebook was conducted by Naghdipour and Eldridge (2016). This study aimed to explore the affordances of Facebook and focused on EFL learners' vocabulary acquisition (word formation, idioms and expressions, colloquial and slang terms, collocations, proverbs, and euphemisms). A Facebook page was created and 25 undergraduate students majoring in English at an international university in Cyprus participated in this study. In terms of methods, participants' posts in the online environment were counted and focus groups were carried out with 12 participants. Findings indicated that Facebook extended learning activities beyond the physical walls of the classroom and helped students to enhance their vocabulary and develop an awareness of various vocabulary learning strategies. Naghdipour and Eldridge (2016) also argued that the level of student-to-student interaction was very low and that students preferred to interact more with their teachers rather than their peers. This study, too, presents certain limitations. First, the analysis of the online data was limited to counting participants' posts and comments in the Facebook page. Even though examples of posts and comments were provided, these were not analysed using a particular theoretical or pedagogical framework. Second, it is not clear how the data derived from the focus groups were analysed. Finally, the study provided neither any information about the duration of the study nor clear details about the implementation process and Facebook use (e.g. number and content of the uploaded activities).

Karal, Kokoc and Cakir (2017) examined the impact of Facebook groups on students' use of Turkish. The study was carried out in Turkey and 30 eleventh grade high school students and a teacher used a closed Facebook group over a period of three months with the aim of facilitating their in-classroom learning and teaching. According to the authors, this study was underpinned by connectivism and a CoP framework, and the learning process as well as the activities (discussion, reflective writing, questions and answers,

discovery and vignette activities) were designed accordingly. However, it was not clear how these theoretical lenses informed the design of the learning process. Applying a mixed-methods approach, data were gathered from questionnaires, online observation, and interviews, and the results indicated that students improved their usage of Turkish. Karal, Kokoc and Cakir (2017) concluded that use of Facebook can increase collaboration and interaction among students and teachers as well as enhance learners' writing skills. Nonetheless, the language gains claimed were based on self-report data (i.e. questionnaire and interview responses) and some examples of students' online contribution to the Facebook, which, however, were not scrutinised using a clearly delineated analytical framework. In fact, the authors stated that interview data were studied using content analysis but did not provide any information about how the online data were selected, analysed and presented in this study. In addition, it is not clear how the use of Facebook in this study increased collaboration and interaction among the learners and the teacher, while the teacher's and learners' levels of participation were not specified.

Peeters (2018) used Facebook as an online collaborative writing space in which students could interact and discuss academic writing activities. With the aim of exploring how EFL learners develop their peer interaction processes through Facebook, two Facebook groups were created to function as peer interaction forums, while no teachers were part of these groups. A total of 231 first-year students at a university in Belgium joined the groups (n=119 in group 1; and n=112 in group 2) and were asked to use Facebook as a collaborative writing space where they could share their written work, their writing experiences as well as any questions about their assignments and the course. Besides Facebook, learners were also supported by face-to-face lessons (n=12), combined with the use of an online learning platform provided by the university. Following a qualitative approach, this study focused solely on participants' online contributions (n=5.834) which were analysed using grounded theory. The findings indicated that through the use of Facebook learners engage in cognitive and metacognitive processes and participate in the learning process both socially and responsibly. In relation to peer interaction, Peeters (2018, p. 906) contended that *"learners initiate cardinal learning activities in which they strive for proper cognitive, metacognitive, organisational and social functioning"*. Overall, this study appears to have been well conducted and the discussion and conclusions arrived at are nuanced and subtle. As regards the duration of the study, Peeters (2018) stated that the two Facebook projects were conducted over a time span of two years, but the actual

duration of Facebook use was not clearly indicated. Another limitation of this study concerns the analysis of students' online contributions. Even though the study provided several examples of Facebook use which were analysed in a nuanced way, it did not examine the extent to which the learners participated in the online group, by discussing for example the number of learners' individual contributions and/or the frequency in which students were engaged in peer-to-peer interactions.

Another study by Sirivedin, Soopunyo, Srisuantang and Wongsothorn (2018) employed a mixed-methods approach to investigate the effects of Facebook on English language learning among language teachers. This study was performed in two stages. The first stage involved the use of a survey which was administered to 1,170 (403 surveys were completed) teachers who teach English in Bangkok (Thailand). The second stage concerned the actual use of Facebook as a learning platform by 17 teachers of English language. Following an experimental design, a pre- and a post-test were used to investigate participants' writing skills before and after the integration of Facebook, while online observation and interviews were also employed. The findings revealed significant improvements in teachers' writing skills and indicated that Facebook positively affected teachers' English writing skills and their learning attributes. Sirivedin and her colleagues (2018, p. 188) concluded that Facebook "can be a visionary, recommended platform for English learning". Nonetheless this study entails several limitations which seem to lessen the conclusiveness of the reported findings. First, the study provides no information about its duration, the implementation process (i.e. how Facebook was used) and the participants' characteristics (i.e. age, gender, educational backgrounds, etc), while equally unspecified was the educational context in which this study was conducted. Second, the study did not provide any results from the first step of this research (i.e. the use of surveys). Finally, even though the authors claimed that they employed online observation the online data presented were not subject to any analysis, and this study was not underpinned by a particular theoretical framework.

Peeters and Pretorius (2020) studied Facebook as a virtual Community of Practice (VCoP) and explored the roles and any type of leadership that emerge in these VCoPs when learners interact with their peers in Facebook. Their study examined two different groups of ELF students at a university in Belgium. The first group consisted of 123 first-year students (aged between 17 and 23) who enrolled in an academic writing course. Participants of the second group were 34 medical pre-professionals (aged between 20 and

52), who were pursuing a bachelor's degree and enrolled in an EFL training for occupational purposes. For the first group, Facebook was used as a space for peer-interaction without the presence of a teacher, where students could discuss their academic writing assignments (3x 300-word essays) over the duration of the study (12 weeks), while they were also supported by face-to-face lessons. The second group used Facebook primarily as a learning management system (LMS) (i.e. to disseminate learning material, introduce online tasks and interact with the teacher). In this second group, a total of five online tasks were posted by the teacher over a 12-week period, while students also attended five in-classroom lessons with the teacher during the same period. Underpinned by CoP and sociocultural theory, this study analysed participants' online posts (n=4278 from group 1, and n=129 from group 2) using social network analysis. The findings indicate that participants' interactive behaviour in the two groups was distinctly different (Peeters & Pretorius, 2020). Specifically, participants' interaction in the first group resembled the principles of a CoP by establishing a sense of belonging and commitment, while forming connections with others. On the contrary, those in the second group presented a more passive interaction, while the teacher was leading the conversation and was the only member of the "core group". The findings also revealed that some learners adopt a leadership role when they are engaged in peer-interaction activities in Facebook, depending on the incentives, the nature of these activities and the inclusion of a teacher. Peeters and Pretorius (2020, p. 303) concluded that "both the ways in which activities are integrated into the curriculum and the ways materials are disseminated can, furthermore, influence the rate at – and degree to which – learners may participate, which also counts for the designated role of the teacher". Overall, this study provided valuable insights concerning the ways in which EFL learners engage in peer-interaction activities. However, it predominantly focused on social network analysis and this type of analysis does not attend to the ways in which learners engage in these peer-interaction activities by providing examples and studying learners' actual online activity. In addition, along with social network analysis, this study could have examined learners' perceptions of their use of Facebook to investigate the reasons why they demonstrated the participation patterns reported in this study.

To sum up, this section discussed nine key papers identified in the review of the literature where scholars drew on online data generated on Facebook to analysed participants' online activity. As Table 2.1 illustrates, only four of the studies discussed above

(Lantz-Andersson, 2016; Lantz-Andersson et al., 2013; Peeters, 2018; Peeters & Pretorius, 2020) consistently adopted an explicit analytic framework to study learners' and teachers' online participation and interaction. On the contrary, the remaining five studies (see Annamalai, 2016; Karal et al., 2017; Naghdipour & Eldridge, 2016; Razak et al., 2013; Sirivedin et al., 2018) contained important methodological limitations especially in terms of online data analysis. These limitations lessen the conclusiveness of the findings and emphasise the need for in-depth analysis of participants' online activities to explore the ways in which they participate in Facebook groups and interacted with each other. This PhD thesis addresses these methodological gaps by placing primary attention on the analysis of online data by adopting two established frameworks which are discussed in Sections 2.4 and 2.5 respectively.

2.1.1.3 Summary of the reviewed literature on Facebook use

The discussion above critically examined nine systematic literature reviews around the use of Facebook for educational and language learning purposes (see Section 2.1.1.1) and a similar number of individual publications which in various ways (and with varying degrees of success) incorporated the scrutiny of online data. This review of the literature synthesises the various attempts which have been made by scholars to scrutinise the potential of Facebook for pedagogical purposes and its possible place in language pedagogy. Multiple benefits and positive effects attaching to the use of Facebook for pedagogical purposes were identified in the literature. More specifically, improvements in terms of learners' motivation (Aydin, 2012; Duffy, 2011; Halvorsen, 2009; Kabilan et al., 2010; Sancar et al., 2021), collaboration (Aydin, 2012; Duffy, 2011; Manca & Ranieri, 2013, 2016; Niu, 2017), engagement and higher student performance (Aydin, 2012; Chugh & Ruhi, 2018; Voivonta & Avramidou, 2018) were identified. Facebook was also found to enable feedback (Blattner & Fiori, 2009; Duffy, 2011; Halvorsen, 2009; Liu et al., 2015; Manca & Ranieri, 2016; Menzies et al., 2017; Zourou et al., 2017) and a range of interactions among learners and tutors (Chugh & Ruhi, 2018; Manca & Ranieri, 2016; Voivonta & Avramidou, 2018). In relation to language pedagogy, Facebook has been identified as a dynamic and flexible tool (Barrot, 2018), which can improve foreign and second language skills such as reading and writing (see Aydin, 2012; Derakhshan & Hasanabbasi, 2015; Mahmud & Ching, 2012; Rodliyah, 2016). Apart from the educational benefits reported in the current literature, some limitations and risks were also identified.

The most commonly reported issue concerning the Facebook use is privacy (Aydin, 2012; Blattner & Lomicka, 2012; Chugh & Ruhi, 2018; Duffy, 2011; Lomicka & Lord, 2016; Marwick & boyd, 2014; Niu, 2017; Voivonta & Avramidou, 2018), while inappropriate behaviours, cyber abuse (Aydin, 2012) and issues related to teacher training (Voivonta & Avramidou, 2018) have also been identified.

In terms of geographical distribution, the majority of the studies which explored the use of Facebook as learning environment were conducted in Asia (Barrot, 2018; Manca & Ranieri, 2013, 2016). This geographical focus may further affect the generalisability of the results. Given that language teaching and technology vary from country to country there is a need to examine other cultural contexts to better understand the applicability, appropriateness and effectiveness of Facebook (Barrot, 2018). In addition, the current literature indicated that most of the studies around Facebook use were carried out in higher education contexts (Barrot, 2018; Manca & Ranieri, 2013, 2016). From this perspective, other educational contexts as well as different groups of learners need to be studied to provide more concrete evidence concerning the educational value of Facebook and to identify its place in language pedagogy. This thesis is set to address this point.

Most importantly, the literature reviews discussed in Section 2.1.1.1 point to important methodological gaps, since the majority of the studies around the use of Facebook for language relied heavily on self-reported data (Barrot, 2018; Manca & Ranieri, 2013, 2016; Niu, 2017; Sancar et al., 2021; Tess, 2013). In addition, studies that did not focus merely on student perceptions, but attempted to analyse students' actual online participation also present several methodological limitations (see Section 2.1.1.2). Consequently, there is a need for qualitative research designs and the use of methods such as the observation of participants' online activities combined with frameworks for analysing their sharing practices.

Even though most of the studies reviewed emphasise the viability of Facebook as a pedagogical tool and acknowledge its potential benefits for education and language learning, there is a clear lack of objective evidence to demonstrate that Facebook can be efficiently and effectively integrated into educational contexts. Furthermore, an in-depth examination of the process and the quality of learning that may be achieved using Facebook remains to be conducted. As mentioned, Facebook has been used for various educational and language learning purposes. Attempts have been made to provide guidelines on how to use Facebook (R. Wang et al., 2014), to propose specific tasks and

activities of educational value (Blattner & Fiori, 2009; Liu et al., 2015; Lomicka & Lord, 2016) as well as recommendations on how to integrate Facebook into language pedagogy effectively (Aydin, 2012; Blattner & Fiori, 2009; Blattner & Lomicka, 2012; Chugh & Ruhi, 2018; Dougherty & Andercheck, 2014; Kabilan et al., 2010; Niu, 2017; Rodliyah, 2016; R. Wang et al., 2014). However, there is still no comprehensive understanding of how this social media platform can be used for language learning.

To sum up, the literature examined above suggests that Facebook can be a viable pedagogical tool that facilitates education and language learning. However, there is a clear lack of concrete evidence to support claims that this online environment can efficiently and effectively be integrated into language pedagogy. The existing research also suggests that there is a big theoretical gap concerning our understanding of how languages are learnt in social media platforms and more specifically in Facebook. Moreover, the educational landscape around Facebook use and its appropriateness remains blurred since research into its role as a learning environment for teaching and learning is still in its infancy. A clear theoretical framework for the integration of Facebook into the language classroom is still missing, and thus, the educational value of Facebook, as well as its place in language pedagogy, is still debatable.

Besides Facebook, this thesis also explored the use of WhatsApp as a language learning environment. The reasons for choosing to examine this particular social media platform in addition to Facebook are discussed in Section 3.3. The following section examines the current literature related to the use of WhatsApp as a learning environment.

2.1.2 WhatsApp as a learning environment

The advent of mobile instant messenger (MIM) applications (such as WhatsApp, WeChat, Facebook Messenger, Kakao Talk, QQ, Tango, Viber, and Telegram) has shaped the communicative practices of people around the globe. These social media platforms offer mobile communication services that differ from traditional SMS (Short Message Service), since they enable users to send and receive text messages, images, video, audio and location information in real-time to individuals or groups of friends at no cost (Church & de Oliveira, 2013).

To date, WhatsApp is the most popular MIM application with two billion monthly active users worldwide (Statista, 2022b), while its active user base in the United Kingdom currently numbers approximately 40 million (Statista, 2021a). WhatsApp is an internet-based cross-platform instant messaging application for smartphones (also accessible via desktop computers, laptops and tablets), which enables users to send and receive messages at no cost. This social media application, launched in January 2009, offers a great variety of other features such as the creation of groups, the sharing of images, videos, and audio, in addition to recording voice messages and sending them straightaway to other users. Due to these functionalities and its simple operating scheme, WhatsApp has become very popular among smart phone owners of different ages and backgrounds (Bouhnik & Deshen, 2014).

Even though attempts have been made to scrutinise the potential of WhatsApp in various educational settings, research around the use of this social media platform remains limited. This was evident in a recent systematic literature review on social media use for educational purposes carried out by Barrot (2021b) who identified only 98 articles related to WhatsApp use as compared to other platforms such as Facebook (n=1117), Twitter (n=596) and YouTube (n=393) that attracted greater scholarly attention. Similarly, Manca (2020) conducted a literature review around the use of social media in higher education and identified 32 studies related to WhatsApp use in this context. With reference to the use of social media as language learning environments, Barrot (2021a) carried out another systematic literature review and reported that only 39 studies examined the use of WhatsApp for language learning. Even though research on the use of WhatsApp in language education is gaining more attention (Barrot, 2021a; Kartal, 2019; Manca, 2020), the above studies show that research in this field is still in its infancy and this thesis contributes to this growing body of literature.

Some literature reviews (n=4), albeit limited, have been carried out to examine the broader educational value of this social media platform. These are discussed in the following section.

2.1.2.1 Literature reviews on the educational use of WhatsApp

Zulkanain and her colleagues (2019) carried out a systematic literature review to explore instructors' and learners' use of social media (i.e. Facebook, Twitter, YouTube and WhatsApp) as learning environments. After identifying 33 studies related to the use of social media in educational settings they argued that WhatsApp can improve academic performance and assist students in preparing for assessment (Zulkanain et al., 2019). In addition, this study showed that social media in general and WhatsApp in particular have been used as learning platforms to facilitate communication, collaboration, information sharing and social connections as well as to enhance learning (Zulkanain et al., 2019).

In another literature review, Baguma and her colleagues (2019) analysed the literature using activity theory to examine the effectiveness of WhatsApp as a learning tool and concluded that this application has a great potential to support learners in developing their higher order thinking skills, namely inquiry, creativity, critical reflection, and dialogue. Specifically, this review revealed that WhatsApp can facilitate effective learning and lead to the development of higher order thinking skills since its use can facilitate deep learning and construction of knowledge, stimulate students' active participation, social interaction, and online collaboration. As regards the technological affordances of this digital tool, Baguma and her colleagues (2019) argued that due to its usability and students' familiarity, WhatsApp provides easier access to educational resources without any temporal or spatial constraints and promotes information and knowledge sharing in various content formats. Nonetheless, this literature review did not provide any information related to the selection criteria of the studies under examination.

In the same year, Kartal (2019) also carried out a systematic literature review to explore the effectiveness of WhatsApp in the field of language learning and teaching. After identifying and analysing 37 studies, Kartal (2019) argued that WhatsApp is a useful tool which can facilitate language learning. This review concluded that it can be used to improve the four language skills (i.e. reading, writing, listening and speaking) as well as vocabulary acquisition, while WhatsApp use was also found to be effective in increasing motivation and interaction, fostering learner autonomy and lowering language anxiety (Kartal, 2019).

As regards the educational settings in which the messaging app has been implemented, the review showed that most studies of its use (n=24, 65%) were conducted in higher education contexts, while none of them examined the application of WhatsApp in ACL contexts. As for second language learning, almost all studies (n=35, 95%) explored the use of WhatsApp for English language learning, while only two studies dealt with foreign languages other than English. In addition, this review showed that WhatsApp has mostly been used to improve learners' vocabulary (n=11), writing (n=10), reading (n=3) and speaking (n=3) skills, while only one study examined the abilty of the tool to foster interaction. From a methodological perspective, the studies examined relied heavily on self-reported data (i.e. questionnaire) and pre- and post- tests, while only two studies used observation techniques to investigate participants' actual use of WhatsApp for language learning. In addition, Kartal (2019) observed that the studies examined did not clearly discuss the pedagogical assumptions of WhatsApp use, while some of the articles analysed provided neither any information about students' level of participation in the online environment nor any details about the implementation process. Therefore, even though Kartal (2019) argued that WhatsApp is a user-friendly app that can be used in language teaching and learning, he also emphasised that future research should discuss the implementation process in detail and also employ qualitative methods to study teachers' and learners' levels of participation.

More recently, Goughari (2021) carried out a literature review to explore the opportunities and challenges associated with the use of WhatsApp in the field of English language learning and teaching. This review aimed to identify the most recent articles published from 2019 to 2020 and encompassed 16 relevant studies which were analysed using thematic analysis. According to Goughari (2021), learners can benefit from using WhatsApp for learning English both as individuals and as groups of learners. As individuals, learners can become more autonomous and motivated to use the target language and develop their skills via WhatsApp, while as peers (or as a group) they can support each other, interact, and collaborate. Coinciding with the results reported in Kartal's (2019) literature review, Goughari (2021) also contended that the use of WhatsApp has a positive impact on learners' macro (i.e. reading, writing, reading and speaking) and micro (i.e. vocabulary and grammar) skills. This review also reported benefits related to teachers' and students' social relationships. Goughari (2021) argued that the use of WhatsApp contributes to a better educational experience and wellbeing, increases students'

motivation, lowers the levels of their language anxiety, and facilitates student-to-student and teacher-to-student social relationships. The author also pointed out that learning through WhatsApp can be an engaging and enjoyable experience for both teachers and learners (Goughari, 2021). As regards the technological capacities of WhatsApp, this review highlighted that the platform is an innovative, collaborative and user-friendly environment which allows instant communication and high interaction and has the capacity to facilitate English language teaching and learning (Goughari, 2021). Apart from the educational and technological benefits reported in this review, some challenges related to WhatsApp use were also identified. As opposed to Kartal's (2019) literature review, which did not report any drawbacks of using WhatsApp for language learning and teaching, Goughari (2021) found that the platform can be highly addictive and might be distractive to language learners. In addition, Goughari (2021) raised concerns around privacy arguing that learners might be exposed to inappropriate behaviours and/or contents which might in turn lead to cyberbullying.

Similar findings were reported by Kashy-Rosenbaum and Aizenkot (2020) who examined elementary, middle and high school students' exposure to cyberbullying in student-created WhatsApp groups. The authors argued that using WhatsApp harbours dangers related to cyberbullying such as insults, threats, mockery, exposure to inappropriate content, abusive responses, fear and avoidance of discourse, group exclusion, blocking, and removal as members of WhatsApp (Kashy-Rosenbaum & Aizenkot, 2020). On similar lines, Yilmazsoy and his colleagues (2020) carried out a literature review to examine the negative effects of WhatsApp use in educational contexts. Even though the authors acknowledged that this social media platform is an effective communication tool which can be used in different kinds of educational processes, they argued that the overuse of WhatsApp may cause distraction and increase addiction. Additionally, this review revealed that students addicted to instant messaging might not control the time spent for messaging, neglect their homework and become less disciplined, while their comprehension levels, learning skills, productivity and academic achievements might be affected negatively (Yilmazsoy et al., 2020). Authors also highlighted the need for qualitative studies that provide an in-depth analysis of the different features and interactive components of WhatsApp to increase our understanding of the effects of this application in educational contexts (Yilmazsoy et al., 2020).

Apart from the above literature reviews, in the field of language education, WhatsApp has been used for various purposes such as the development of learners' vocabulary acquisition (Avci & Adiguzel, 2017; Bensalem, 2018; Lai, 2016; Tahounehchi, 2021), as well as writing (Alouch et al., 2021; Haron et al., 2021; Yuliantini et al., 2021), reading (Ahmed, 2019; Alzubi & Singh, 2018), speaking (Akkara et al., 2020; Manan, 2017; Minalla, 2018), and listening (Andujar & Hussein, 2019; Fauzi & Angkasawati, 2019). The following section discusses the various attempts which have been made by scholars to examine the potential of WhatsApp use in the field of language education.

2.1.2.2   The use of WhatsApp for language learning purposes

Avci and Adiguzel (2017), followed a mixed-methods approach (interviews, focus groups, peer evaluations of group work and log files of WhatsApp conversations) to examine the effects of WhatsApp on English language learning and concluded that WhatsApp can facilitate second language learning, improve students' communication skills and vocabulary knowledge, and positively affect learners' performance. Similarly, Bensalem (2018) and Tahounehchi (2021) explored the impact of WhatsApp on learners' vocabulary acquisition. Both studies followed an experimental research design and revealed that the treatment groups outperformed the control groups, concluding that WhatsApp can facilitate students' vocabulary learning.

Another study conducted by Ahmed (2019) dealt with the effectiveness of WhatsApp in developing English as a foreign language (EFL) learners' reading and writing skills. Using a pre- and post-test and a post-questionnaire, Ahmed (2019) found that WhatsApp was very effective in developing students' reading and writing skills as well as their vocabulary and grammar, while he argued that this MIM application can promote natural interaction and contextualised language use that cannot be achieved in a traditional classroom environment. In addition, more recent studies (Alouch et al., 2021; Haron et al., 2021; Yuliantini et al., 2021), which focused on the use of WhatsApp to promote learners' writing skills reported positive results. These studies showed that the use of this app can facilitate the development of learners' writing skills by raising their motivation (Alouch et al., 2021; Haron et al., 2021), promoting cooperative learning (Yuliantini et al., 2021) boosting their confidence, and encouraging peer to peer interactions (Haron et al., 2021). Other studies examined the effectiveness of WhatsApp in enabling students to practice reading and concluded that this digital tool can be beneficial in developing learners' reading

skills (Alzubi & Singh, 2018; Hazaea & Alzubi, 2016) by promoting socio-cultural learning, interaction, self-regulation and mutual support (Alzubi & Singh, 2018).

WhatsApp has also been used to develop learners' speaking and listening skills. For instance, Akkara et al. (2020) and Minalla (2018) investigated the impact of WhatsApp on improving L2 speaking skills by employing pre- and post-tests and questionnaires. Both studies reported statistically significant differences in students' speaking skills after the implementation of WhatsApp into the language learning process, and concluded that this digital tool enables collaborative learning and interaction in the target language (Akkara et al., 2020), while the use of voice messages on WhatsApp can enhance learners' verbal interactions outside the traditional classroom (Minalla, 2018). More recently, Albogami and Algethami (2022) used WhatsApp for teaching speaking to EFL learners. The authors created a WhatsApp group and language learners (n=15) were asked to post voice messages related to a given topic, while they were not allowed to exchange text messages. Employing a pre- and a post- speaking test, a questionnaire and semi-structured interviews, they argued that WhatsApp is a suitable tool for teaching speaking, since its use improved learners' speaking performance, increased their motivation and decreased their anxiety and their fear of making mistakes when speaking (Albogami & Algethami, 2022).

Fauzi and Angkasawati (2019) used WhatsApp as a means of sharing audio files with a group EFL learners with the aim of enhancing their listening skills. Using a pre- and post-test the researchers concluded that the practice of listening via audio logs in WhatsApp can significantly improve learners' listening comprehension. Andujar and Hussein (2019) also examined the potential of WhatsApp in developing students' listening skills. Following an experimental research design (pre- and post- tests and surveys), 41 EFL students (control group) participated in traditional face-to-face lessons, while 20 learners joined the experimental group in which traditional EFL tuition along with the use of voice messaging via WhatsApp were used (Andujar & Hussein, 2019). Results indicated that the use of WhatsApp can generate a high number of language-related episodes and foster learners' listening comprehension, while learners can adapt to different accents and tones. Learners who participated in this study also perceived that WhatsApp can be beneficial in terms of vocabulary and pronunciation (Andujar & Hussein, 2019).

The literature discussed above indicates the various attempts which have been made by scholars to examine the potential of WhatsApp use for the development of learners' language skills. All the above studies reported multiple benefits and positive

effects attaching to the use of this social media platform for language learning. From a methodological standpoint, the above studies relied heavily on quantitative methods (mainly pre- and post-tests and questionnaires), and none of them provided empirical evidence of students' actual participation and interaction while using WhatsApp for language learning. Nonetheless, two studies (Keogh, 2017; Tragant et al., 2021) incorporated online data into their research designs and presented and analysed students' and teachers' online activities when using WhatsApp for language learning. These two studies are described in detail in the following sections because of their relevance to my thesis.

The first study dealt with the use of WhatsApp to create a space of language and content for EFL students. According to Keogh (2017), the WhatsApp group in this study was conceived of as an extension to a Community of Practice (CoP) and was used by a group of 18 undergraduate students (aged between 18 and 21) in Colombia and their teacher throughout their semester-long (4 months) English class. WhatsApp was used as a shared space in which learners could practice their use of new phrases and/or vocabulary. A qualitative approach was followed and involved an analysis of the online data, students' reflections on their experiences in using WhatsApp (i.e. learners were asked to post their reflections in the WhatsApp group), and semi-structured interviews (n=5). Keogh (2017) concluded that WhatsApp has huge potential for creating enriching and inclusive learning experiences. As regards student-to-student interactions, this study showed that WhatsApp can increase learners' involvement, expand their knowledge and accommodate various traits of CoP (i.e. co-construction of knowledge, scaffolding, etc.). However, it also revealed that there was "a lack of true dialogue" when learners interacted with each other, while most of the discussions on WhatsApp were teacher-initiated (Keogh, 2017, p. 102). From a methodological standpoint, even though Keogh (2017) argued that his research was theoretically informed by Communities of Practice and Social Constructivism, the analysis of the online data was not informed by a particular analytical framework associated with these theories. In addition, this study did not provide any information concerning the extent to which learners participated in the WhatsApp group (e.g. number of individual messages, frequency with which students engaged in peer-to-peer interactions, etc.).

The second study by Tragant, Pinyana, Mackay and Andria (2021) used WhatsApp to extend language learning beyond the classroom. This exploratory study aimed to examine students' participation in WhatsApp and particularly focused on changes in

participation over time. Participants of the study were 23 EFL learners aged between 18 and 25 from a university in Spain and enrolled in an intensive (5hours/day) face-to-face summer course. Blended with in-classroom learning, the WhatsApp group was used as means of distributing optional language learning tasks introduced by the teacher and also as an informal medium of communication. During the study (n=5 weeks), the teachers posted a total of eight language tasks and overall 764 messages (105 from the teachers and 659 from the students) were posted in the WhatsApp group. According to the authors, this research was informed by Long's (1996) Interaction Hypothesis, and following a qualitative approach, students' participation was analysed in different ways, namely by individuals, by task type, by use (on-task vs off-task[4]), including changes in participation over time. The findings indicated that most of the messages in the online environment were off-task messages posted by the students who were enabled to practice the language and engage in real communication, even though their participation tended to decrease over time (Tragant et al., 2021). With reference to off-task messages, the finding revealed that WhatsApp facilitated informal and spontaneous communication among the students and the teachers, which meant that the number of these off-task messages grew over time. As regards the nature of the online interaction in this study, negotiation of form and content was scarce, while Tragant and her colleagues (2021, p. 26) concluded that *"both on-task and off-task messages were complementary and equally productive in engaging students to take ownership of the medium and use English beyond the walls of the classroom"*. Overall, this study appears to have been well conducted and provided several (n=15) examples of students' and teachers' actual participation in the online environment. Nonetheless, the online data presented in this study were not analysed using a clearly delineated analytical framework, while no rationale was offered for the selection and analysis of the presented examples of online exchanges. In addition, this study did not explore why participants demonstrated the reported participation patterns in WhatsApp, by employing other methods (e.g. interviews, focus groups, stimulated recall, etc.) to examine their awareness and interpretations of their online practices.

To sum up, this section discussed how WhatsApp has been used in the field of language education. The discussion above showed that most of these studies dealt with

---

[4] According to Tragant, Pinyana, Mackay and Andria (2021) "on-task" messages refer to messages elicited in response to the tasks uploaded by the teacher, while "off-task" messages were not connected with the teacher-initiated tasks.

WhatsApp use for the development of learners' language skills and primarily used questionnaires and pre- and post-tests, while the two studies (Keogh, 2017; Tragant et al., 2021) that used online data to explore learners' and teachers' online participation and interaction presented methodological limitations particularly in terms of online data analysis. These methodological limitations suggest that there is a need for an in-depth examination of participants' online activities to explore the ways in which they participate in WhatsApp and interact with each other. Notwithstanding that all studies have certain methodological limitations, the fact that most of the studies discussed above were based on questionnaires and pre- and post-tests to argue for the effectiveness of social media point more general to instrumental views of technology effect in education. Most of the studies reviewed above generally report on "what works" and how a particular tool was used rather than approaching the use of technology as entangled with other materials, tools, pedagogies and practices in the educational process. The following section summarises the literature reviewed in Sections 2.1.2.1 and 2.1.2.2.

2.1.2.3 Summary of the reviewed literature on WhatsApp use

Overall, the literature reviewed above revealed multiple benefits and positive effects of WhatsApp use for pedagogical purposes. Based on the current literature, WhatsApp can be viewed as a user-friendly and flexible (Baguma et al., 2019; Goughari, 2021; Kartal, 2019) tool, which can be used to facilitate language teaching and learning. Benefits related to students' motivation (Albogami & Algethami, 2022; Alouch et al., 2021; Haron et al., 2021; Kartal, 2019; Yuliantini et al., 2021), collaboration (Akkara et al., 2020; Baguma et al., 2019; Yuliantini et al., 2021), communication (Avci & Adiguzel, 2017; Zulkanain et al., 2019) and interaction (Ahmed, 2019; Akkara et al., 2020; Alzubi & Singh, 2018; Haron et al., 2021; Kartal, 2019) were identified in the recent literature around WhatsApp use for language learning and teaching. In addition, WhatsApp was found to increase learners' performance in the target language (Avci & Adiguzel, 2017; Zulkanain et al., 2019), decrease their language anxiety (Albogami & Algethami, 2022; Goughari, 2021) and facilitate the development of learners' and teachers' social relationships (Goughari, 2021; Zulkanain et al., 2019). With regard to language pedagogy, the use of this social media platform has the capacity to improve learners' second language skills (Goughari, 2021; Kartal, 2019) such as reading (Ahmed, 2019), writing (Alouch et al., 2021), speaking (Akkara et al., 2020) and listening (Fauzi & Angkasawati, 2019), higher order thinking skills

47

(Baguma et al., 2019) as well as grammar (Goughari, 2021) and vocabulary acquisition (Tahounehchi, 2021). Apart from the educational benefits reported in the recent literature, some concerns were also raised. Specifically, the use of WhatsApp in educational contexts might entail issues related to privacy (Goughari, 2021), while risks related to cyberbullying (Kashy-Rosenbaum & Aizenkot, 2020) have also been identified. In addition, overuse of WhatsApp might cause distraction and addiction, and negatively affect students' comprehension, learning skills, productivity and academic achievement (Yilmazsoy et al., 2020).

From a methodological standpoint, most of the existing research that explored the effectiveness of WhatsApp in educational contexts relied heavily on quantitative data (questionnaires and pre- & post-tests) (Kartal, 2019). In addition, only a few studies (Keogh, 2017; Tragant et al., 2021) used online data to scrutinise teachers' and learners' use of WhatsApp for language learning and teaching. However, these studies (Keogh, 2017; Tragant et al., 2021) did not adopt an explicit analytic framework to study learners' and teachers' online participation and interaction. This suggests that there has been a lack of attention to students' online activities and social media practices. Even though the studies reviewed above highlight the viability of WhatsApp as a pedagogical tool, these methodological limitations indicate that claims about the educational value of WhatsApp should be treated with caution. Moreover, there is a lack of empirical studies that clearly discuss how WhatsApp was integrated in classroom pedagogies, and the theoretical underpinnings of its use (Kartal, 2019). Even though attempts have been made to provide practical ideas, strategies and recommendations related to the integration of WhatsApp into language classrooms (Afsyah, 2019; Alberth et al., 2020; Mwakapina et al., 2016), there is a need for an in-depth examination of the process and the quality of learning that may be achieved when integrating WhatsApp into language learning contexts.

As regards the educational settings in which the messaging app has been implemented, the literature reviewed above indicates that most of the studies were conducted in higher education, while none of them examined the effects of this social media platform in ACL. This predominant focus on higher education raises questions about the educational value of WhatsApp in other educational contexts which are unexplored.

To sum up, the above literature suggests that WhatsApp can be a viable pedagogical tool that has the potential to facilitate language teaching and learning. Nonetheless, reseach around the use of this social medium for educational and language learning

purposes is still in its infancy (Barrot, 2021a, 2021b; Kartal, 2019; Manca, 2020). The limited number of studies that examine the effects of WhatsApp in language education along with the methodological limitations identified in the current literature suggest that there is still scope for a better understanding of how WhatsApp can be integrated into language learning contexts, while a clear pedagogical framework that describes and explains the ways in which this social medium could be used to facilitate language learning is still missing. Finally, the fact that most of the studies were carried out in higher education suggests that other educational contexts and different groups of learners (e.g. adult learners) need to be explored to provide more concrete evidence, broaden our understanding of the educational value of WhatsApp and identify its place in language pedagogy.

Due to the interactive nature of both Facebook and WhatsApp it is often assumed that these digital tools can support the basic language development mechanisms suggested by interaction theory (see Section 2.2). In that respect, some studies dealt with students' participation and interaction in these online environments. The following section discusses the findings reported in the literature with regards to the potential value of Facebook and WhatsApp in promoting communicative interaction.

2.1.3 Potential value of Facebook and WhatsApp in promoting language interaction

Some studies, albeit limited (see Barrot, 2018), examined the effectiveness of Facebook as an online environment that facilitates student-to-student and teacher-to-student interactions and communication.

Manan, Alias and Pandian (2012) used a blended approach and supplemented conventional classroom teaching with online instruction through the use of a Facebook group. The study provided self-reported evidence of undergraduate students' (n=30) acceptance of Facebook as a tool for language learning. Based on a pre- and a post-questionnaire, Manan, Alias and Pandian (2012) also argued that blending in-class lessons with online activities in Facebook groups can be beneficial for both tutors and learners in terms of extending the limited class time, enhancing in-class lessons, promoting self-directed learning and providing a student-friendly environment that can facilitate student-teacher and student-student interactions (p. 3). Nevertheless, the authors reported that students preferred to interact using their mother tongue rather than using the target language (English). Omar, Embi and Yunus (2012) used information-sharing tasks via

Facebook to support ESL students' online interaction in the target language. Based on a quantitative analysis of the online discussions and an open-ended questionnaire, the results revealed students' substantial contribution to the group discussion and their positive attitudes towards Facebook use. The authors concluded that Facebook is a promising tool that promotes constructive interactions and boosts learners' confidence and collaboration (Omar et al., 2012).

Following an experimental research design Wang, Lin, Tsai and Chuang (2017) explored the efficacy of a peer interaction-based learning community in Facebook. Comparing traditional learning (control group) with Facebook use, they argued that the use of this digital tool can promote learners' cooperation, interaction, academic achievement and motivation. Annamalai (2016) examined the effect of online writing and interactions on students' narrative writing. The findings revealed students' positive attitudes towards the use of Facebook for writing instruction and showed improvements in learners' writing competence and confidence. Annamalai (2016) also pointed out that the online interactions were mostly related to correcting spelling, grammar and sentence structure rather than organisation and content. In a similar vein, Peeters (2018) used Facebook as an online collaborative writing space in which students could interact and discuss academic writing activities. The findings showed that the peer interaction process positively affected students' writing competence with respect to cognition, metacognition, organisation and social functioning. Peeters (2018) also added that students perceived the Facebook group as a social buffer and a safe environment which can facilitate peer-to-peer interactions, while another study by Peeters and Pretorius (2020) highlighted that learners' participation in Facebook is influenced by the ways in which activities are integrated and material is disseminated (these studies have been discussed in detail in Section 2.1.1.2).

A few studies focused on the use of Facebook for the development of learners' intercultural communication competences and interactions. Blattner and Lomicka (2012), and Jin (2015) examined the use of Facebook in telecollaborative projects. Blattner and Lomicka (2012) adopted a Facebook group to facilitate communication and intercultural exchange between learners of French from the US and French native speakers who were learning English. Participants in this study demonstrated positive feelings towards the implementation of Facebook and considered the project beneficial for their language learning, especially in terms of communication and language practice. Blattner and Lomicka (2012) also emphasised that social media platforms can provide a social element in the

learning process by enabling students to communicate and interact both synchronously and asynchronously, while these affordances are absent from traditional forums (or discussion boards). Similar findings were obtained by Jin (2015) who used Facebook as a medium to facilitate intercultural interactions between Korean and US students. Employing virtual ethnography and interviews , Jin (2015) concluded that the use of Facebook is an innovative and practical way to effectively facilitate intercultural interactions and promote intercultural competence in the EFL classroom. Özdemir (2017) adopted an experimental research design and also used an open-public Facebook group which enabled students to interact with Facebook users from different countries in a random manner. The findings indicated that students in the treatment group had significantly higher scores, in terms of intercultural communicative effectiveness and interaction, as compared to the in-classroom discussion group.

Nonetheless, some authors have challenged the value of Facebook in promoting interactions in the target language. For instance, Ekoç (2014) used Facebook as an informal discussion environment and explored students' interactions in Facebook. Using online observations, research diary entries and participants' online comments, the author identified that students demonstrated a diversity of different participation patterns in the online environment. Specifically, only five students (out of 22) were very active, while the rest preferred to observe content online and others did not want to participate at all in the online discussions. This study also showed that students mainly used the platform for social interaction primarily with friends with whom they had a pre-established relationship in face-to-face contexts, while they perceived that Facebook is a not a suitable online space for learner-to-teacher interactions and they were also reluctant to disseminate content in the target language (English) due to concerns about their level of language proficiency.

Following an online ethnographic approach, Lantz-Andersson (2016) and Lantz-Andersson, Vigmo and Bowen (2013) emphasised the potential of Facebook as an extended space in which students can engage in language learning activities (see Section 2.1.1.2). The study of Lin et al. (2016) used Facebook as a complement to face-to-face and traditional e-learning. Applying a mixed-methods research design they found that students' and teachers' positive experiences outweighed the negative ones. Nonetheless, this study revealed that student-initiated posts primarily focused on task uploads and did not lead to significant interaction among students.

Some studies also highlighted the need for a high level of teacher support to promote students' participation and interaction (see Kasuma, 2017; Leier, 2017; Lin et al., 2016; Naghdipour & Eldridge, 2016; Sampurna, 2019). In particular, Naghdipour and Eldridge's (2016) study revealed students' inclination to respond to the teacher's rather than their peers' posts, while interaction amongst the students was limited. In Sampurna's (2019) research, learners' inactivity resulted in an increased level of support and intervention by the teacher. Similarly, Kasuma's (2017) study highlighted students' preference for teacher-led activities and the importance of the teacher's presence as an authority figure who facilitates learning and keeps the online group lively.

With reference to WhatsApp, only a few studies deal with the effectiveness of the platform in promoting communicative interaction. Aburezeq and Ishtaiwa (2013) examined the impact of this digital tool on interaction in an Arabic language teaching course. Interviews (n=17) were the main data collection method, while participants' posts on WhatsApp were also collected and quantitatively analysed. The findings indicated that most participants (71%) perceived that WhatsApp could enable peer-to-peer interactions, while approximately half of the participants reported that this social media platform can facilitate student-to-content (54%) and student-to-instructor (42%) interactions. Aburezeq and Ishtaiwa (2013) concluded that WhatsApp can facilitate interaction, since it provides a suitable space for communicating, expressing ideas, and exchanging information without any temporal or spatial constraints. However, this study relied heavily on interview data and did not provide any direct empirical evidence of how WhatsApp actually facilitates such interactions.

Keogh (2017) also examined the potential value of WhatsApp in promoting interaction and concluded that WhatsApp has the capacity to increase learners' levels of engagement, expand their knowledge and accommodate various traits of communities of practice (i.e. co-construction of knowledge, scaffolding, etc.). Nonetheless, findings from this study also indicate that there was "a lack of true dialogue" when learners interacted with each other, while the teacher had a key role in initiating the online discussion on WhatsApp (Keogh, 2017, p. 102). This study which has been discussed in detail in Section 2.1.2.2, presented important methodological limitations since the analytical framework and students' actual degree of participation were unspecified.

In another study, Akkara, Anumula and Mallampalli (2020) examined the impact of WhatsApp interaction on improving undergraduate students' speaking skills. Pre- and post-

speaking tests and surveys were used to elicit data from a group of English language learners (n=110) who were using WhatsApp over two semesters. The findings indicated a statistically significant development in learners' speaking skills, while the authors argued that WhatsApp has the potential to create a space for interaction in the target language and its use has a positive impact on language learners (Akkara et al., 2020). Nonetheless, this study reported learners' different levels of interaction, while acknowledging that nearly 40% of the participants remained silent during the first three to four weeks of the study.

More recently, Tragant, Pinyana, Mackay and Andria (2021) (this study has been discussed in detail in Section 2.1.2.2) examined students' participation in WhatsApp. This study revealed that the use of WhatsApp enabled students to use the target language (i.e. English) beyond the physical classroom and facilitated informal and spontaneous communication among students and teachers, even though learners' participation tended to decrease over time.

Apart from Facebook and WhatsApp, other studies (Ducate & Lomicka, 2008; M. H. Lin et al., 2013; Tran, 2018) explored the efficacy of other Web 2.0 tools in facilitating online interactions between learners and teachers. For instance, Ducate and Lomicka (2008) conducted a year-long study to explore learners' use of blogs for language learning purposes. The research project was divided into two semesters. For the first semester, German (n=20) and French (n=29) language learners were asked to read native speakers blogs, get to know the Bloggers and at the end of the semester present the Blogger to their peers. In the second semester, German (n=10) and French (n=11) language learners were expected to post weekly entries to their personal blogs, and also comment on at least two of their peers' blog entries (Ducate & Lomicka, 2008). Based on data from pre- and post-questionnaires, learners' online contributions and focus groups, the authors reported that the use of blogs promoted ownership and creativity, facilitated language production and expression, and offered students a deeper understanding of the target culture that was not provided through their textbooks (Ducate & Lomicka, 2008). However, to the authors' surprise, students expressed mixed feelings about their peers' comments. In addition, even though Ducate's and Lomicka's (2008, p. 24) intention was to establish a sense of community, the blogs mainly served *"as a private space for students to describe, explore, and express their own ideas and feelings in the T[arget] L[anguage] without needing input from other students"*.

Lin, Groom and Lin (2013) examined ESL learners' use of blogs for language learning purposes. Students in this study (n=25) were asked to share at least 17 blog entries which focused on the development of their writing skills in the target language. Based on eight in-depth interviews which were qualitatively analysed, the authors reported contradictory views and attitudes related to learners' use of blogs (Lin et al., 2013). Even though ESL learners were enthusiastic about their use of blogs and perceived them as a positive, novel, and convenient alternative to the conventional writing classroom, they viewed their experiences as bloggers negatively, arguing that their use of blogs did not motivate them to engage in the writing activities required by the teacher (Lin et al., 2013). In other words, even though ESL learners were enthusiastic about the idea of incorporating blogs into their writing classes, in practice, they were not willing to engage in writing tasks using blogs. Lin, Groom and Lin (2013) identified three interrelated factors that inhibited learners' blogging in practice. First, learners' proficiency in the target language affected their ability to write blogs and read their peers' contributions. Learners also reported that blog writing did not differ from writing activities in a traditional ESL classroom context. Second, due to their low proficiency levels, learners required more time to complete the compulsory writing tasks, which inhibited their willingness to participate in other voluntary blogging activities, such as journalling and commenting on their peers' contributions. Finally, learners expressed feelings of anxiety, worry and embarrassment due to the public nature of blogs, coupled with concerns about potential ridicule form their peers regarding language errors in their written contributions.

In another study, Tran (2018) examined the use of Quizlet (a vocabulary learning app) and LINE (a messaging app widely used in Japan) as supplementary tools for out-of-class vocabulary learning and explored the impact of these tools on interaction between learners and teachers. The study was divided into two semesters (n= 30 weeks). In the first semester, EFL learners (n=48) were asked to use Quizlet to create vocabulary lists which they were required to present to their teacher during their in-classroom sessions. Learners were also encouraged to contact their teacher via email for any questions they may have had. In the second semester, learners were required to send their vocabulary lists created on Quizlet via LINE. Learners were also encouraged to use LINE to contact their teacher and interact with their peers. Based on data gathered from pre- and post-questionnaires, focus groups and participants' online interactions on LINE, Tran (2018) identified three roles of social interaction facilitated through LINE for out-of-class learning. The first involved the

use of LINE as a *"social community discussion tool"* which can afford teacher-to-student and student-to-student social interactions (Tran, 2018, p. 99). The second was the use of the messaging app as a *"teacher-to-student reporting tool"* allowing teachers to provide instructions and feedback, while the third was its use as a *"student-to-teacher reporting tool"*, enabling learners to share their homework with the teacher (Tran, 2018, p. 99). The author concluded that LINE has the potential to facilitate task engagement and enhance social relationships between students and teachers. Nevertheless, based on the online data, Tran (2018) emphasised that the majority of the interactions on LINE were initiated by the teacher while learners mainly demonstrated a passive receiver role in the online environment.

Overall, even though one of the main reasons for integrating Facebook and WhatsApp is their interactive nature (Barrot, 2018; Kartal, 2019), the above discussion reveals mixed results for the effectiveness of these tools in facilitating interaction in the target language. On the one hand, some authors (Aburezeq & Ishtaiwa, 2013; Jin, 2015; Manan et al., 2012; Omar et al., 2012; Özdemir, 2017; Peeters, 2018; I. T. Wang et al., 2017) highlighted the value of Facebook and WhatsApp in facilitating students' participation and interaction, while others (Akkara et al., 2020; Ekoç, 2014; Kasuma, 2017; Keogh, 2017; Lantz-Andersson, 2016; V. Lin et al., 2016; Naghdipour & Eldridge, 2016; Sampurna, 2019) reported learners' limited participation and interaction and remained sceptical about the opportunities that these social media can provide in terms of learner-to-learner and teacher-to-learner interaction. The limited number of studies related to the effectiveness of these digital tools in facilitating interaction and the mixed results they reported highlight the need for further research in this area. Therefore, this thesis studies how teachers and learners participate in these online environments and how they interact with each other. In addition, most of the studies that examined the potential educational value of Facebook (see Barrot, 2018) and WhatsApp (see Kartal, 2019) did not clearly discuss their theoretical underpinnings and did not use analytical tools (this was also evident in Sections 2.1.1.2 and 2.1.2.2) to examine the ways in which learners and teachers participate in these online environments and interact with each other.

The following section summarises the literature around Facebook and WhatsApp use in language education and outlines its limitations.

2.1.4 Summary and Limitations of the reviewed literature

The previous sections offered a critical review of the current literature around the use of Facebook and WhatsApp for educational and language learning purposes. The literature reviewed above provided evidence that the use of both social media platforms can increase learners' motivation, collaboration and interaction, facilitate their social relationships, improve their academic performance and support the development of their skills in the target language. Nonetheless, as Manca (2020) has argued, the prevalence of positive results reported in the current literature can be attributed to the tendency of journals (and other outlets) to publish studies that report positive results (publication bias). Beside that, some gaps and limitations were also identified in the current literature.

First, the vast majority of the studies that examined the use of Facebook and WhatsApp in language learning and teaching were carried out in higher education (Barrot, 2018, 2021a; Kartal, 2019). In addition, no research has been conducted to examine the effects of these social media in the field of adult language learning and teaching (Barrot, 2018; Kartal, 2019). This signifies the importance of this thesis which is set to address this gap by examining the ACL context and offering insights into the educational value of both Facebook and WhatsApp in these underexplored educational contexts. ACL is a different environment from that of tertiary education since learners in this context are mature (often of retirement age), and they are studying purely for personal interest, rather than formal qualifications. In addition, their learning is not assessed or graded, while they are much less exposed to the target language than they would be at university. As regards adults' use of social media, Statista research department reported that the majority of people aged 46 to 55 in the United Kingdom use Facebook (79%) and WhatsApp (76%) (Statista, 2022c), while people aged 56 and older are also Facebook (72%) and WhatsApp (63%) users (Statista, 2022d). In addition, users of social media aged 65 and older in the United Kingdom increased from 35% in 2015, to 59% in 2020 (Statista, 2021c), while the monthly number of Facebook visitors aged 55 years or older grew by 2.4 million from March 2016 to 2018 (Statista, 2021c). These data show that social media are becoming more popular among older adults (Sweney, 2018) and their use might offer opportunities for lifelong learning and adult education. Consequently, there is a need to examine the effectiveness of social media platforms in adult education and investigate how this particular group of learners use these digital tools to facilitate their language learning.

Second, even though current research revealed promising results and positive learning outcomes related to the use of Facebook and WhatsApp in language education, most of the studies focused on English as a foreign and second language (Barrot, 2018; Kartal, 2019). Relatively little research has been conducted on less widely taught languages. As opposed to English language learning, learners of other languages might not be exposed to the target language regularly and communication with native speakers might be considered more difficult. This gap in current literature was also reported in Manca's (2020) literature review on social media use in higher education, which showed that studies in the field of language learning predominantly reported on the learning of English as the target language. On similar lines, Barrot (2021a) found that most of the studies (68.9%) that explored the use of social media as language learning environments targeted English. Therefore, future research should pay more attention to second or foreign languages other than English (Manca, 2020). Nonetheless, it is acknowledged that there might be studies published in languages other than English which were not examined in this literature review.

Third, the literature reviewed above revealed some important methodological gaps. Research related to the effectiveness and suitability of Facebook in educational and language learning contexts is mainly based on self-report data (Barrot, 2018; Manca & Ranieri, 2016; Sancar et al., 2021), while most of studies that incorporated online data collection into their research designs did not employ a particular analytical framework (see Section 2.1.1.2). Similarly, and with respect to WhatsApp as a learning environment, the majority of existing research relied heavily on quantitative methods (mainly surveys and pre- and post-tests) (Kartal, 2019) and experimental research designs, while a few studies that attempted to explore learners' actual participation in WhatsApp lacked a clear analytical framework (see Section 2.1.2.2). In addition, current research around the use of both Facebook and WhatsApp for language learning suggests that there has been little actual observation of participants' online activities. Similar methodological limitations were also reported in other literature reviews on the use of social media platforms and their educational value. For instance, Manca (2020) argued that the use of single methods (e.g. surveys, pre- and post- tests) cannot unveil other variables of the learning process (e.g. implementation issues, participants' attitudes, data collection bias, etc.). In this respect, Manca (2020) highlighted that future research should employ multiple data sources and adopt triangulation of methods to ensure research quality. In a similar vein, Barrot's

(2021a) literature review revealed that the studies that explored the effectiveness of social media as language learning environments mainly employed a quantitative research design. Barrot (2021a) also contended that due to the lack of qualitative research designs, research in this field has not fully developed yet, while future research should aim to provide an in-depth understanding of how these tools can be used in language pedagogy.

Finally, even though many studies examined the effectiveness of Facebook and WhatsApp in developing students' language skills, only a few studies (see Section 2.1.3) have focused on the interaction patterns that occur in these online environments (Barrot, 2018; Kartal, 2019; Sampurna, 2019). In addition, most of these studies lacked an analytical framework to scrutinise learners' participation in these online environments. Looking back at the definition of social media: *"networked tools that allow people to meet, interact and share ideas, artifacts and interests with each other"* (Anderson, 2009, p. 95), interaction and sharing are core elements of these digital tools. Another core element that differentiates social media from other educational platforms (e.g. Coursera, edX, Duolingo, etc.) is user-generated content (Obar & Wildman, 2015). In other words, while many other educational environments offer standard courses with predefined curricula supported by various forms of content (e.g. videos, documents, presentations, etc.), social media are purely based on content generated and shared by their own users. With respect to language pedagogy, a main rationale for integrating Facebook and WhatsApp into L2 education is their potential in promoting social activities such as participation and interaction (Barrot, 2018, 2021a; Kartal, 2019; Sampurna, 2019). It is therefore surprising that only a few studies placed analytic attention on how teachers and learners participate in these online environments and how they interact with each other.

Given the limitations of the current literature and the lack of established theoretical frameworks that inform the implementation of social media in language education, some scholars (Kartal, 2019; Manca & Ranieri, 2013, 2016; Tess, 2013) remain sceptical regarding the educational value of Facebook and WhatsApp. Even though most of the studies reviewed emphasise the viability of Facebook and WhatsApp as pedagogical tools and acknowledge their potential benefits for education and language learning, there is limited evidence to show that these digital tools can be effectively integrated into educational and language learning contexts. The gaps identified in current knowledge have driven the aims and the research questions of this thesis. These are discussed in the following section.

2.1.5   Aims of the thesis and Research Questions

The literature examined so far pointed to some important limitations of current research. First, research on the use of Facebook and WhatsApp in the field of language education focused predominantly on higher education contexts, and mainly examined the effects of these digital tools on English language teaching and learning. In addition, the literature revealed a clear lack of qualitative research and the observation of participants' online activities, while only a limited number of studies focused on the examination of teachers' and learners' participation and interaction in social media spaces. To address these gaps in the current literature, this thesis examines the use of Facebook and WhatsApp in ACL. Specifically, it investigates the use of Facebook (see Chapter 4) and WhatsApp (see Chapter 5) by two groups of French and German language learners respectively, in an adult education centre in the UK. What is more, this research uses two established frameworks to analyse data from online observation, providing in-depth insights into patterns of interaction and learning in these environments. Informed by Interaction theory (see Section 2.2) and CoI framework (see Section 2.4), this doctoral research also analyses how students and teachers participate in these online environments. The examination of a specific aspect of language learning, which is student-to-student and teacher-to-student interactions, makes possible another contribution. Through the use of Androutsopoulos' (2014) framework for the analysis of sharing practices (see Section 2.5), an in-depth understanding of the extent to which these interactions take place in an adult learning context in Facebook and WhatsApp is provided. Based on the above gaps, this thesis attempts to answer the following research questions:

RQ1: How do learners in the ACL context perceive the use of Facebook and WhatsApp in relation to their language learning?

RQ2: How do learners and teachers in the ACL context participate in Facebook and WhatsApp platforms for language learning purposes?

RQ3: To what extent does the use of Facebook and WhatsApp facilitate (or impede) language learning interaction in the ACL context?

Concerning the first research question, numerous studies have examined learners' perceptions and attitudes towards the use of Facebook (Aydin & Özdemir, 2019; Eren, 2012; Miller et al., 2018; Putri & Aminatun, 2021; Ríos & Campos, 2015; Tunde-Awe, 2015)

and WhatsApp (Alghamdy, 2019; Mbukusa, 2018; Oksuz-Zerey, 2021; Wulandari & Mandasari, 2021) for language learning purposes. Some scholars (Barrot, 2018; Kartal, 2019; Manca & Ranieri, 2013, 2016; Niu, 2017) have heavily criticised these studies since they focused predominantly on student satisfaction and perceptions, rather than actual learning processes and outcomes. These studies also used self-report data, which has known limitations (discussed in Section 3.2), to evaluate the effectiveness of these digital tools. However, students' perceptions are an important element which can inform the wider research project since features such as ease of use may have an impact on learners' motivation and engagement (Manca & Ranieri, 2016). In addition, learners' views about the effectiveness of instructional practices are valuable in relation to their achievement of learning outcomes (Nunan, 1987), while students in the 21st century bring their pre-established "cultures of use", which might affect how they use Web 2.0 tools to facilitate their language learning (Thorne, 2003). Ultimately, however, this thesis aims to do more than examine students' attitudes and perspectives, as explained below.

With respect to the second and the third research questions, this thesis offers an empirically evidenced account of how adult learners and their teachers participate in Facebook and WhatsApp respectively. In addition, analytic attention is placed on the student-to-student and teacher-to-student interactions that take place in these digital tools. Considering that only a few previous studies (see Keogh, 2017; Lantz-Andersson, 2016; Peeters, 2018; Tragant et al., 2021) focused on the mechanics of participation and interaction which occur in Facebook and WhatsApp, this thesis addresses this gap and investigates to what extent and how learners and teachers participate in these online environments and interact with each other.

Overall, as the current literature indicates, our understanding of how social media facilitate the learning of languages remains partial. The educational value of Facebook and WhatsApp, as well as their place in language pedagogy, is debatable since research in the field is still in its infancy. This doctoral research offers empirical evidence of the affordances and constraints of digital tools use in the context of adult education and of the processes of students' learning in these online environments. The focus of this thesis on the adult education context is important, given the predominant focus of the current literature on higher education contexts. In ACL contexts, learners are typically mature (often retired) and engage in language learning purely for personal interest rather than pursuing formal qualifications; their learning is not subject to any formal assessment or grading, while they

also have limited exposure to the target language in contrast to higher education students. This empirical study, thus, contributes insights into less formal language learning practices in social-mediated environments.

This discussion so far critically examined the literature around the use of Facebook and WhatsApp in the field of language education, identified and discussed the limitations of current research and outlined the aims and the research questions of this thesis. The second part of this chapter discusses interactionist theory (see Section 2.2) which crucially informed this doctoral research before offering an account of the two analytical frameworks (see Section 2.4 and 2.5) adopted in this thesis to address its research questions.

2.2　Cognitive Aspects of SLA: The Interactionist approach

Based on interactionist theory, interaction between learners and teachers is the main mechanism by which languages are learnt (Blake, 2008; Mackey et al., 2012; Randall, 2007). Interactionist theory can be broken down into four main hypotheses about the language learning process (Blake, 2008; Mackey et al., 2012):

- The input hypothesis (Krashen, 1980, 1985)

- The interaction hypothesis (Long, 1983b, 1990),

- The output hypothesis (Swain, 1985),

- The noticing hypothesis (Schmidt, 1990).

One major strand of theory that influenced the development of the interactionist approach is Krashen's Input Hypothesis. According to this hypothesis, input that is comprehensible and also slightly above the learners' proficiency levels can lead to language acquisition (Krashen, 1980, 1985). In other words, when learners are exposed to comprehensible input, non-native language acquisition can be subconsciously achieved.

Long (1983a, p. 98) recognised Krashen's hypothesis arguing that *"access to comprehensible input is a characteristic of all cases of successful acquisition, first and second"*, and that *"greater quantities of comprehensible input seem to result in better (or at least faster) acquisition"*, while *"lack of access to comprehensible input […] results in little or no acquisition"*. Long (1983b, 1990) also developed the Interaction Hypothesis highlighting that both comprehensible input and L2 acquisition derive from conversational modifications (i.e. interactional adjustments during negotiation for meaning) that occur when native and non-native speakers try to resolve a communication difficulty. In other words, the Interaction Hypothesis emphasises that second language acquisition (SLA) is achieved through communicative encounters and negotiation of meaning.

Other researchers challenged Krashen's claims about comprehensible input and SLA. In particular, Swain (1985) argued that even though input is an important element of L2 acquisition, it is far from sufficient on its own, and learners' output (i.e. language production) is also necessary for SLA acquisition to occur. In Swain's (1985) view, when learners do not have the opportunity to regularly speak and/or write the target language (i.e. produce output) their speaking and writing skills would lag behind their comprehension skills (i.e. listening and reading). Swan's Output Hypothesis emphasises the crucial role of comprehensible output, since it enables learners to practice the production of language, test hypotheses related to their L2, comprehend the structure of the target

language and identify potential gaps in their interlanguage (Swain, 1985, 1995, 2005). In that respect, it is crucial for learners to express themselves in the target language and to be understood, since in Swain's words *"being pushed in output, it seems to me, is a concept parallel to that of the i + 1 of comprehensible input. Indeed, one might call this the comprehensible output"* (Swain, 1985, p. 249).

Another strand of research was related to the role of attention in second language learning. Extending the Interaction and Input Hypotheses, Schmidt (1990, 1992) highlighted that only consciously noticed features of input can result in intake. According to Schmidt's Noticing Hypothesis *"subliminal language learning is impossible"*, while *"noticing is the necessary and sufficient condition for converting input to intake"* (Schmidt, 1990, p. 129). As Mackey and her colleagues (2012, p. 9) highlighted, the aspects of input that are *"salient and meaningful are typically those that draw the learners' attention"* while other aspects that *"lack saliency or communicative value […] may pass under the learner's radar"*.

Based on Schmidt's Noticing Hypothesis, Long reconceptualised the Interaction Hypothesis in 1996 and contended that: *"negotiation for meaning, and especially negotiation that triggers interactional adjustments by the native speaker or more competent interlocutor, facilitates acquisition because it connects input, internal learner capacities, particularly selective attention, and output in productive ways"* (Long, 1996, p. 451). In addition, Long (1996) emphasised the importance of feedback on form. Incorporating Schmidt's Noticing Hypothesis he argued that through post-modified input (i.e. explicit corrections or recasts) better learning outcomes can be achieved as compared to pre-modified input (i.e. models of correct forms) (Long, 1996). In that respect, corrective feedback from more proficient peers and/or experts (e.g. teachers) enables language learners to notice the gaps (Swain, 1998) and adjust their language accordingly.

In line with the above hypotheses, interactionist theory posits that the language interactions that occur when learners and their interlocutors (i.e. native speakers, more proficient learners or teachers) communicate, are beneficial for L2 development (Mackey et al., 2012). For instance, communicative needs (or difficulties) during these interactions should lead learners to employ discourse strategies (e.g. clarification requests, confirmation checks, repetitions, and recasts) to be understood and to overcome any barriers in communication. During these communicative encounters, learners often receive modified input from their interlocutors in an effort to make it more comprehensible. In addition, these interactions may draw learners' attention to *gaps* (e.g. faultily produced

morphosyntactic features) between their interlanguage and the target language (Schmidt, 1990). In turn, aware of these *gaps*, learners may focus more on their interlocutors' input, which is crucial for their L2 development (Mackey et al., 2012). In this manner, language learners may also pay more attention to these gaps both through explicit feedback (e.g. metalinguistic corrections) or implicit forms of feedback (e.g. recasts).

Overall, as Gass and Mackey (2007, p. 176) argued, *"it is now commonly accepted within the SLA literature that there is a robust connection between interaction and learning"*. Interactionally modified (and comprehensible) input, learners' attention to their interlanguage as well as opportunities to produce output and receive feedback are the core elements of the interactionist approach (Mackey et al., 2012). While the interactionist approach highlights the importance of interaction in SLA, a related concept known as Willingness to Communicate (WTC) delves into the factors that shape an individual's willingness to engage in communicate acts in second or foreign language. The following section discusses the main principles of WTC and examines its significance in the context of SLA.

2.3   Situational and Psychological Factors in SLA: Willingness to Communicate

The concept of WTC was originally introduced by McCroskey and Baer (1985) in relation to L1 communication. McCroskey and Baer (1985) conceptualised WTC as individuals' inclination to engage in communication when they have complete freedom to decide whether or not to do so. They based their construct on the assumption that WTC is *"a personality-based, trait-like predisposition which is fairly consistent across a variety of communication contexts and types of receivers"* (McCroskey & Baer, 1985, p. 1). In their study, they introduced the WTC scale (see McCroskey & Baer, 1985, p. 10) which was designed to measure individuals' WTC across various communication contexts (i.e. public speaking, talking in meetings, talking in small groups, and talking in dyads) and with different interlocutors (i.e. strangers, acquaintances, and friends). Results indicated that individuals' WTC declines when the number of receivers increases and the relationship between individuals their interlocutor(s) becomes more distant (McCroskey & Baer, 1985). In general, McCroskey and Baer (1985) conceptualised WTC as a personality trait which reflects a *"predisposition toward being willing or unwilling to communicate"* (p. 8), while attributes such as introversion/extraversion, communication apprehension, perceived communication competence and self-esteem can influence an individual's WTC.

MacIntyre (1994) introduced a model highlighting the interconnectedness of various personality-based variables that can serve as predictors of an individual's WTC in the L1. His study showed that the combination of communication apprehension and perceived competence, which stem from introversion and self-esteem, can influence WTC. Based on MacIntyre's (1994) model, individuals are willing to communicate when they demonstrate low levels of communication apprehension and perceive themselves as capable to communicate effectively.

With regard to SLA, the study of MacIntyre and Charos (1996) examined the relationships between second language learning motivation, WTC and also the frequency of L2 communication. MacIntyre and Charos (1996) emphasised that the WTC construct is adaptable in the context of L2 and highlighted its relationship with L2 communication, motivation for language learning, contact opportunities and the perception of competence. In addition, results from this study showed that both personality traits and social context play a significant role in determining the frequency of L2 communication (MacIntyre & Charos, 1996).

A few years later, MacIntyre, Clément, Dörnyei and Noels (1998) expanded on McCroskey's WTC construct and adapted it to the L2 context by introducing willingness to communicate in a second language (L2 WTC). The authors conceptualised L2 WTC as a situational variable that directly predicts L2 usage and broadened the WTC concept to encompass not only oral communication but also *"other modes of production, such as writing and comprehension of both spoken and written language"* (MacIntyre et al., 1998, p. 546). MacIntyre and his colleagues (1998) defined L2 WTC as *"a readiness to enter into discourse at a particular time with a specific person or persons, using a L2"* (p. 547) and introduced a model to conceptualise the diverse behavioural, contextual, and psychological variables that influence L2 WTC. MacIntyre and his colleagues illustrated the variables influencing WTC using a pyramid-shaped figure (see Figure 2.1 below).
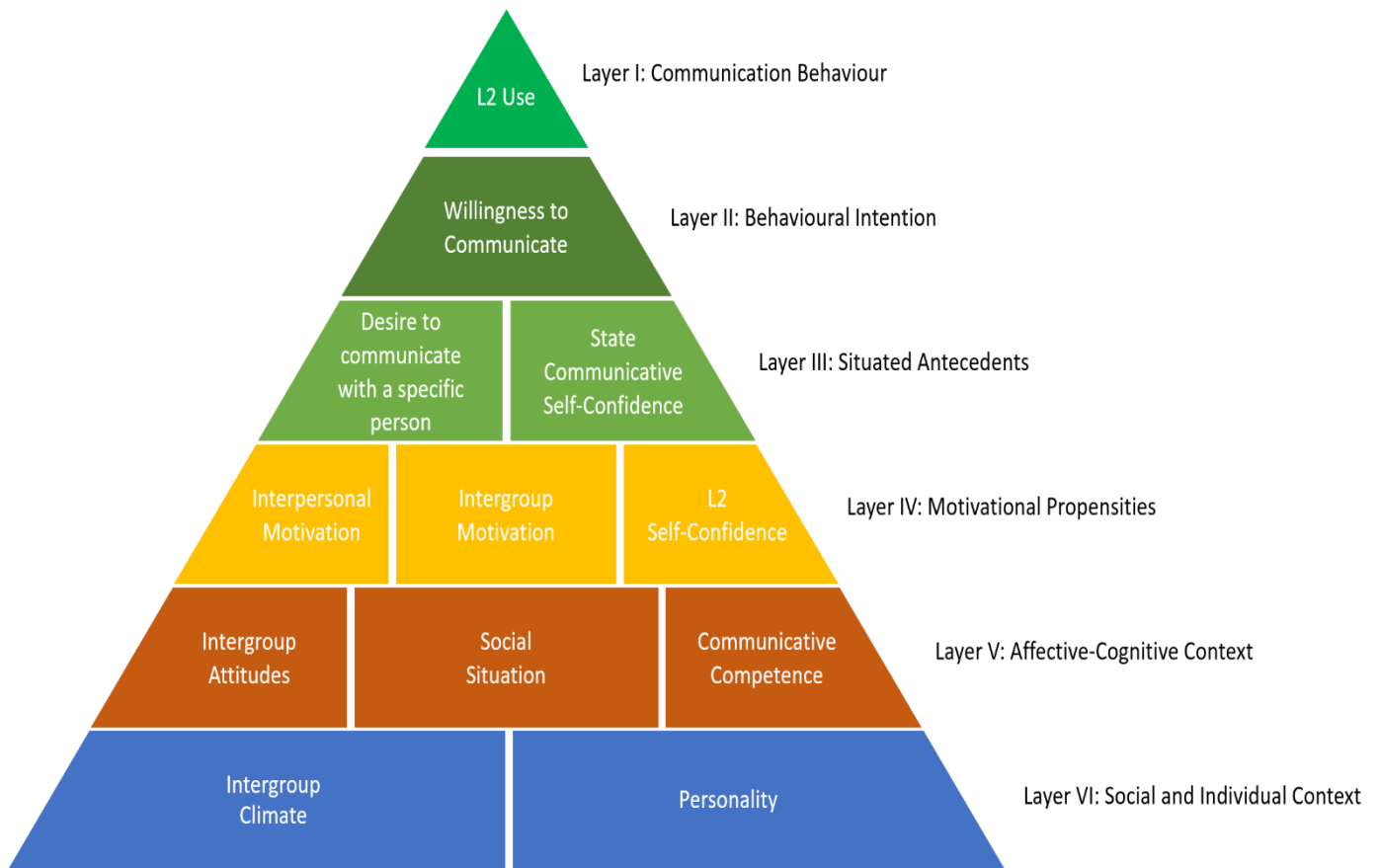
Figure 2.1: Heuristic Model of Variables Influencing WTC

(Adopted from MacIntyre et al., 1998, p. 547)

As Figure 2.1 illustrates, the pyramid is comprised of six layers which are organised along a *"proximal-distal continuum […] that captures the dimensions of time and concept specificity, with a distinctly intergroup flavour"* (MacIntyre, 2007, p. 567). The top three layers include the *"Communication Behaviour"* (L2 use), *"Behavioural Intention"* (Willingness to Communicate) and the *"Situated Antecedents"* (the desire to communicate with a specific person and the state communicative self-confidence) (MacIntyre et al., 1998, p. 547). The bottom three layers incorporate the *"Motivational Propensities"* (interpersonal motivation, intergroup motivational and self-confidence), the *"Affective-Cognitive Context"* (intergroup attitudes, social situation and communicative competence) and the *"Social and Individual Context"* (intergroup climate and personality) (MacIntyre et al., 1998, p. 547). The top three layers represent situation-specific variables that are prone to fluctuate or change from moment to moment, whereas the bottom layers reflect trait-like and enduring variables that are less susceptible to change over time (or may change over a long period of time). In other words, *"the base of the pyramid reflects the influence*

of long-term, stable processes [and] as one moves upward the pyramid, shorter-term, more situation-specific or time-limited processes begin to become relevant" (MacIntyre, 2020, p. 115). Overall, the pyramid model of WTC encompasses constructs from L2 literature which *"are layered according to a proximal—distal continuum [...] that captures the dimensions of time and concept specificity, with a distinctly intergroup flavour"* (MacIntyre, 2007, p. 567).

L2 WTC is viewed as a direct predictor of L2 use and its promotion is recognised as a significant objective in the field of SLA. MacIntyre's and his colleagues' pyramid model of WTC has been adopted by many scholars in the context of SLA research (MacIntyre, 2020). However, when revisiting the WTC pyramid model, MacIntyre (2020) highlighted two major discrepancies between his pyramid model and WTC research. First, *"the pyramid model did not address the measurement of state WTC and was silent on how it fluctuates over time"* (MacIntyre, 2020, p. 119). Given that the pyramid model distinguishes between enduring (i.e. bottom three layers) and rapidly changing (i.e. top three layers) variables, WTC research has overlooked the measurement of individuals' WTC changes in a given situation over different timescales (MacIntyre, 2020). Second, even though the pyramid model focuses on the interplay of various timescales with the multi-layered processes, the mechanisms through which these processes interact at any given moment were not elucidated (MacIntyre, 2020). For instance, the mechanisms through which processes like culture and personality interact with state-like variables (e.g. desire to communicate with a specific person) within a given situation and moment were not outlined.

In addition to the inconsistencies highlighted by MacIntyre (2020), the pyramid model has faced criticism for its focus on the Western world, neglecting to consider other cultural and geographical contexts. Based on that criticism, Wen and Clément (2003) reconceptualised the WTC model in the Chinese context by amending structural interconnections between constructs and by re-evaluating certain variables to reflect Chinese cultural values. The scholars drew distinctions between desire to communicate and WTC arguing that *"having the desire to communicate does not necessarily imply a willingness to communicate"* (Wen & Clément, 2003, p. 25). In their conceptualisation, Wen and Clément (2003, p. 25) introduced other variables such as *"Societal Context"* (i.e. group cohesiveness and teacher support), *"Personality Factors"* (i.e. risk-taking and tolerance of ambiguity), *"Motivational Orientation"* (i.e. affiliation and task-orientation) and *"Affective Perceptions"* (i.e. inhibited monitor and positive expectation of evaluation) which

moderate the relation between desire to communicate and WTC in the Chinese context. Overall, this model emphasised the impact of culture on L2 WTC but lacked sufficient justification for the connection between the proposed variables and how they might affect a learner's L2 WTC (Syed et al., 2022).

The literature above illustrates the transition of the WTC concept from a trait-like predisposition (McCroskey & Baer, 1985) to a situational construct (MacIntyre et al., 1998) which could also be influenced by the cultural context (Wen & Clément, 2003). In contrast to MacIntyre's model, Kang (2005) proposed a conceptualisation of L2 WTC as a dynamic situational construct. In her study, Kang (2005) inductively analysed data from interviews, videotaped conversations and stimulated recalls to examine the means by which L2 WTC can dynamically arise and fluctuate during the course of a conversation. Findings from this study highlighted that situational factors such as topics that learners are interested in, their interlocutors and the conversational context interact with psychological variables like feelings of security, excitement, and responsibility. These factors affect learners' L2 WTC not only between different situations but also within the same conversation, manifesting moment-to-moment fluctuations (Kang, 2005). The author argued that *"situational WTC can dynamically emerge through the role of situational variables and fluctuate during communication"* and defined WTC as *"an individual's volitional inclination towards actively engaging in the act of communication in a specific situation, which can vary according to interlocutor(s), topic, and conversational context, among other potential situational variables"* (Kang, 2005, p. 291).

Kang's (2005) conceptualisation of L2 WTC as a dynamic situational construct has led many scholars (e.g. Cao, 2013, 2014; Cao & Philp, 2006; Pawlak et al., 2016; Pawlak & Mystkowska-Wiertelak, 2015; Peng & Woodrow, 2010) to explore how various situational variables affect learners' WTC. In addition, from a methodological standpoint, instead of relying heavily on quantitative data, many studies (Cao, 2013, 2014; Cao & Philp, 2006; Pawlak et al., 2016; Pawlak & Mystkowska-Wiertelak, 2015) employed various mixed methods approaches to explore the complex and dynamic situational factors that might influence L2 WTC. For instance, Cao and Philp (2006) employed classroom observation, interviews and questionnaires to explore ESL learners' WTC across different classroom settings (i.e. whole class environment, small groups and dyads). Similar to Kang's (2005) findings, Cao and Philp (2006) emphasised the dynamic nature of WTC arguing that situational variables such as the group size, learners' familiarity with their interlocutors and

with the topics under discussion, the interlocutors' participation, learners' self-confidence and the medium of communication can influence WTC across different classroom settings. In another study, Cao (2013) carried out a longitudinal case to investigate dynamism in WTC. Participants of the study were twelve ESL learners who were asked to record themselves during classroom interactions in the target language over a period of five months (Cao, 2013). Stimulated-recall interviews and journal entries were also used in the study. The findings revealed that learners' L2 WTC can demonstrate both short term (from one lesson to another and even from one task to another within the same lesson) and long term (as learners become more experienced and confident in L2) fluctuations (Cao, 2013). A year later, Cao (2014) investigated WTC among six ESL learners over a period of 5 months. The author employed classroom observations, stimulated-recall interviews and journals entries to examine WTC behaviour in the classroom context (Cao, 2014). The findings indicated that WTC cannot be fully explained by exploring learners' individual characteristics, classroom environmental conditions, or linguistic factors; instead L2 WTC is shaped by the interplay among these three factors. In addition, Cao (2014, p.810) emphasised the dynamic nature of L2 WTC in the classroom context and defined it as *"a student's observable intention to engage in class communication with other interlocutors. This intention entails fluctuation and dynamism due to variations in its individual, environmental, and linguistic antecedents, which interdependently exert facilitative and inhibitive effects on it".* The dynamic nature of L2 WTC was also reported by Pawlak and Mystkowska-Wiertelak (2015). This study aimed to examine the potential changes in learners' WTC during a conversation. Participants of the study were eight ESL learners who were asked to work in pairs and converse using the target language (Pawlak & Mystkowska-Wiertelak, 2015). Following a mixed-methods approach (i.e. self-ratings, questionnaires, and interviews), the authors reported fluctuations in learners' L2 WTC. According to Pawlak and Mystkowska-Wiertelak (2015), these fluctuations are attributed to variables such as the discussion topic, the time provided to prepare for the task, learners' familiarity with their interlocutor, the opportunity to share personal ideas and learners' proficiency level (especially in terms of vocabulary)(Pawlak & Mystkowska-Wiertelak, 2015). Another study examined the dynamism of WTC among four groups of advanced ESL learners (n=60)(Pawlak et al., 2016). Based on learners' self-ratings of their WTC and questionnaires, the authors reported differences in learners' WTC across groups which can be attributed to the topic under discussion and the types of tasks as well as to teacher-related (e.g.

teaching style and skills, scheduling of the activities, affinity with students and enthusiasm) and learner-related (e.g. proficiency level, preparation, motivation and boredom) factors (Pawlak et al., 2016).

The discussion above emphasises the switch from perceiving L2 WTC as a stable, trait-like phenomenon to focusing more on its dynamic, state-like variables. In that respect, Zhang and her colleagues (2018) carried out a systematic literature review to explore the situational antecedents of L2 WTC. Based on the review of 35 empirical studies that explored the situational components of WTC in the field of SLA, the authors identified situational cues such as the interlocutors (familiarity, participation, and cooperation), classroom atmosphere (classmates, class size and teachers) and tasks (topics, types of activity, preparation time and assessment) which can have an impact on learners' WTC (Zhang et al., 2018). In addition, based the reviewed empirical studies, Zhang and her colleagues (2018) proposed a framework of situational antecedents of state WTC (see Figure 2.2. below).
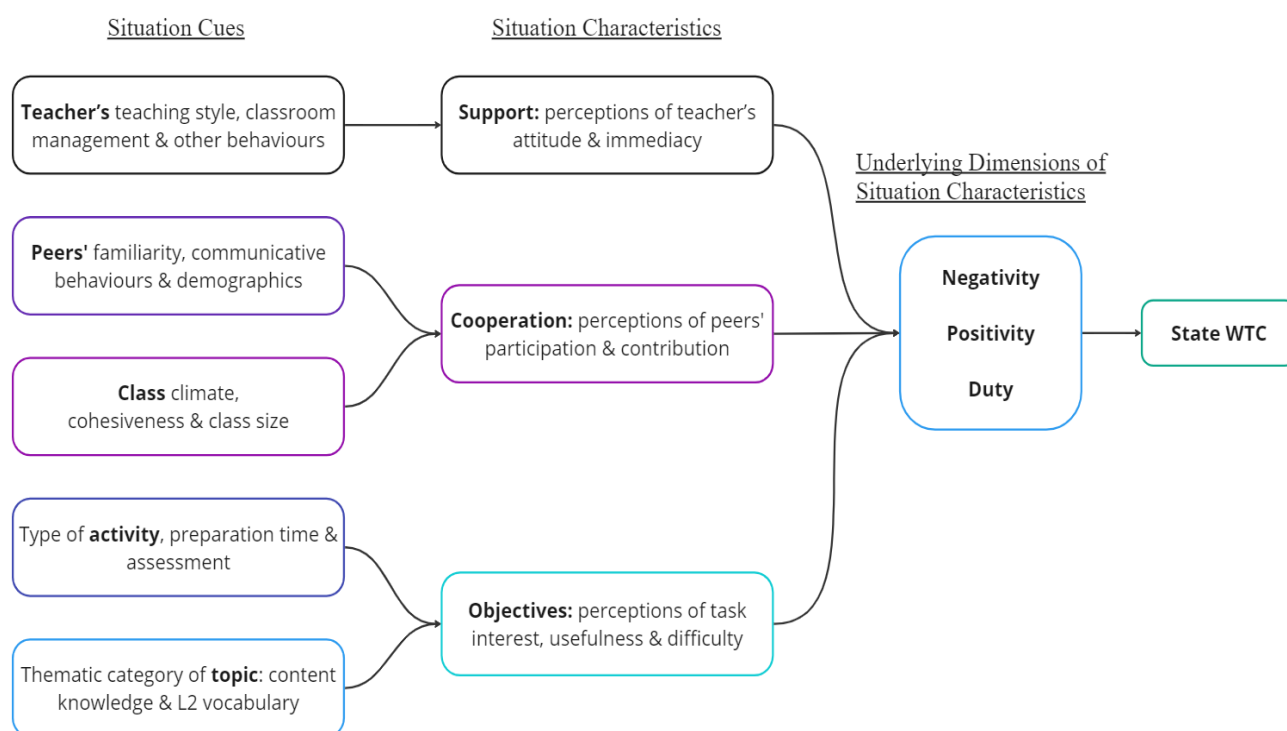
Figure 2.2: The proposed framework of situational antecedents of state WTC. (adopted from Zhang et al. (2018, p. 233)

The proposed framework consists of three interconnected layers of situational variables (see Figure 2.2). The situation cues which include variables such as the teacher's role (i.e. teaching style, classroom management and other verbal and non-verbal behaviours), interlocutors (i.e. peer's familiarity, communicative behaviours and demographics), classroom environment (class climate, cohesiveness and size), activities (type of activity, preparation time and assessment) and discussion topic (i.e. content knowledge and L2 vocabulary)(Zhang et al., 2018, p. 233). The second layer (i.e. situation characteristics) includes variables such as support (i.e. learners' perceptions of teacher's attitude and immediacy), cooperation (i.e. learners' perceptions of their peers' participation and cooperation) and objectives (i.e. learners' perceptions of the task in terms of interest, usefulness and difficulty) which are conceptualised as learners' subjective perceptions of the situation cues (Zhang et al., 2018, p. 233). The third layer incorporates *"the underlying dimensions of situation characteristics"*, namely, *"negativity"* (negative emotions such as lack of confidence and apprehension of making mistakes in L2) *"positivity"* (positive feelings such as excitement and interest) and *"duty"* (students' perception of task importance) (Zhang et al., 2018, p. 233). Overall, the proposed framework distinguishes learners' subjective perceptions of a situation (i.e. situation characteristics) from the objective features of a situation (i.e. situation cues) and emphasises the dynamic processes that underpin the WTC construct. According to the authors, the objective characteristics of a situation and students' subjective perceptions result in positive and/or negative feelings, as well as feelings of duty (Zhang et al., 2018).

The preceding discussion highlights the various attempts that have been made by scholars to investigate the L2 WTC construct and pinpoint its fundamental variables in a classroom context. Recently, there has been a growing body of research (see Ebadi & Ebadijalal, 2022; Lee & Chen Hsieh, 2019; Lee & Dressman, 2018; Lee & Lee, 2020; Nematizadeh & Cao, 2023) that explored the L2 WTC construct in both outside-the-classroom settings and online environments. For instance, Lee and Chen Hsieh (2019) investigated the association between affective variables (i.e. L2 self-confidence, L2 anxiety, L2 motivation, and grit) and L2 WTC across in-class, out-of-class (non-digital) and digital contexts. The authors used a questionnaire as their instrument for data collection, which was administered to 261 Taiwanese EFL students. The findings indicated a significant correlation between two affective variables, namely L2 confidence and grit, and L2 WTC in all three contexts. The authors argued that learners who exhibit persistence in their use of

English and confidence in their communication skills demonstrate higher WTC and are more likely to initiate communication in the target language in both digital and non-digital settings (Lee & Chen Hsieh, 2019). In addition, the study revealed that the lack of L2 anxiety significantly contributed to learners' L2 WTC in non-digital environments but was not correlated with L2 WTC in the digital environment. Based on these findings, the authors concluded that EFL learners perceive communication in digital environments as more comfortable than in offline settings and argued that digital contexts may offer social support and additional psychological benefits which can potentially reduce learners' L2 anxiety (Lee & Chen Hsieh, 2019).

In a similar study, Lee and Lee (2020) explored the extent to which affective factors are associated with L2 WTC in three different communication settings (i.e. in-class, out-of-class and digital). Employing a quantitative approach to a sample of 176 Korean EFL undergraduate and graduate students, the findings revealed that demographic, affective variables, and virtual intercultural activities significantly influenced learners' WTC in all three contexts. The authors argued that learners who demonstrated higher levels of motivation and grit, along with low L2 anxiety had higher L2 WTC in the classroom context, while EFL students with high levels of L2 confidence and risk-taking demonstrated higher L2 WTC outside the classroom (Lee & Lee, 2020). In addition, the study showed that younger EFL learners characterised by higher levels of L2 confidence and regular engagement in virtual intercultural experiences exhibited higher L2 WTC in digital settings (Lee & Lee, 2020).

In another study, Nematizadeh and Cao (2023) explored the nature of online L2 WTC and the potential factors that affect learners' WTC during synchronous discussion tasks. The study involved seven Farsi-speaking ESL speakers who participated in six 30-minute discussion tasks via Zoom. Learners were asked to rate their WTC every five minutes during the discussion tasks, and after the discussion, they participated in stimulated recall interviews. The authors reported significant fluctuations of learners' WTC during the online discussion tasks emphasising the dynamic nature of online WTC. In addition, Nematizadeh and Cao (2023, p. 22) found that these fluctuations can derive from internal (i.e. *"individual, linguistic, perceived, organizational factors"*) and external (i.e. *"environment, task dynamics, facilitators, coparticipants, topics"*) forces. Most importantly, the authors reported that WTC fluctuations result from interactions among multiple internal and external factors rather than from a single factor, and argued that online WTC "emerge[s]

from complex interrelationships among individual, affective, cognitive, social, and contextual predictors" (Nematizadeh & Cao, 2023, p. 22).

Some studies also examined the impact of social media on learners' L2 WTC. Shamsi and Bozorgian (2022) conducted a systematic literature review on the use of social media and the impact of these tools on L2 WTC. The authors identified and analysed 23 relevant papers from 2011 to 2021 (Shamsi & Bozorgian, 2022). In terms of geographical distribution, almost all of the studies (n=22) were conducted in Asia, while only one study was carried out in Europe. In addition, all reviewed studies were carried out in formal contexts (19 in higher education contexts and 4 in middle schools and high schools), while the majority of the studies (n=22) focused on English as the target language. As regards the effects of social media on L2 WTC, Shamsi and Bozorgian (2022) identified three predictors of L2 WTC: self-confidence, motivation and anxiety. Based on the reviewed studies, the authors concluded that the use of social media for language learning purposes *"helped language learners to improve L2 WTC by increasing self-confidence and motivation and decreasing anxiety"* (Shamsi & Bozorgian, 2022, p. 4473).

In summary, the above discussion explored the main principles of WTC and its various conceptualisations. Since the original conceptualisation of WTC in L1 as *"a personality-based, trait-like predisposition"* (McCroskey & Baer, 1985, p. 1)*,* WTC has been adapted in the context of L2 (MacIntyre & Charos, 1996) and has been reconceptualised as a situational variable (MacIntyre et al., 1998) and more recently as a dynamic situational construct (Cao, 2014; Kang, 2005; Zhang et al., 2018). Overall, L2 WTC is recognised as a crucial element in the language learning and communication process which plays a key role in the development of learners' communicative competence (Elahi Shirvan et al., 2019). In addition, considering that L2 interaction is the main mechanism by which languages are learnt (Blake, 2008; Mackey et al., 2012; Randall, 2007) (see Section 2.2), promoting learners' L2 WTC becomes a significant goal of language pedagogy (MacIntyre et al., 1998). In Kang's (2005, p. 278) words, *"given that language development can occur through interaction, it can be assumed that more interaction leads to more language development and learning"*. In that respect, L2 WTC plays a pivotal role in SLA and should be given significant attention in L2 pedagogy (Kang, 2005).

Notwithstanding the importance of L2 WTC construct in SLA, this doctoral research does not delve into the examination of the situational and psychological factors that influence students' WTC. The main objective of this doctoral research is to investigate how

learners and teachers participate in social media platforms and interact with each other, rather than examining the variables that influence their WTC. Finally, and with regard to SLA, even though this thesis explores the conditions that might facilitate language learning, the measurement of learners' SLA and WTC is not within the scope of this research.

One of the analytical and theoretical frameworks that informed this doctoral research is the Community of Inquiry (CoI) framework. This widely adopted explanatory educational framework for online education grounds learning and teaching in the interactions between learners and teachers and conceptualises them as the means for establishing and sustaining social, teaching and cognitive presences. The following section discusses the main principles of CoI framework and its use in this thesis.

2.4 The Community of Inquiry framework

Garrison and his colleagues (Garrison et al., 1999, 2001) first introduced the Community of Inquiry (CoI) theoretical framework to account for the process of learning in an online educational environment (Fiock, 2020; Stenbom, 2018). Grounded in the social constructivist perspective on learning (Kim & Gurvitch, 2020), the CoI model can be described as *"a generic and coherent structure of a transactional educational experience whose core function is to manage and monitor the dynamic for thinking and learning collaboratively"* (Garrison, 2017, p. 24). The CoI framework also provides a comprehensive way of studying interactions in online environments via three interdependent elements – cognitive, teaching, and social presences (Garrison, 2011, 2017). Those elements of CoI are commonly illustrated with a Venn diagram (Stenbom, 2018) (see Figure 2.3).
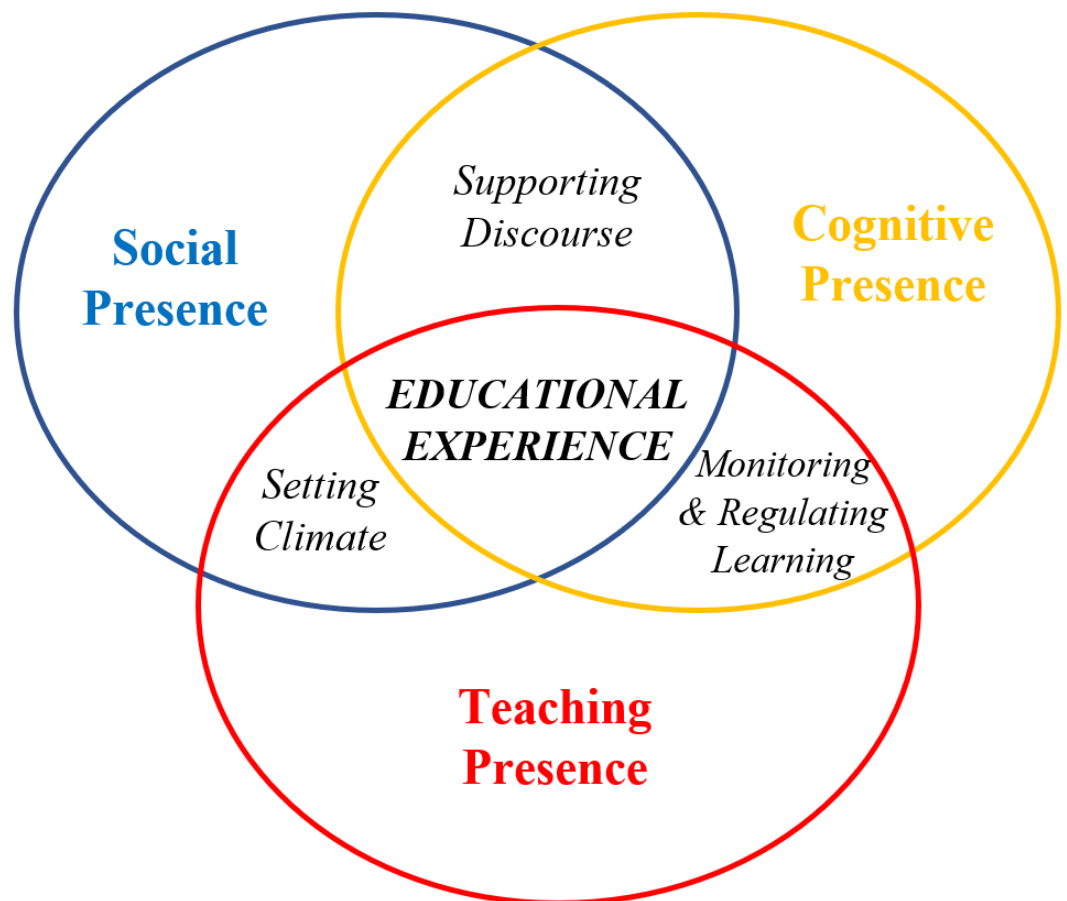
Figure 2.3: The Community of Inquiry Framework
(adopted from Garrison 2011, p. 23)

As Figure 2.3 illustrates, CoI represents a *"process of designing and delivering deep and meaningful learning experiences through the development of three interdependent elements – social, teaching, and cognitive presences"* (Garrison, 2017, p. 24). These

presences and their structural relationships (see Figure 2.3) create a sense of identity through purposeful communication, interaction, and distributed teaching and learning responsibilities (Garrison, 2017).

Social presence is an aspect of the *"human experience of learning"* (Stenbom, 2018, p. 22) and refers to the degree to which learners feel connected to one another and develop relationships within an online environment. Teaching presence refers to the design, organization, facilitation and direction of the learning experience by the teacher (see Garrison, 2017, p. 28). The third component of CoI – cognitive presence – reflects the learning process and learners' development of higher-order and critical thinking. According to Akyol and Garrison (2008), those three presences of CoI interact with each other in complex ways and all three are essential to establish an effective online learning process.

As its name indicates, this framework entails two essential learning constructs: *community*, which is a *"formally constituted group of individuals whose connection is that of academic purpose and interest who work collaboratively toward intended learning goals and outcomes"*, and *inquiry*, which is concerned with the systematic process of questioning, identifying a problem, investigating, exploring ideas and concepts, resolving a problem and creating new knowledge (Garrison & Vaughan, 2008, p. 17). Consequently, an educational community of inquiry can be defined as *"a group of individuals who collaboratively engage in purposeful critical discourse and reflection to construct personal meaning and confirm mutual understanding"* (Garrison, 2011, p.2). In other words, this framework emphasises the value of collaboration between learners and teachers which can lead to knowledge creation(Garrison, 2017).

To comprehend the complexities of a CoI it is important to discuss its three interdependent elements (i.e. social, teaching, and cognitive presence). These are discussed in what follows.

2.4.1   Social presence

The original working definition of social presence within a CoI was *"the ability of participants to project themselves socially and emotionally, as real people (i.e. their full personality), through the medium of communication being used"* (Garrison et al., 1999, p. 94). A few years later, Garrison (2009, p. 352) defined social presence as the *"ability of participants to identify with the group or course of study, communicate purposefully in a trusting environment, and develop personal and affective relationships progressively by*

way of projecting their individual personalities" (Garrison, 2009, p. 352). As Goshtasbpour (2019) has shown in her study of instructor contributions to discussions in Massive Open Online Courses (MOOCs), social presence serves three purposes: it shapes the identity of the learners within the educational community; it establishes the condition for open and interpersonal communication; and it facilitates the development of personal relationships over time by fostering group cohesion and open communication.

Social presence also consists of three broad categories: *affective* (or interpersonal), *open* and *cohesive* communication (Garrison, 2017; Rourke et al., 1999). Affective communication involves expressions of feelings, emotions, beliefs and values as well as self-disclosure (see Garrison, 2011, p. 38). Open communication concerns participants' online behaviours and activities, including learner to learner and teacher to learner interactions, and is an essential condition that facilitates participants' meaningful discourse and purposeful connection to the group (Garrison, 2017). In other words, open communication is developed *"through the process of recognising, complimenting and responding to the questions and contributions of others, thereby encouraging reflective participation and discourse"* (Garrison, 2017, p. 46). As Garrison (2017) highlighted, interpersonal and open communication contributes directly to the third category of social presence (i.e. cohesive communication), which focuses on creating and sustaining a sense of community as well as group commitment. All three categories of social presence also consist of several indicators. A full description of these indicators and their definitions are provided in Appendix 1.

A challenge associated with the development of social presence in text-based communication is the lack of visual cues (e.g. body language, verbal intonation, etc.) which have a profound effect on how a message is conveyed and interpreted (Garrison, 2011). Nonetheless, Garrison (2017) argued that learners can and do overcome the lack of non-verbal communication through the use of greetings, encouragement, paralinguistic emphasis (e.g. capitals, emojis, emoticons, etc.) and personal vignettes (Garrison & Arbaugh, 2007).

Overall, social presence is a critical component of the CoI model since it fosters a supportive and engaging online environment which can promote learning. It is also *"a mediating variable with regard to cognitive and teaching presence"* (Garrison, 2017, p. 49). In addition, according to Garrison, the primary role of social presence is to support the development of cognitive presence (Akyol & Garrison, 2008; Garrison, 2007, 2011).

2.4.2   Teaching presence

Teaching presence focuses on the roles of an educator and has been defined as *"the design, facilitation, and direction of cognitive and social processes for the purpose of realizing personally meaningful and educationally worthwhile learning outcomes"* (Anderson et al., 2001, p. 5). It is *"the key to a successful and sustained community of inquiry"* (Garrison, 2015, p. 61) and encompasses the *"actual functions that a teacher must perform to create and maintain a dynamic collaborative learning environment"* (Garrison, 2017, p. 71).

Garrison, Anderson and Archer (1999) conceptualised teaching presence in terms of three components: *instructional design and organisation*, *facilitating discourse* and *direct instruction* (also see Appendix 1). Instructional design and organisation involves the macro-level structure and process in an online CoI (Garrison, 2017). Teachers' decisions related to design and organisation include planning and designing possibilities, building the curriculum, establishing time parameters and netiquette, utilising the online environment effectively, and adjusting to changes in the course of the educational transaction (see Garrison, 2017, p. 72-73). The second element of teaching presence – facilitating discourse – refers to the purpose of a CoI as *"enabling and encouraging the construction of personal meaning as well as collaboratively shaping and confirming mutual understanding"* (Garrison, 2017, p. 73) (also see Appendix 1). This category of teaching presence also involves the means by which learners engage in interactions and elaborate on the online content (Arbaugh, 2014). The third element of teaching presence – direct instruction – refers to instructors' *"direct and proactive interventions that support an effective and efficient learning experience"* (Garrison, 2017, p. 76). Direct instruction involves teachers' ability to present the content of the course, inject knowledge using diverse sources, summarise the discussion, diagnose misconceptions, and provide feedback (Anderson et al., 2001; Garrison, 2011).

The development of teaching presence is a continuous and dynamic process since it requires adaptations to meet learners' evolving needs (Garrison, 2009, 2015). In addition, within a CoI the role of the teacher is demanding and his/her responsibilities are complex and multi-faceted (Garrison, 2017). These responsibilities include being a subject matter expert, an educational designer, a facilitator, and a teacher (Garrison, 2011). Notwithstanding the essential role of a teacher in designing, facilitating, and directing an e-learning experience, Garrison (2011) emphasised that ideally in the CoI framework

learners can also contribute to the teaching presence and should be encouraged to become critical thinkers and self-directed in monitoring and regulating their learning process. In addition, according to Garrison (2017, p. 74) the community should be self-sustaining and self-correcting, while *"too little or too much teaching presence may adversely affect the discourse and the process of building understanding".* Along the same lines, Zhao and Sullivan (2017, p. 14) argued that *"a higher level of teacher presence might be associated with a lower level of participation, interaction, cognitive presence, and knowledge construction".*

Overall, teaching presence requires an instructor's intellectual and pedagogical leadership and focuses on the roles of a teacher or the functions that he/she must perform to ultimately create a dynamic and collaborative learning environment (Garrison, 2017). According to the CoI framework, teaching presence must also bring together the cognitive and social presences in purposeful and synergistic ways (Garrison, 2017).

2.4.3 Cognitive presence

The third element of the CoI framework – cognitive presence – is associated with critical thinking and has been defined as the process of *"facilitating the analysis, construction, and confirmation of meaning and understanding within a community of learners through sustained discourse and reflection"* (Garrison, 2017, p. 50).

Garrison, Anderson and Archer (2001) conceptualised four phases within cognitive presence – *Triggering event*, *Exploration*, *Integration* and *Resolution* (also see Appendix 1). The first phase – *Triggering event* – initiates the inquiry process and is associated with conceptualising a problem or issue. This phase should include presenting information, resources or learning activities that generate curiosity and questions (Garrison, 2011). It is followed by *Exploration* where learners search, gather and exchange relevant information and ideas. This phase would include: brainstorming, sharing supportive or contradictory ideas and offering relevant suggestions based on personal experiences and perspectives (Garrison, 2017). Next, the *Integration* phase is concerned with learners' efforts to synthesise relevant information and construct meaningful solutions and/or explanations. In other words, learners in this phase of cognitive presence internalise relevant information, express agreement or disagreement, elaborate on other ideas, provide a rationale or justification and explicitly offer a solution (Garrison, 2017). Finally, in the *Resolution* phase learners critically reflect on the proposed solutions and assess their

validity through direct or vicarious application. According to Garrison (2017), this phase requires learners' commitment to test a solution deductively (in some cases through experiment or action research projects) and rigorously analyse the hypothetical test.

As Garrison (2017) highlighted, moving the discussion and learners' cognitive development through each of the above phases is a major challenge for educators. He also acknowledged that there is a tendency to *"do the first two phases very well, the third phase less well, and the last phase hardly at all"* (Garrison, 2017, p. 67). One of the reasons why moving learners through these phases (and particularly *Integration* and *Resolution*) is challenging is that online courses rarely provide enough time for the last two phases of cognitive presence to be developed (Akyol et al., 2009; Garrison & Akyol, 2013). Another factor that Garrison (2017) considers challenging in developing all the above phases is the lack of sufficient teaching presence to move the discussion forward, while he also emphasised the importance of designing and facilitating the learning tasks since their design and their nature are crucial in reaching *Resolution* (also see Bai, 2009; Garrison, 2015).

In sum, cognitive presence involves the cognitive aspects of a collaborative learning experience *"grounded in personal reflection and shared discourse"* and represents *"the means to support and sustain a purposeful learning community"* (Garrison, 2017, p. 67). However, there are major challenges in moving learners through the phases of cognitive presence, thus its development requires facilitation and direction from teachers (Garrison, 2007).

2.4.4   The rationale for choosing CoI and its role in this research

The CoI framework is the most widely adopted explanatory educational framework for online education (Garrison, 2011, 2017; Garrison & Akyol, 2013; Garrison & Anderson, 2003; Z. Wang et al., 2017) due to its high adaptation rate, its comprehensive view of educational transactions and its manageable application (Garrison et al., 2006; Goshtasbpour, 2019; Rourke & Anderson, 2002). Several studies (Goshtasbpour, 2019; Goshtasbpour et al., 2020; Jackson et al., 2013; Rourke et al., 2001; Stenbom et al., 2016; Swan & Ice, 2010) have confirmed that the CoI framework provides high validity and reliability in terms of analysing and interpreting participants' interactions in online discussions.

A major advantage of this framework is that it provides a theoretical foundation for examining and understanding the complex nature of online learning. By focusing on the interplay between social, teaching, and cognitive presences, the CoI framework provides the lens through which we can understand the online learning experience and can also support educators in designing and facilitating online courses that foster engagement, collaboration, and critical thinking. In addition, this framework provides a classification of the type and level of both teachers' and learners' contributions in an online educational environment and can offer valuable insights that help interpret how and why interactions between learners and teachers occur.

With reference to the present doctoral study, the CoI framework informed many aspects of the research design, directed the data analysis, and offered valuable insights that helped interpret the data and generate findings. The CoI framed the research design by providing the theoretical lens and the directions to study the online data and to unpack learners' and teachers' online activities in the two main studies that comprised this thesis. As regards the data analysis, the CoI framework was used as a coding scheme (see Section 3.4.2) for the analysis of the online data and provided valuable evidence of the types of contributions that the teachers and the learners made to the Facebook and the WhatsApp groups. In addition, it offered a theoretical orientation which was essential in enabling insights which complemented those derived from other sources of data (i.e. questionnaires and interviews). Finally, the CoI framework helped with the interpretation of the findings from the analysis of participants' interactions and provided the theoretical lens to discuss the findings and make recommendations for practice and future research.

Notwithstanding the benefits of the CoI framework in exploring participants' interactions in online discussions, it has also received some criticism. As noted in Bailey (2017), Goshtasbpour (2019) and Chen (2022), Xin (2012) emphasised that online expression is multi-functional and discussion in these environments must be understood as a communication phenomenon. Thus, Xin (2012) contended that the analysis of the communicative functions in online talks should go beyond content analysis techniques (typically used in CoI) and focus on the processes of communicative interaction as well as the structure, organisation and social implication of online discourse (also see Mazur, 2004). In other words, when examining online discussions, emphasis should be placed on who said what, how, why and when (Xin, 2012) and on the dynamics of online conversations such as turn taking, responding and/or initiating a conversation (Chua et al.,

2017), which cannot be revealed by employing the CoI framework. With regard to teaching presence, Morgan (2011, p. 1) argued that even though the CoI framework provides valuable insights into the types of interactions teachers make in online discussions, it is *"less useful in helping to understand the why's of instructors' interactive decisions"*.

These limitations of the CoI framework can be addressed by incorporating other methodologies (e.g. questionnaires and interviews) into the research design. Most importantly, to scrutinise multi-functional communicative exchanges in an online environment as well as teachers' and learners' sharing practices in social media there is a need to systematically observe their online activities and carry out a sociolinguistic analysis (in the sense of the examination of language use in its social context) of the online data. To address the above limitations of the CoI framework, this doctoral research adopted the framework for the analysis of online sharing practices proposed by Androutsopoulos (2014) in the context of his study of linguistic repertoires in SNSs, and used it to examine the ways in which the learners and their teachers participated in the Facebook and the WhatsApp groups and interacted with each other. This is discussed in the following section.

2.5 The framework for the analysis of sharing practices

The ubiquity of digital technologies has influenced the ways in which people communicate, interact, and form their social relationships. These new practices along with the advent of social media gave rise to different forms of interaction than those encountered in face to face conversation and traditional written texts and transformed the ways in which researchers view texts, social interactions and the nature of language itself (Jones et al., 2015).

The affordances of digital technologies nowadays make possible new kinds of *practices* which refer to *"observable, collectable and/or documentable [...] events, involving real people, relationships, purposes, actions, places, times, circumstances, feelings, tools, and resources"* (Tusting et al., 2000, p. 213). According to Jones, Chik and Hafner (2015, p. 5), these digital practices do not refer to online discourse per se, *"but rather, [to] the situated social practices that people use discourse to perform"*. Therefore, digital practices are defined as *"these 'assemblages' of actions involving tools associated with digital technologies, which have come to be recognised by specific groups of people as ways of attaining particular social goals, enacting particular social identities, and reproducing particular sets of social relationships"* (Jones et al., 2015, p. 6).

Given that digital texts in online environments (such as social media, discussion forums, blogs, video games, etc.) can take multiple forms, Lankshear and Knobel (2008, p. 5) used the term *"digital literacies"* which they defined as *"a shorthand for the myriad social practices and conceptions of engaging in meaning making mediated by texts that are produced, received, distributed, exchanged, etc., via digital codification"*. According to Cooper (1986, p. 367), literacy is *"an activity through which a person is continually engaged with a variety of socially constituted systems"*. In that respect, digital literacies can be viewed as practices that are socially situated and describe the ways in which *"the members of a certain social group represent, negotiate, and formulate their stances and identities to meet their goals and interests"* (Lee et al., 2019, p. 36). Nonetheless, digital literacies can also be conceptualised as cognitive processes that focus on how individuals are *"engaged in reading, writing, thinking and reasoning in response to texts of different contents and forms"* (Lee et al., 2019, p. 37).

In general terms, the use of social media involves users' development of digital practices (and literacies) to negotiate the new rhetorical situations they encounter (Buck, 2012). Nonetheless, understanding and interpreting the complex relationships between discourse and digital practices in social media is challenging, and necessitates the use of analytical frameworks designed to investigate digital communication and the various practices related to digitally mediated discourse (Jones et al., 2015).

Androutsopoulos (2008) introduced a framework which he tentatively called Discourse-Centred Online Ethnography (DCOE). Arguing that research based solely on online data cannot scrutinise participants discourse practices and perspectives, Androutsopoulos (2008) combined systematic observation of online activities in social media platforms with interviews with the users. This framework goes beyond what is observable on the screen and uses interviews as a complement to the linguistic analysis, aiming to relate participants online practices and perspectives to observable patterns of language use. Situating his approach in the field of sociolinguistics, Androutsopoulos (2008) proposed the use of DCOE to study patterns of online communication, interactions and social relationships established through language use in an online community or a group.

Combining systematic observation, linguistic analysis, and interviews, DCOE can help understand the social meaning rooted in online discourse by taking into account participants' awareness and interpretation of their practices, and by relating their language use to the social activities of an online community or a group. Systematic observation in

this framework is used to scrutinise the complex architecture of an online space (e.g. social media groups) and provide an in-depth understanding of the multifaceted relations among its components. Androutsopoulos (2008, p.17) also noted that DCOE uses elements of the ethnographic method (i.e. systematic observation) but does not represent a *"full-fledged ethnography"* (i.e. an in-depth and long-term study of virtual communities). Hence, DCOE adopts Hine's (2000, p. 65) views of virtual ethnography, which in methodological terms is an *"adaptive ethnography which sets out to suit itself to the conditions in which it finds itself"*. In that respect, systematic observation in this framework focuses on the examination of participants' linguistic practices and the patterns of language use, and aims at charting online activities in these environments, identifying the main online actors (i.e. participants) and exploring the ways in which they interact and interrelate (Androutsopoulos, 2008). In addition to systematic observation, interviews seek to elicit participants' awareness, assumptions, and interpretations of their digital and linguistic practices as well as the strategies they develop when they engage in discussions in social media groups.

A few years later, based on the main principles of DCOE (i.e. systematic observation, linguistic analysis of online data and interview) Androutsopoulos (2014) introduced an empirical framework which particularly focuses on the notions of *"sharing"* in social media and examines the relation between sharing practices and linguistic repertoires. This framework adopts John's (2013, p. 178) conceptualisation of *sharing* which describes *"the way[s] in which we participate in Web 2.0"*. According to John (2013), *sharing* in the context of social media incorporates both communication and distribution. In John's (2013, p. 175-176) words:

> *"Sharing on SNSs involves the distribution of digital content in the form of links, photos, video clips and more. In this sense, I share something by letting someone else have it as well. Yet sharing on SNSs is also, and importantly, about communication, particularly through the practice of updating one's status on Facebook or Twitter. Here, sharing is telling. Part of what we are encouraged to share on SNSs is our feelings, and so there is an overlap between a common spoken use of the term and the Web 2.0 meaning. However, letting people know your opinion of current events, your location or any of the minutiae of your everyday life is, in Web 2.0, also called sharing."*

Following John's (2013) view of *sharing* as a concept that incorporates a wide set of language practices in social media, Androutsopoulos (2014) proposed a descriptive framework for the analysis of these sharing practices. This empirically informed framework

84

involves three stages of analysis. The first stage concerns a quantitative analysis of participants' linguistic repertoires. The second stage of analysis is concerned with the identification and selection of relevant communicative events (see Section 3.4.3) which are then qualitatively analysed following a discourse-centred approach. A communicative event is defined as a *"spatially and temporally delimited, multi-authored sequence of contributions"* (Androutsopoulos, 2014, p. 7). In other words, the basic unit of analysis in this stage is not a single post, but a communicative event which consists of an initial post followed by other users' responses. The final stage involves a discourse-centred analysis of the selected communicative events. Androutsopoulos (2014) conceptualised *sharing* as a practice that unfolds on three levels, namely, "*selecting*", "*styling*" and "*negotiating*". Consequently, this micro-analysis focuses on what is being shared (selecting), how this is done (styling) and how the audience engages with what is being shared with other users (negotiating). Finally, interview data are used during all the above stages of analysis to capture participants' reflections upon their sharing practices in social media.

Overall, this framework conceptualises *sharing* as *"an interactive accomplishment that involves both the sharer and responding members from their audience, whose feedback encourages and at times shapes future sharing activities"* (Androutsopoulos, 2014, p. 17) and offers a tripartite analysis of sharing as a process of *selecting*, *styling*, and *negotiating*. It is noted that Androutsopoulos (2014) did not provide a particular name (or term) for his framework, so for the purposes of this thesis I will be using the phrase "*framework for the analysis of sharing practices*". A detailed description of how this framework was used in this doctoral research is offered in Section 3.4.3.

The next chapter outlines the research design and discusses the methodological choices made to address the research questions of this thesis.

3   Research Methodology

Chapter 2 has critically examined the relevant literature, highlighting the limitations of the studies that examined the use of social media for language learning. This chapter outlines the methodologies[5] and methods[6] adopted in this research and discusses the methodological decisions made in addressing the research questions.

The research methodologies and methods are informed by the research questions as presented in Chapter 2:

RQ1: How do learners in the ACL context perceive the use of Facebook and WhatsApp in relation to their language learning?

RQ2: How do learners and teachers in the ACL context participate in Facebook and WhatsApp platforms for language learning purposes?

RQ3: To what extent does the use of Facebook and WhatsApp facilitate (or impede) language learning interaction in the ACL context?

This chapter documents how I used a combination of data collection methods within a case study method to investigate the use of social media in the ACL context. Section 3.1 outlines the philosophical underpinnings of the research followed by a description of the case study methodology (see Section 3.1.2). Section 3.1.3 outlines the pilot study and briefly discusses the main findings that informed the research design of this thesis, which is discussed in Section 3.1.4. A description of the data collection methods is presented in Section 3.2, followed by an account of the design of the main study in Section 3.3. The analytic approach followed in this doctoral research is outlined in Section 3.4, followed by the consideration of the ethical requirements of conducting research with human participants in Section 3.5.

---

[5] Methodology is the systematic approach for selecting and using one or more methods and reflects "the overall goals or objectives of the research, which in turn frame specific research questions, and is underpinned by particular ontological and epistemological positions" (Twining et al., 2017, p. 6)

[6] Methods refer to the specific techniques, strategies, or tools for collecting data such as questionnaires, interviews, observation, etc. (Twining et al., 2017)

3.1 Philosophical underpinnings, research design, and methodology

The philosophical underpinnings of research design are constantly *"informing the methodology and therefore, providing a context for the process and grounding its logic and criteria"* (Crotty, 1998, p. 3). In addition, the selection of the research methods in a study necessitates a consideration of those methodological and philosophical assumptions that satisfy the purposes of the research and appropriately address the research questions (Bryman, 2016).

Researchers' underlying philosophical views concerning truth and reality guide their decisions during the research inquiry process are referred to as *research paradigms*. A research paradigm is *"a system of beliefs and practices that influences how the researcher selects both the questions they study and methods that they use to study them"* (Morgan, 2007, p. 49). Research paradigms also entail assumptions about ontology and epistemology. Ontology is concerned with the nature of truth (i.e. beliefs on the nature of reality), while epistemology refers to the nature of human knowledge (i.e. beliefs on how knowledge is constructed) (Bryman, 2016; Twining et al., 2017).

Table 3.1 offers an overview of five commonly used research paradigms (i.e. Positivism, Interpretivism/Constructivism, Critical realism, Subjectivism and Pragmatism). It also provides a summary of the underlying ontologies and epistemologies for each research paradigm and some corresponding examples of the methodologies and methods.

Table 3.1: Overview of popular research paradigms

Paradigm	Ontological views	Epistemological views	Methodology examples	Method examples
Positivism	There is one reality	Reality is measurable through valid, reliable tools	Experiments Questionnaires Big Data	Quantitative analysis Statistical analysis
Interpretivism / Constructivism	There is no single reality because the researcher and the reality are inseparable	Reality is interpreted through 'perceived' knowledge	Ethnography Discourse Analysis Grounded Theory Action Research	Qualitative analysis Interviews Observation
Critical realism	There is no one single reality because reality is socially constructed	Reality is socially constructed, discovered through facts, events and perceived experiences which need to be interpreted through the lens of society	Critical Discourse Analysis Critical Ethnography Action Research	Qualitative analysis Interviews Observations Journals
Subjectivism	There is no one single reality because reality is interpreted through our own perceptions	Reality is constructed and interpreted from the perspective of the individual researcher	Discourse Theory Deconstruction	Qualitative analysis Auto-ethnography Literary analysis
Pragmatism	There is no one single reality because reality needs to constantly be debated and reinterpreted	Reality can be explored by the use of appropriate methods that suit the problem	Mixed Methods	A combination of methods that can enable the researcher to provide practical solutions

(Based on Bryman, 2016; Creswell & Plano Clark, 2011; Creswell & Poth, 2013; Crotty, 1998; Mittelmeier, 2017; Potter, 2006; Rets, 2020)

3.1.1 Pragmatic Approach

This thesis set out to explore the use of social media platforms for language learning purposes in the adult language learning context. Considering the complex nature of learning and when viewing this research inquiry through the various ontological lenses, I perceive that there is no single reality. Adopting the ontological assumptions of pragmatism as a research paradigm, my starting point is that reality should constantly be debated and reinterpreted in light of new circumstances. For instance, and with reference to this doctoral research, I recognise that the use of different digital tools by different language teachers and learners might provide multifaceted realities which need to debated and reinterpreted.

From an epistemological standpoint, the flexibility of pragmatism entails the acceptance of multifaceted realities that should be examined through the use of appropriate methodologies and methods that suit the research inquiry (Creswell & Creswell, 2017). Pragmatism embraces both positivist (quantitative methods and deductive reasoning) and constructivist (qualitative methods and inductive reasoning) perspectives and provides a flexible and reflexive approach to the research design. In addition, pragmatists set aside the quantitative-qualitative divide and are not overly concerned about which methods they use, on the basis that these methods have the potential to help them answer the questions of a research study (Feilzer, 2010). Another characteristic of pragmatism is its focus on providing answers to practical inquiries in the real world. The research questions in this thesis also address practical issues by exploring how language teachers and learners perceive the use of social media for language learning and how they interact while using these digital tools.

Considering that the pragmatic paradigm focuses on practical inquiry, it is seen as an underlying philosophical framework that emphasises the combination of methods that can enable the researcher to provide practical answers to the research query. With this in mind, the use of case study methodology was considered to be suitable for this research, since it can accommodate multiple sources of evidence and draw on a variety of evidence to provide answers to the research questions. The research context and the gaps identified in the review of the literature (see Chapter 2) also influenced the methodological strategy adopted in this doctoral research. Building on the existing literature and based on the pragmatic paradigm and the research questions of this thesis, a case study research

methodology has been deemed to be an appropriate strategy for the purposes of this research. The following section discusses the rationale for choosing this methodology.

3.1.2   The case study research methodology

A case study methodology is defined as *"an empirical inquiry that investigates a contemporary phenomenon (the "case") in depth and within its real-world context"* (Yin, 2014, p. 16). This method allows an in-depth understanding of a situation by capturing the complexity of a single case or multiple cases. In other words, as Simons (2009, p.21) highlights, a case study method offers *"an in-depth exploration from multiple perspectives of the complexity and uniqueness of a particular project, policy, institution, program or system in a "real life" context."* The main advantage of a case study is that it offers a much more detailed examination of a particular phenomenon in practice. In addition, case studies are essential resources for developing expertise and demonstrating how concepts play out in practice. A case study investigation can accommodate multiple sources of evidence and drawing on a variety of evidence is considered another important benefit of a case study approach. In this thesis, a case study design allowed a range of methods to be combined in order to generate more detailed and nuanced insights. Importantly, the use of case studies was particularly appropriate for this study given that they can inform the investigation of "how" and "why" a given treatment worked (or not) (Yin, 2014).

With reference to the design characteristics of a case study, a primary distinction is between a single- and multiple-case study design (Scholz & Tietje, 2002). For this study, a multiple-case (two or more cases) design was preferred since this can generate more robust findings than reliance on a single case (Yin, 2014). Specifically, two case studies are presented in this thesis, both of which were initially treated as independent cases (i.e. implemented and analysed independently). Then, these case studies were brought together to synthesise the insights elicited from the analysis. This design allowed me to carry out a cross-case synthesis and explore whether the two cases under investigation replicate or contrast with each other. In other words, through this design I could examine and analyse each case study separately, and in a second step, examine the differences and commonalities across the two case studies reported in this thesis.

Another important consideration in case study design is the identification of cases (Creswell & Poth, 2013). A case should represent either an illustrative example of a phenomenon or be an unusual situation with intrinsic value (Stake, 1995). In this enquiry,

as the research questions were exploratory in nature, I considered illustrative cases of the use of social media in adult language teaching and learning. In particular, Case Study 1 dealt with the use of Facebook for language learning by a group of adult learners of French and their teacher, while Case Study 2 explored the use of WhatsApp by a group of adult learners of German language in the same adult education centre in the UK. In this sense, the object of my case is the use of Facebook and WhatsApp respectively, while the research is focused on the use of these digital platforms for language learning and user participation patterns that occur in response to the platform used.

According to Scholz and Tietje (2002), case studies can also be classified as "exploratory", "descriptive" and "explanatory". Based on this classification, my study can be characterised as both exploratory and descriptive. The exploratory nature of this study arises from the lack of detailed research on the phenomenon under investigation (Mills et al., 2010), which is the use of social media for language learning in the ACL context (as illustrated in Chapter 2). It also has descriptive features as it offers rich descriptions and interpretations of a phenomenon (social media use for language learning) within the specific context of adult education.

A common concern related to case study research is the generalisability of the findings (Yin, 2014). To address this, the use of multiple data sources and their triangulation provide a solution to the issue of generalisability in my study. Data generated using different methods support an accurate interpretation of the phenomenon examined, while data triangulation ensures a robust validation of the findings. As a result, in this study a range of methods were used (i.e. questionnaire, observational and interview data) to generate rich data and address the aims of the inquiry. In line with Yin's (2014) distinction between "analytic" and "statistical" generalisations, the aim of conducting this case study research was *"to expand and generalise theories (analytic generalisation) and not to extrapolate probabilities (statistical generalisations)"* (p .21).

In addition, the fact that there are no set paths for compiling case studies was another challenge for me in employing a case study research design. To diminish these challenges, I contemplated rival interpretations of the observed data (Baxter & Jack, 2015). Similarly, in analysing case studies, often there is no genuine end point. Considering that case study analysis is an iterative process, I continued analysing the collected data until I was confident that the analysis had been saturated and the main meanings had been distilled (Braun & Clarke, 2006).

3.1.3 Pilot Study

At an early stage in this research, a pilot study was conducted to determine the feasibility of the research design, evaluate the instruments of data collection and the analysis of the collected data, help refine the research questions and inform the development of the main study (Malmqvist et al., 2019).

3.1.3.1 Description of the pilot study

The pilot study was conducted in a Greek supplementary school[7] in the UK. Participants were 16 L1 speakers of English who aimed to learn Greek as a foreign language out of personal interest. All learners were adults and fell into a wide range of age categories (18 to 68 years old) and different levels of language proficiency.

The main research activity in the pilot study involved the examination of adult learners' use of Facebook for language learning. As the teacher and the researcher, I created a Facebook group which aimed to supplement students' language learning. The group was not defined as a mandatory component of their in-classroom learning and syllabus. The study lasted eight weeks, in which the course contents and the learning objectives were different each week (see Appendix 2).

Data was collected through the use of a pre- and a post-questionnaire (n=16), systematic online observation and interviews (n=6). The pre-questionnaire was used to identify participants' demographic characteristics as well as their former experiences and interests in using social media platforms. I also systematically observed learners' engagement with the uploaded content as well as their communicative practices over the period of eight weeks. Notes were kept on a daily basis and upon the completion of the study all participants' posts, comments and "likes" were gathered. Following the project end, a post-questionnaire was also administered to the participants to find out their experiences and perceptions of using Facebook as a language learning tool. Concluding the pilot study, semi-structured interviews (n=6) were conducted to further explore students' experiences concerning the implementation of Facebook into their language learning process.

---

[7] The purpose of the Greek supplementary schools is the teaching of Greek language (from Nursery up to GCE A Level) and culture for first, second and third generation students who have migrated from Greece and Cyprus (Voskou, 2019) as well as for adult learners. There are approximately 70 Greek supplementary schools in the UK which operate in the afternoons or on Saturday mornings (see Voskou, 2019).

3.1.3.2 Key implications

The pilot study revealed some insights that were essential to the development of the main study.

First, observation data showed that learners' level of participation varied. Some learners were particularly active and generated most of the online data, whilst others had limited or no participation. When interviewed, learners stated that the different levels of language proficiency within the group influenced their participation. Learners who demonstrated lower proficiency in Greek perceived some activities as very challenging and felt intimidated by the contributions of more advanced learners within the Facebook group. Hence, a decision I made for the main study was to recruit learners with similar proficiency levels in the target language. In addition, I observed that student-to-student interactions were very limited throughout the pilot study. As a result, the main study paid analytic attention to learners' participation and examined the extent to which the use of social media can facilitate or impede language learning interaction.

Second, from a methodological standpoint, the pilot study showed that a case study research method would be appropriate to investigate the use of social media for language learning purposes, because it provided a good understanding of Facebook use for language learning and of how learners participate in this online environment. The pilot study was a single case, yet I decided to adopt a multiple-case design for the main study. This methodological decision was taken with the aim of generating more robust findings by examining whether different cases replicated or contrasted with each other (Yin, 2014).

Third, the instruments used to collect data were found to be adequate for the purposes of this doctoral research and provided a good starting point for developing further the research design for the main study. Nonetheless, a few amendments related to the development of the pre- and the post-questionnaire as well as the interview protocol were required.

Fourth, the pilot study revealed a methodological limitation related to the analysis of the online data. Even though the online observation offered an understanding of learners' engagement and their communicative practices, a framework for the analysis of the online data was missing. As a result there was a need to examine the online data in more structured ways and explore the learning processes as well as participants' online activity in greater depth. To do so, the analysis of online data was carried out in two phases using two different analytical frameworks, namely, Community of Inquiry (CoI) framework

93

and the framework for the analysis of sharing practices (Androutsopoulos, 2014). The analytic approach adopted in the main study is discussed in detail in Section 3.4.

Finally, upon reflection, the multiplicity of roles I took in the pilot study - researcher, group tutor, Facebook group administrator - is likely to have had an impact on the design and implementation of the study. Being their tutor could have affected learners' perceptions and/or participation in the online environment, which subsequently might have influenced the success (or failure) of Facebook implementation as a language learning tool. I also acknowledge the strong power dynamics that are associated with my role as a tutor. For instance the fact that I, both as a researcher and a teacher, was interviewing the participants could have affected how learners responded, and their responses might had been based on how I wanted them to respond (i.e. acquiescence bias). Consequently, I decided to keep the role of the teacher and the researcher separate for the main study.

Overall, the pilot study confirmed the appropriateness of the case study research method, tested the effectiveness of the instruments of data collection and highlighted some methodological limitations (i.e. the researcher's role and the need for analytical tools for the analysis of the online data). It also offered useful insights to inform the research design of the main study which is discussed in the following section.

3.1.4 Research Design

This research was conducted in response to three research questions, which were addressed through two case studies. As discussed in the previous section, the case design in this thesis involved various methods of data collection. As Figure 3.1 illustrates, this mixed-methods case study included the use of a pre- and a post-questionnaire, online observation and interviews aiming to gain comprehensive and in-depth insights and answer the research questions.
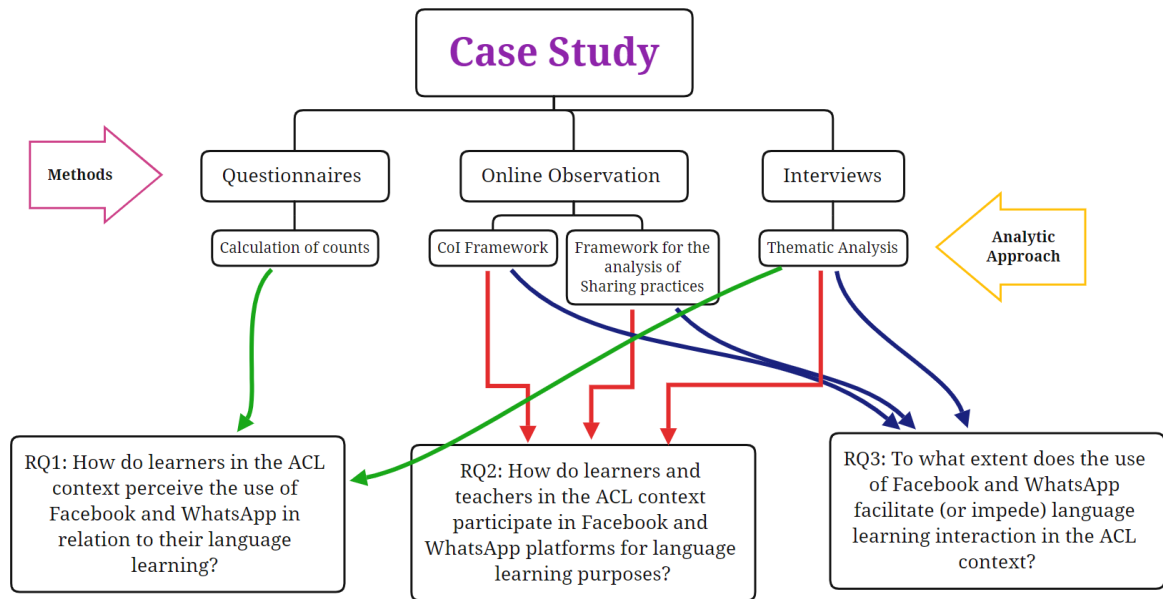
Figure 3.1: Research design mapped to Research Questions

To begin with, a pre-questionnaire (see Appendix 3) was administered to all participants prior to the implementation of social media tools in the language classes and served the objective of identifying participants' demographic characteristics, their experiences and interest in using social media as well as their willingness to use them as tools for language learning. A post-questionnaire (see Appendix 4) was administered upon the completion of the project activities. This aimed to identify participants' perceptions and experiences as well as the challenges faced during their use of social media as language learning environments.

Online observation was used to develop an in-depth understanding of participants' social, communicative and learning experiences. The online data were analysed using two frameworks. First, the CoI framework was used to examine the extent to which the teachers and the learners contributed to the discussions in social media. Moving from a macro-level (i.e. CoI framework) to a micro-level of analysis, the framework for the analysis of sharing practices (see Androutsopoulos, 2014) was used to investigate the ways in which

the learners and their teacher participated in the social media groups and interacted with each other. The use of these frameworks is discussed in detail in Sections 3.4.2 and 3.4.3.

Interviews were conducted to explore students' attitudes towards and perceptions of the use of social media for language learning. In addition, interview data were used to corroborate the findings derived from the analysis of the online data and identify the reasons why learners demonstrated specific participation preferences during their use of social media.

Other methods of data collection were also considered. One of those was the use of focus groups which provide the social context within which a phenomenon is experienced and allow participants to hear others' ideas and reflect on these. However, focus groups would not have offered the opportunity for capturing individual perspectives and thus semi-structured interviews were preferred in this study. In addition, introspective methods such as think-aloud protocols, journal entries and stimulated recall which attempt to capture participant's cognitive (i.e. thinking and decision-making) processes were also considered. Notwithstanding that these methods can offer insights into what participants think, what their online behaviour is based on and how they reflect on these, the above methods can result in participants' cognitive overload (Fan et al., 2020; Smagorinsky, 1989). In addition, participants in this study were expected to devote time to using social media platforms for language learning and these methods (i.e. think-aloud protocols, journal entries and stimulated recall) make heavy demands on time and effort from participants. For all the above reasons, these methods were not considered appropriate for the purposes of this research and questionnaires, online observation and interviews were used instead.

As Figure 3.1 shows, data derived from the pre- and the post-questionnaire as well as the interviews were used to identify how learners perceive the use of social media in relation to their language learning and answer the first research question of this thesis. Online observational data and interview data were used to examine how adult learners and their teachers actually participate in social media platforms for language learning (RQ2) and the extent to which their use facilitates (or impedes) language interaction (RQ3).

Overall, this mixed-methods approach emphasises a synthesis of the data derived from the pre- and post-questionnaires, systematic observation and semi-structured interviews. Through this triangulation, stronger arguments and detailed insights can be generated to support the findings. The research instruments and methods were used and tested in the pilot study (see Section 3.1.3). The same research design was followed in the

two case studies that are reported in this thesis to ensure the rigour of research (Yin, 2014) and allow for a cross-case synthesis. The following section outlines the data collection methods used in this study.

3.2 Data Collection Methods

Three data collection methods were used in this thesis, namely questionnaires, interviews and online observations. A description of each of these data collection methods used in the study is presented in turn in the following sections.

3.2.1 Questionnaires

Questionnaires appear to be the most common method of data collection in second language research (Dörnyei & Taguchi, 2010). In this study, these self-report tools were used to collect data related to participants' characteristics, preferences, beliefs, and attitudes or perceptions (Cohen et al., 2017), which are not accessible from production data, such as performance or observational data (Wagner, 2015). A pre- and post-questionnaire were used in this study. Both instruments were designed to collect three main types of data about the participants which are classified as "factual" (or classification), "behavioural" and "attitudinal" (Dörnyei & Taguchi, 2010, p. 8). The pre-questionnaire was used to identify participants' demographic characteristics (i.e. factual questions), their experiences of using social media in everyday life (behavioural questions) as well as their expectations and preferences in using these platforms for language learning (attitudinal questions) (see Appendix 3). The post-questionnaire also included factual questions (age, gender, etc.) and aimed to identify participants' experiences in using social media for language learning (behavioural questions) as well as their perceptions of their former use of these platforms (attitudinal questions) (see Appendix 4).

One of the reason why I chose to design and administer questionnaires is that these self-report tools can be flexibly adapted to accommodate the needs of a research project (Frey, 2018; Tan & Siegel, 2018). Questions incorporated into questionnaires can take different forms. They can lead to quantitative analysis (e.g. Likert scales, multiple choice, or dichotomous yes/no questions), and/or collect written responses which lend themselves to qualitative analysis (e.g. short answer or open-ended questions). In this study, both questionnaires combined multiple-choice questions, 6-point Likert scale questions, dichotomous "Yes" or "No" questions and open-ended questions (see Appendix 3 and 4).

This allowed me to examine participants' characteristics, preferences, beliefs, and perceptions by collecting and analysing different forms of self-report data.

Another reason for using questionnaires in this research is their cost-effectiveness, as a consequence of researchers' time, effort and financial resources (Dörnyei & Taguchi, 2010; Tan & Siegel, 2018). In addition, as Dörnyei and Taguchi (2010) argued, questionnaires are very "versatile", since they can be favourably employed with *"a variety of people in a variety of situations targeting a variety of topics"* (p. 10). In my study, questionnaires allowed me to assess participants' perceptions more directly than other methods (i.e. think aloud protocols, journals/diaries, etc.) and collect participants' responses more quickly as compared to other methods (i.e. observation and interviews) (Tan & Siegel, 2018).

The use of questionnaires also has some important limitations. The validity and reliability of the data derived from questionnaires have been criticised by many scholars (see Dörnyei & Taguchi, 2010; Tan & Siegel, 2018; Wagner, 2015) on account of the simplicity and superficiality of the answers they provide. Another issue concerns participants who are unmotivated or unreliable (misinterpret and/or omit some questions, perceive a questionnaire as a nuisance) (Dörnyei & Taguchi, 2010; Wagner, 2015). Furthermore, survey research is prone to three main types of bias defined as "social desirability" (or prestige) bias, "self-deception" bias and "acquiescence" bias (Dörnyei & Taguchi, 2010; Wagner, 2015). Informants may respond to a survey by providing desirable answers that can enhance their own standing, even if they are not true (i.e. social desirability bias). Respondents may also provide answers, which reflect how they would think of themselves as acting rather than how they truly act (i.e. self-deception bias). Acquiescence bias refers to the tendency of people to agree with statements about which they are unsure or ambivalent, while at the same time they may respond to a questionnaire based on how the researcher wants them to respond. The "halo effect" which is defined as the human tendency to overgeneralise as well as the "fatigue effect" which is a consequence of overlong (or monotonous) questionnaires can also affect the reliability and validity of the data derived from a questionnaire (Dörnyei & Taguchi, 2010).

Overall, questionnaires were used in this study to offer valuable "factual" (or classification), "behavioural" and "attitudinal data. At the same time, this research method presents some serious limitations that may influence the validity and reliability of the results. For these challenges to be mitigated, I adopted specific guidelines and strategies

proposed by other researchers (see Dörnyei & Taguchi, 2010; Lavrakas, 2008). For instance, to mitigate the "fatigue effect" both questionnaires were designed to take approximately 10 minutes to fill in. In addition, I carefully designed the questionnaires (content, layout, style, etc.) and tested the instruments in the pilot study (see Section 3.1.3) before administering them to the participants of the main study (Dörnyei & Taguchi, 2010; Wagner, 2015). Finally, to avoid the risk of over-relying on these self-reported data, questionnaires in this study were used as a supplement to the other research methods (i.e. online observation and interviews).

3.2.2   Online observation

This study draws on ethnographic approaches to exploring participants' contributions to an online environment (i.e. social media) and the identification of their behaviours without relying on second hand accounts (Cohen et al., 2017). Systematic online observation was used in this study to generate knowledge and provide a deeper understanding and interpretation of the communicative phenomena observed in social media platforms.

Ethnographic research enables the researcher to uncover the various meanings that participants generate during their activity and develop an in-depth understanding of their social experiences (Starfield, 2015). Ethnography presupposes that research takes place in the field and the data are gathered from a range of resources, mainly through systematic participant observation and/or informal conversations (Hammersley & Atkinson, 2007). Nevertheless, online observation does not necessitate physical co-presence in geographic space, but systematic scrutiny of the selected online mediated forms of connections (Hine, 2000, 2015). Hine (2015) highlighted the fact that the Internet has become "embedded", "embodied" and "everyday"; and she emphasises the need to adopt ethnographic approaches to gain more detailed insights without relying on selective retrospective accounts from participants. An ethnographic approach was adopted for this study to offer an in-depth understanding of the *"textures of social experience that arise as people engage with the various technologies that comprise the contemporary Internet"* (Hine, 2015, p. 29).

Even though online observation generates valuable and in-depth insights, there are specific constraints related to this method. A main criticism has been, for example, that the interpretation of the data derived from this approach is subjective (Hammersley & Atkinson, 2007). To address this, I sought to generate knowledge by observing participants'

activity online, and at the same time to report and interpret the findings without making assumptions and presenting my (subjective) opinion. Concerning online ethnographic approaches, the main challenge lies in exploring the boundaries and connections mainly between the "virtual" and the "real" world (Hine, 2000, p. 67). In addition, online ethnography is not ideally positioned to examine people's motivation for the use of particular digital tools (see Androutsopoulos, 2008). To address these issues I went beyond what is observable on the screen and combined the systematic observation of online discourse with interviews with the participants (see Androutsopoulos, 2008). This approach, which Androutsopoulos (2008) initially called Discourse-Centred Online Ethnography (DCOE), combines online systematic observation with discourse analysis and interviews to study patterns of communication and social relationships in an online group by taking into account participants' awareness and interpretations of their practices (also see Section2.5). This ethnographic approach enabled me to examine participants' discourse practices and perspectives, while relating these to observable patterns of participation and language use. In addition, the use of interviews along with online observation enabled me to draw relationships between participants' and my own interpretations and elucidate the findings without making assumptions. The analytic approach I followed to study the online data is discussed in detail in section 3.4.3.

Overall, online observation is both an exploratory and adaptive method, which serves the objective of identifying how things make sense in an online setting. Observational approaches to data collection and analysis can provide valuable and in-depth insights into real-life communicative phenomena. Finally, the ethnographic approach followed in this study does not represent a *"full-fledged ethnography"* (Androutsopoulos, 2008, p.17) (i.e. an in-depth and long-term study of communities) but adopts elements of the ethnographic method (i.e. systematic online observation). Systematic observation in this study is used to examine teachers' and learners' linguistic practices and their patterns of language use, aiming to observe and document online activities in social media and examine the ways in which participants interact and interrelate (Androutsopoulos, 2008, 2014). In addition, systematic observation is combined with the analysis of participants' online discourse and the elicitation of their perspectives through the use of interviews. This approach was key to exploring the complexities of these online environments and understanding the various relations among its components.

3.2.3 Interviews

The third research instrument used in this study was interviews. Interviews have been widely used as a research method, mainly in combination with other methods (Gubrium et al., 2012; Steinar Kvale, 2007; Talmy, 2010). Interviews have been defined as *"social encounters where speakers collaborate in producing retrospective (and prospective) accounts or versions of their past (or future) actions, experiences, feelings and thoughts"* (Rapley, 2004, p. 16). The use of interviews as a research instrument can offer rich and in-depth insights into the participants' lived world, experiences, activities and opinions (Kvale, 2007). As described by Kvale (2007, p. 6) *"an interview is an interchange of views between two persons conversing about a theme of common interest"*.

Kvale (2007) also refers to "semi-structured life-world interviews" which serve the objective of *"obtaining descriptions of the life world of the interviewee with respect to interpreting the meaning of the described phenomena"* (p. 8). Interviews have been embraced as a research instrument because of the vividness and richness of the data they offer (Gillham, 2000). In interviews, the depth of meaning is central, since they provide a more profound view and understanding of what is reflected upon rather than superficial and abstract data. One reason why I chose to use interviews in my study is because they allowed me to understand the students' and the teachers' experiences, beliefs, feelings and attitudes. In addition, while quantitative approaches (e.g. questionnaires) fail to provide answers about *how* and *why* observed phenomena occur, the use of interviews can offer valuable insights in this respect. Consequently, the use of interviews in this study supplemented the questionnaires and most importantly offered valuable insights that can interpret participants' observable online actions.

Like any other research method, interviews are also subject to some limitations. Interviews present similar constraints to questionnaires, since they are prone to the same forms of bias (i.e. social desirability, self-deception and acquiescence bias) (Wagner, 2015). In other words, interviews are subject to the possible discrepancy between what people say and what they actually think and do. For this limitation to be mitigated, interview data in this study were not accepted at face value, but rather carefully examined in relation to the online data which captured participants' actions.

Another important weakness of interviews lies in the subjectivity in the analysis which relies on researchers' personal perception and is therefore subject to potential bias (see Kvale, 1994). To mitigate this risk and remove some of the subjectivity in the

qualitative analysis I piloted the interview protocol, used a well-established analytical framework (i.e. thematic analysis) and involved multiple coders to ensure inter-rater reliability in the coding process and enhance the reliability of interviews. A detailed account of the steps undertaken for the analysis of the interviews is presented in section 3.4.4.

Summing up, the use of interviews as a research instrument can offer valuable in-depth insights and understandings of phenomena related to the specific questions of a research project (Gillham, 2000). Nevertheless, like any research method, interviews do not come without constraints. As Fontana & Frey (2005, p. 697-698) argued, *"the spoken or written word always has a residue of ambiguity, no matter how carefully we word questions and how carefully we report or code the answers. Yet interviewing is one of the most common and powerful ways in which we try to understand our fellow humans".* The use of interviews in this study allowed me to gain a better understanding of participants' experiences, beliefs, feelings and attitudes, supplemented the findings derived from the questionnaire responses, and most importantly enabled me to elicit important insights related to participants' acts of sharing in the social media platforms.

3.3 Research context, participants, and procedures

This doctoral research explored the use of social media for language learning in adult education. Following a case study methodology and employing three data collection methods discussed in the above sections, this study examined students' perceptions of using social media platforms for language learning and investigated how learners and teachers participate in these online environments and interact with each other. The following sections describe the research procedures followed in the two case studies reported in this PhD thesis.

3.3.1 Setting, participants and recruitment procedures

Given that this doctoral research aimed to examine the effects of social media in adult education, getting access to ACL settings was a key aspect of the planning phase of this research. Consequently, purposive sampling was employed to identify potential schools and participants. During the planning phase, I identified an adult education centre in the UK, and contacted the curriculum manager who was responsible for the language courses offered by the school.

This adult education centre offers a wide range of learning opportunities including arts, health and wellbeing, IT and languages. In total 74 language courses in 10 different languages are available for adult learners according to their proficiency. Classes take place weekly, running for three terms of ten weeks each (September–December, January–April, April–July). Adult learners in this school typically attend 30 lessons a year (2 hours a week) and are exposed to the target language only intermittently, while the long breaks between the terms make it difficult for them to recall and assimilate knowledge. Learners in this context are learning a second language purely for personal interest rather than to pursue academic or professional qualifications. Their learning is not formally assessed or graded, while they are much less exposed to the target language than they would be in some other educational settings (e.g. a university). Classes are generally small in size and the number of students per class varies from 9 to 13 learners. Teaching methods are largely traditional since books and handouts were the main tools used to facilitate students' language acquisition. The use of technology in teaching is rare and largely focused on PowerPoint presentations during in-classroom learning, while after the end of each lesson, the teachers distributed homework via email.

The planning phase for the study involved three meetings with the curriculum manager to discuss the purpose of my research and resolve some practical issues related to the recruitment procedure (e.g. presenting the aims of the research, approaching tutors and learners, ethical considerations, etc.). Following these meetings, written permission was obtained by the curriculum manager to conduct the research in that school and incorporate the use of social media platforms into language courses to supplement students' learning. I also observed three face-to-face lessons (Greek, French and Chinese) to familiarise myself with the educational context and to be informed about the approaches used and processes followed (material used, teaching approaches, learning objectives, duration of the courses, etc.) by the teachers and the curriculum manager. The next step was to approach language teachers in this adult education centre. To do so, I presented my research to all language teachers (n=12) at a team meeting in November 2018 and asked them to consider integrating social media platforms into their language learning courses. Recognising that the implementation of social media into the learning process was time-consuming for the teachers, a monetary incentive (Amazon gift voucher) was offered to those tutors who agreed to participate in this research project. Following the team meeting, the teacher of the German and French intermediate classes expressed their interest in the study. When the study was conducted (i.e., in January 2019), the teacher of the German intermediate class was 46 years old and had been teaching the class for four years. He is a native speaker of English who studied German language and literature at a university in Germany. In addition to the intermediate class, he was also teaching a beginner's class at the same adult education centre. Regarding his engagement with social media, he only used WhatsApp, primarily for contacting family and friends. The French teacher was 38 years old and had been teaching the intermediate class for two years. She is a native speaker of French and studied French language and culture at a university in France. Besides the intermediate class she was teaching two other class at another French language centre and provided private tutoring to French language learners. In her everyday life, she only used Facebook and YouTube. I attended three meetings with these teachers and further discussed the practicalities and the main objectives of the project. More specifically, I explained that social media were being used in this project to extend the limited class time and provide an informal online environment which could facilitate student-student and tutor-student interactions (Manan et al., 2012). These digital platforms would also be used as a means of sharing learning activities and language

learning material. The teachers had complete freedom to design and share the learning activities and material, while my role as a researcher was to observe and record participants' online engagement and interactions without interfering with the language learning and teaching practices.

After gaining the teachers' consent to participate in the research, I presented the research project to the German and French language learners and gave an information sheet to all potential participants, highlighting that their participation in the study was voluntary (see Appendix 5). Those who expressed an interest in participating in the project were asked to sign a consent form (see Appendix 6).

As Table 3.2 shows, from the French class, five L1 speakers of English who were learning French as a foreign language agreed to take part in the research project. All learners were adults, with two of them in the age range of 30 to 39 and 50 to 59 respectively, while one learner was in the age range of 40 to 49 years old. All participants were attending a French language class at intermediate level offered by the adult education centre mentioned above.

From the German class, eight learners consented to participate in the research (see Table 3.2). All of them were L1 speakers of English who were learning German language at intermediate level. All learners were adults and fell into a range of age categories, with three of them being from 60 to 69 years old, two were in each of the age ranges 40 to 49 and 50 to 59 respectively, and one participant was over 70 years old.

Table 3.2: List of Participants

		Pseudonym
Case Study 1 (French Intermediate)		French Teacher
		Amélie
		Juliette
		Louis
		Marion
		Matthieu
Case Study 2 (German Intermediate class)		German Teacher
		Emma
		Frieda
		Helmuth
		Jürgen
		Klaus
		Louisa
		Otto
		Petra

3.3.2 Procedures and tools

Before the incorporation of social media into the language classes, it was crucial to select a digital platform. The selection of the platform to be used in the two classes (French and German Intermediate) was made by considering the teachers' and learners' needs and preferences, their familiarity with the various platforms available in 2018 and the objectives of the study. Teachers and their learners were asked to choose their preferred digital platform that would meet the following characteristics: (1) the creation of groups, and (2) the sharing of images, videos, links and documents (e.g. Word documents, PowerPoint, pdf files, etc.). The decision of the French class was to use Facebook, while the German class decided to use WhatsApp.

In January 2019, Facebook and WhatsApp groups were created by the French and the German teacher respectively. Learners who consented to participate in the research study were invited to join the online environments via email, while I was also added as member of both groups with the sole aim of observing and recording the interactions amongst the members of the group without actively taking part in any of the activities on the platforms. The French and the German teachers remained the administrators of both groups throughout the study. As regards Facebook and its privacy settings, the group was "closed" to avoid any unwanted interventions from strangers and make sure that students' contributions could not be viewed by other online users (see Chugh & Ruhi, 2018; Manan et al., 2012; Manca & Ranieri, 2013). The 'closed' privacy option only allows members of the Facebook group to see posts made in the group and even though anyone could ask to join the group, only the administrator (i.e. the French teacher) could admit them. On similar lines, the German teacher as the administrator of the WhatsApp group was the only one who could add (or remove) participants to the group.

Considering that one of the aims of this thesis was to examine how teachers and learners adapted to social media platforms and used them intuitively to facilitate their language teaching and learning, no formal rules were set by the researcher. With regard to the use of language within the two groups, participants could converse using their preferred language (i.e. English, French or German). Teachers and learners from both groups were given complete freedom to interact, initiate conversations and share any information related to their language teaching and learning.

As regards the duration of the use of Facebook and WhatsApp, even though my initial plan was to have the same number of weeks (i.e. 12 weeks) across both studies, the

study in the French class lasted for 12 weeks (from February to May 2019) and the study in the German class was 24 weeks (from February to July 2019). The German teacher was keen to extend the duration of WhatsApp use, and this aligned with my interest in examining the use of the platform over a longer period of time. Considering that online communities take time to mature, my intention was to allow more time for rapport building, enable participants to further familiarise themselves with the group dynamics and potentially become more active in the online environment.

3.3.3   Data collected

As noted earlier, multiple data collection methods were employed. The data collection process occurred in four phases.

First, prior to the launch of the study, (January 2019), a pre-questionnaire (see Appendix 3) was administered to all participants in both groups.

Second, during periods of Facebook (February-May 2019) and WhatsApp (February-July 2019) use, participants' online activity was systematically observed and documented by keeping notes on a daily basis. This allowed me to gain an initial understanding of how the French and the German teacher as well as their learners were using Facebook and WhatsApp respectively. In addition, given that Facebook and WhatsApp are archived platforms I could study teachers' and learners' actions and interactions retrospectively. To do so, all online data from both platforms were archived after the completion of the project. First, I took screenshots of the online threads from both Facebook and WhatsApp (see Table 3.3). To ensure that no data was lost, I also used NCapture software (a web-browser extension that gathers web content) to retrieve the data from the Facebook group in Pdf format. Similarly, I retrieved the chat history from the WhatsApp group using one of the features provided by the app (i.e. "Export chat"). The online dataset was stored in an encrypted external hard drive. All data was then anonymised and imported into Dedoose software (https://www.dedoose.com/) to conduct the analysis which is further discussed in Sections 3.4.2 and 3.4.3.

As Table 3.3 shows, the average length of the posts in the Facebook group was 13.4 words, with posts varying from a single word to 155 words. In the WhatsApp group, messages varied from one word to 545 words and the average length of the messages posted was 22.7 words.

Table 3.3: Summary of the Dataset

		Case Study 1 (Facebook)	Case Study 2 (WhatsApp)
Online Dataset	Number of Screenshots	55	72
	Total number of posts, comments, and messages	106	243
	Data in Pdf format	✓	✓
	Average Length of Posts	13.4 words	22.7 words
	Range of posts length	1-155 words	1-545 words
Interviews	Number of Interviews	5	6
	Average Length of Interviews	39 minutes	38 minutes
	Range of interview lengths	33 to 46 minutes	31 to 44 minutes

Third, following the project end, a post-questionnaire was administered to both groups to identify their experiences, and perceptions of their former use of Facebook and WhatsApp as language learning tools (see Appendix 4).

Finally, on concluding the project, all learners and their teachers were invited via email (see Appendix 7) to participate in an interview. Participants who expressed their interest in taking part in the interview were asked to choose their preferred date, time, and location. The average length of the interviews was 39 minutes, ranging from a minimum of 33 minutes to a maximum of 46 minutes in Case Study 1 (see Table 3.3). In Case study 2, the interviews lasted 38 minutes on average and their length ranged from 31 to 44 minutes. As Table 3.4 illustrates, four out five learners and their teacher from the French group, and five out of eight German language learners and their teacher agreed to take part in the interview. An incentive (Amazon gift voucher) was offered to interviewees to compensate them for their time.

Table 3.4: List of Interviewees

		Pseudonym
Case Study 1 (French Intermediate class)		Amélie
		Juliette
		Marion
		Matthieu
		French Teacher
Case Study 2 (German Intermediate class)		Emma
		Louisa
		Otto
		Jürgen
		Helmuth
		German Teacher

All interviews were conducted face-to-face in a safe, neutral and participant-friendly environment (i.e. on the premises of the adult education centre or a café) which was selected by the participants, while all interviewees were asked to sign another consent form prior to the interview (see Appendix 6).

An interview protocol (see Appendix 8) was designed following the guidelines suggested by Castillo-Montoya (2016) and Jacob and Furgerson (2012). The interview started with some open-ended (and icebreaker) questions and progressed to more specific questions based on the research questions of this research. My aim was to make interviewees feel comfortable with the topics discussed, while they were allowed to share any points (or issues) they perceived to be relevant, whist being directed to the specific areas of interest. Interviews were carried out shortly after Facebook and WhatsApp use (June-August 2019) to ensure that events and the experience from their participation in the study were still fresh at participants' memory. Interviews lasted 25 minutes on average. Then interview data were transcribed *verbatim*, anonymised, imported into NVivo 11 Plus and analysed thematically. The analytic approach followed in relation to the analysis of interview data is discussed in Section 3.4.4.

3.4   Analytic approach

This section outlines the analytic approach followed in this doctoral research and discusses how the data were analysed.

3.4.1   Analysis of the Questionnaires

To analyse the pre- and post-questionnaire data, codes were applied to each respondent and their answers. All closed (Yes or No), Likert scale and open-ended questions along with the participants' responses were transferred into an Excel spreadsheet. Due to the small sample size (i.e. n=5 for Case Study 1, and n=8 for Case Study 2), the analysis of the closed and Likert scale questions only dealt with counting occurrences, and these are presented in the thesis. Descriptive statistics such as frequencies, measures of central tendency (e.g. mean, median, etc.) and measures of spread (e.g. standard deviation) were not suitable for this sample size and would not have had any statistical significance (Allen, 2017). Similarly, the open-ended questions were thematically analysed and were not quantified. In reporting this data only the counts and some verbatim quotes are displayed.

The use of the pre-questionnaire in this thesis aimed to identify participants' profiles (i.e. demographic characteristics and former experiences in using social media) and their expectations and preferences in using social media platforms for language learning. The post-questionnaire aimed to examine learners' perceptions of using Facebook and WhatsApp following the two studies. Most importantly, since this doctoral research is primarily qualitative, the incorporation of questionnaires was intended to complement the qualitative data and their analysis. Specifically, the use of questionnaires offered valuable factual, behavioural and attitudinal data that made it possible to analyse and interpret participants' online activity in more nuanced ways. For instance, even though the research questions in this thesis do not concern participants' demographic characteristics, this background information (e.g. gender and age) allowed me to better understand my participants and interpret their participation patterns in the online environment.

3.4.2   Analysis of the online data: Phase 1 – Using the CoI framework

The examination of the online data was intended to gain an understanding of the type of contributions the teachers and the learners made to Facebook and WhatsApp groups. These data were analysed using the CoI framework, which conceptualises learning

as the interaction of three interconnected elements within an online environment. These elements are social, teaching and cognitive presence (see Section 2.4).

Posts to discussion forums are rich data sources which can enable the capture of non-intrusive insights into participants' actions and/or opinions (Bryman, 2016). In addition, scrutinising and analysing online data allows for a systematic examination of online educational transactions (Garrison et al., 2006) and are time efficient, since the discussions in online forums and in social media are in effect a written form of conversation, readily accessible to researchers (Creswell, 2014). This observational method has been widely used to gain insight into learning (see Garrison, 2017; Garrison et al., 2006; Pool et al., 2017; Zhao & Sullivan, 2017) since discussion posts and their analysis can offer an in-depth understanding of the learning processes within an online environment (Chua et al., 2017).

To investigate the type of teachers' and learners' contributions, their posts and comments in the Facebook and the WhatsApp group were analysed based on the three types of presence (i.e. social, teaching, and cognitive) as described in the CoI framework, as described in Section 2.4. Specifically, in this thesis, all participants' posts (and comments) were deductively analysed and the categories and indicators of CoI were used as the coding scheme. This widely adopted analytical approach was intended to examine participants' online activities in terms of social, cognitive, and teaching presence (Garrison & Anderson, 2003; Garrison & Arbaugh, 2007).

3.4.2.1 Units of analysis

In applying the Community of Inquiry framework to the data in this doctoral research, I used a single post or comment[8] as the unit of analysis. Following this approach, the coding units were identifiable objectively and did not require several coding decisions (Garrison et al., 2006; Rourke et al., 2001). Adopting the approach followed by Anderson et al. (2001), Zhao and Sullivan (2017), and Goshtasbpour et al. (2020), multiple codes were allowed for a single post or comment as the following example shows (see Table 3.5):

Table 3.5: The unit of analysis in applying the CoI framework

Teacher
Guten Tag alle. Das ist meine erste Nachricht In unserer WhatsApp Gruppe. Nur ein Test zum Anfang. Der Projekt beginnt naechste Woche. Bis bald. 🙂
14:10

	Presences	Categories	Indicators
"Guten Tag alle." (Good day all.)	Social Presence	Cohesive Communication	Phatics / Salutations
"Das ist meine erste Nachricht In unserer WhatsApp Gruppe." (This is my first message in our WhatsApp group.)	Social Presence	Cohesive Communication	Group reference
"Der Projekt beginnt naechste Woche." (The project begins next week.)	Teaching Presence	Instructional Design & Organization	Establishing time parameters
Bis bald. [Name of the teacher] 🙂 (See you soon [Name of the teacher])	Social Presence	Cohesive Communication	Phatics / Salutations

According to Rourke et al. (1999) and Goshtasbpour (2019), syntactical coding units (i.e. words, sentences, paragraphs, etc.) cannot be relied on, since sentences can be too narrow and would decontextualise a comment, while paragraphs can be lengthy and/or not well-formed and might not allow consistency in identification. Consequently, as shown in the example above, a single post or comment as the unit of analysis can capture the

---

[8] A post or a comment is defined as users completing the action of posting a message in social media platforms. Posts and comments vary in length and complexity and can include text, images, videos, emojis, links, documents etc. or a combination thereof. In Facebook groups a post starts a new discussion topic, while a comment is defined as a reply to the initial post. In WhatsApp groups, I also use the term *"chat entry"* which is a published message in the text-chat window (see Cho, 2017). Chat entries can be either *"initial entries"* (to initiate conversation on a new topic) or *"responsive contributions"* (replies to an initial entry).

exchange in its natural form and can be consistently and objectively identified (Garrison et al., 2006; Goshtasbpour, 2019; Rourke et al., 1999).

3.4.2.2 The coding scheme

The CoI framework was used as the basis for a coding scheme and it acted as a codebook which provided a list of established categories and sub-categories (i.e. indicators) for coding (Goshtasbpour, 2019). According to CoI social, teaching and cognitive presences are composed of various categories, and, in turn, these are identifiable by means of several indicators (Garrison et al., 2006; Garrison & Anderson, 2003; Goshtasbpour et al., 2020).

Social presence consists of three categories – Interpersonal, Open and Cohesive communication – and 12 indicators (see Garrison, 2017; Garrison & Anderson, 2003). Teaching presence is composed of three categories – Instructional Design & Organization, Facilitating Discourse and Direct Instruction – and in turn these categories are marked by a total of 19 indicators (see Garrison, 2017; Garrison & Anderson, 2003). Finally, cognitive presence includes four categories - Triggering event, Exploration, Integration and Resolution – which according to the CoI framework are the four stages of cognitive development and are signalled by 13 indicators (see Garrison, 2017; Garrison & Anderson, 2003).

The coding schemes for social, teaching, and cognitive presence respectively, with their categories and indicators as described by Garrison (2017) and Garrison and Anderson (2003) can be found in Appendix 1. The coding schemes also provide a definition for each indicator based on Garrison (2017), Garrison and Anderson (2003), Goshtasbpour (2019), and Goshtasbpour et al. (2020) and present examples from the two main studies that form the basis of this PhD thesis (see Appendix 1).

3.4.2.3 The coding procedure

Following the above coding scheme, the process of coding dealt with the identification of CoI indicators in teachers' and learners' online contributions. Each post or comment was coded with reference to the relevant indicator(s). In other words, coding was performed at the most granular level of CoI (i.e. indicators) (Goshtasbpour, 2019). Coding at this level can be difficult since a single post or comment often includes more than one indicator of each element and/or more than one aspect of each presence (Garrison et al., 2006). Nevertheless, coding at indicator level can capture the content and the dynamics of online discussions in significant depth (Goshtasbpour, 2019). In addition, in an exploratory

study, coding at the "presence" or the "category" level would have provided limited insights (Garrison et al., 2006).

Multiple codes were allowed within a single unit of analysis (i.e. a post or a comment) as my aim was to capture the dynamics of online discussions in terms of social, teaching and cognitive presence. Multiple coding can facilitate an understanding of the complexities of online conversations and offer insights into the interplay between CoI categories and presences (Goshtasbpour, 2019). Notwithstanding that multiple indicators can be applied to a unit of analysis, it is notable that there were posts (or comments) or segments of a post (or comment) that did not correspond to any indicator of the CoI framework.

To keep a record of the coded data, coding was conducted using the Dedoose software (https://www.dedoose.com/). The online transcripts from the Facebook and the WhatsApp group were uploaded to this platform in PDF formats. Dedoose also provided counts and frequencies for each code (i.e. indicator) which would have been more difficult to recognise and calculate otherwise. The counts for each indicator, category and presence were also used to calculate percentages which offered an understanding of the nature of the discussions in the Facebook and the WhatsApp group respectively and helped summarise the results. In addition, the use of counts and percentages in this doctoral research enabled comparisons across the three presences, and between CoI categories and indicators as well as across the two case studies of this thesis.

3.4.2.4   Reliability of analysis

As Garrison et al. (2006) argue, transcript analysis is a challenging method because of difficulties related to the validity and reliability of the coding procedure. This method necessitates the validation of the coding scheme and a consistent understanding and interpretation of the codes by different coders. Nevertheless, Garrison et al. (2006) highlight that these challenges can be diminished by using a valid coding scheme with discrete, mutually exclusive, and clear categories.

The validity of the CoI framework and the coding scheme derived from it (see Section 3.4.2.2) have been empirically confirmed by several studies (see Anderson et al., 2001; Garrison, 2017; Garrison et al., 2006; Goshtasbpour et al., 2020; Rourke et al., 1999, 2001). Nevertheless, reliability checks were conducted early in the coding process to a) check how consistently the CoI coding scheme had been applied to the online transcripts,

b) identify potential areas of disagreement, and c) discuss disagreements and reach a consensus (Goshtasbpour, 2019). First, the online transcripts retrieved from the Facebook group were coded by myself and additionally by an independent coder. Then, the second coder and I exchanged the coded online transcripts to identify potential areas of disagreement. Finally, we arranged a meeting to discuss the identified disagreements, co-analyse the transcripts, reassign codes, and reach consensus. Once agreement at category and indicator levels was reached, I finalised the coding scheme (discussed in Section 3.4.2.2) and continued the coding process accordingly.

Another consideration for the reliability of the conducted analysis concerned the identification of the coding unit (or unit of analysis). Nevertheless, since a single post (or comment) was chosen as the unit of analysis and is identifiable objectively (Donnelly & Gardner, 2011) there was *"no need to check the consistency in demarcation of the analysis unit"* (Goshtasbpour, 2019, p. 89).

Finally, the coding scheme which offers a definition of each indicator and an example from this research, along with the coding process can provide instructions for replication of the results by other researchers (Goshtasbpour, 2019).

Overall, this analysis can offer valuable insights into the elements and dynamics of an online environment as a CoI and scrutinise the learners' contributions and those of their teachers. In addition, the use of the CoI framework for transcript analysis can enable the categorisation of the content of online conversations and/or interactions, while making inferences about the learning and teaching process. It is also a transparent method since it clearly provides the unit of analysis, as well as the coding scheme and procedure for replication studies (Goshtasbpour, 2019). Nevertheless, this analysis cannot reveal the social structures and the dynamics of online conversations in detail (i.e. turn taking, responding, or initiating a conversation, etc.) (Chua et al., 2017). Consequently, and in order to answer the second and third research questions of this thesis (i.e. How do learners and teachers in the ACL context participate in Facebook and WhatsApp platforms for language learning purposes? To what extent does the use of Facebook and WhatsApp facilitate (or impede) language learning interaction in the ACL context?), it was deemed important to investigate the dynamics of online conversations in more depth. To do so, the empirical framework for the analysis of sharing practices in social media proposed by Androutsopoulos (2014) was adapted and used for the purposes of this doctoral research. The use of this analytical framework is discussed in the following section.

3.4.3   Analysis of the online data: Phase 2 – Using the framework for the analysis of Sharing practices

Moving from a macro-level (i.e. CoI framework) to a micro-level of analysis, the framework for the analysis of sharing practices (see Androutsopoulos, 2014) was used to examine the ways in which the learners and their teacher participated in the Facebook and the WhatsApp groups and interacted with each other. In this study, "sharing" in social media platforms is understood as a mode of participation that incorporates both communication (where sharing is "telling") and distribution (i.e., sharing digital content) (see John, 2013).

According to Androutsopoulos (2014), the analysis of participants' sharing practices in social media is carried out in three stages (see Figure 3.2). The first stage concerns a quantitative analysis of participants' online contributions. This analysis aimed to examine the extent to which the learners and the teacher participated in and contributed to the Facebook and the WhatsApp group respectively. To carry out this analysis all posts and comments in the Facebook group and all chat entries in the WhatsApp group were counted. In Facebook groups, a post can include text, images, videos, YouTube videos, emojis, links, documents etc. or a combination thereof and starts a new discussion topic, while a comment is defined as a reply to a post. Similarly, in the WhatsApp group, a chat entry was identified when a participant published a message in the text-chat window (Cho, 2017), including typed text, embedded images, videos, YouTube videos, emojis, links to web content or a combination thereof. Counting and coding posts, comments or chat entries in social media platforms also involves distinguishing between initiating and responding contributions (Androutsopoulos, 2014, 2015). A chat entry was categorised as an *initial entry* (or an initiating post) when a participant published a message (which may feature embedded media content) to initiate conversation on a new topic, while a *responsive contribution* was identified when a participant replied to an initial entry within the online environment. Overall, in this stage of analysis all teachers' and learners' online contributions were counted with the intention of examining the nature and extent of their contribution in the online environments.
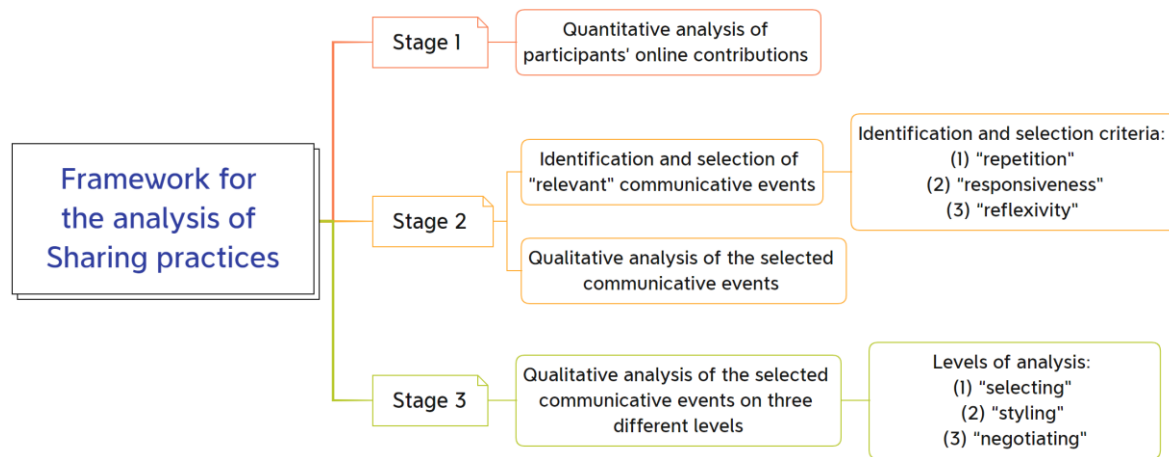
Figure 3.2: Visual representation of the framework for the analysis of sharing practices
(Based on: Androutsopoulos, 2014)

The second stage of analysis involved the identification and selection of relevant communicative events, which were then analysed following a discourse-centred approach that does not look at interaction in terms of its contents, but rather views interaction online as acts of sharing that are part of sharers' online performance and their negotiation of relationships with others. As proposed in Androutsopoulos (2015) the basic unit of analysis at this stage is not a single post but a communicative event which is defined as a *"spatially and temporally delimited, multi-authored sequence of contributions"* (Androutsopoulos, 2014, p. 7). A communicative event consists of an initial chat entry (or an initiating post) followed by other users' responsive contributions. To identify and select communicative events relevant to the analysis, three criteria were followed, namely (1) "repetition", (2) "responsiveness", and (3) "reflexivity" (Androutsopoulos, 2014, p. 8). A "relevant" communicative event is selected when one or more of these criteria are met.

The first criterion (i.e. repetition) involved those communicative events in which participants repetitively used similarly-styled entries. In other words, these communicative events are identified when participants share several series of contributions related to the same (or similar) area of discussion and/or content.

Events in terms of responsiveness were identified when posts received a significant number of responses from the networked audience. These communicative events were relevant not only in terms of their styling, but also of their interactive negotiation[9] since they attract several responses from the members of the group (Androutsopoulos, 2014).

---

[9] "Styling" and "negotiating" are related to the third stage of analysis which is discussed in the following paragraphs.

The third criterion – reflexivity – refers to the communicative events where participants self-reflect upon their sharing practices. Such reflections are "elicited in secondary data sources such as interviews" which can "offer important pointers back to acts of sharing in the digital data" (Androutsopoulos, 2014, p. 8).

As proposed in Androutsopoulos (2014), the third stage involved a discourse-centred analysis of the selected communicative events. This analysis aimed to provide an empirically evidenced account of how Facebook and WhatsApp were used as means of facilitating participants' language learning. In addition, this qualitative analysis was intended to examine how participants' sharing practices unfolded during the period of observation and was performed on three different levels, namely, "selecting", "styling" and "negotiating" (see Figure 3.2). The first level of analysis – selecting – is concerned with what participants chose to share and why. Styling refers to the way participants style their content. In other words, *"the way participants mobilise semiotic resources for entextualisation"* and *"can index various aspects of communicative context"* (Androutsopoulos, 2014, p. 9). While "selecting" and "styling" examine participants' sharing practices from the viewpoint of an individual user, the third level of analysis – negotiating – deals with the audience engagement, namely how participants negotiate what is shared with other users.

Overall, this analytic and discourse-centred ethnographic approach (also discussed in Section 2.5) is centred on the communication patterns and the social relationships accomplished through language in the Facebook and the WhatsApp groups.

3.4.4 Analysis of the interviews

Following the protocol suggested by Braun and Clarke (2006), thematic analysis was used to analyse the interview data. This analysis, which is the process of identifying patterns or themes within qualitative data, allows for an understanding of the emerging themes of the discussion that arose from the interviews.

As Figure 3.3. illustrates, and according to Braun and Clarke (2006), this analysis is performed in six phases. In the first stage of analysis, I transcribed all audio recordings (n=11) to gain familiarity with the data. In addition, I read and re-read the interview transcripts and re-listened to the recorded interviews, while keeping notes of initial ideas and potential codes or themes. In the second phase of data analysis, I created a preliminary list of potential codes with reference to relevant literature, initial insights from the online

observations, the interview questions, and the familiarisation process. During this period, the initial codes were constantly reviewed for relevance to the interview data and the research questions. In the next step, I reviewed the codes to identify potential themes. A theme is defined as *"something important about the data in relation to the research question, and represents some level of patterned response or meaning within the data set"* (Braun & Clarke, 2006, p.82). Following this inductive approach, the codes were arranged into initial themes. These themes were then further reviewed in relation to the coded extracts and the entire data set. The interview transcripts were reread and subjected to critical reflection on their validity to refine, define, and name the themes. Following this ongoing analysis the final codes were defined and amalgamated into high-level themes (Braun & Clarke, 2002, 2006; Guest et al., 2012).

Figure 3.3: Braun & Clarke's (2006) Six phases of thematic analysis

According to Cohen et al. (2017), piloting the interview protocol as well as ensuring inter-rater reliability in the coding process can enhance the reliability of interviews. Therefore before carrying out the interviews in the main study, the interview protocol was tested in the pilot study (see Section 3.1.3) by interviewing six learners who were using Facebook to supplement their Greek language learning. The interview protocol was also piloted by interviewing two PhD students and adjustments were made to the protocol before the main interviews. The coding process also involved reliability checks at its early stages to discuss potential disagreements. Given that a code or a theme and their identification is quite subjective (Steinar Kvale, 2007; Steiner Kvale, 1994, 1996), I coded the interviews first, randomly selected two interviews and asked three independent coders (i.e. fellow PhD students) to co-analyse the transcripts, discuss disagreements and reach consensus. In addition, I shared the codes and themes that had been applied with my supervisors and arranged a meeting to discuss the reliability of the coding. Once agreement at code and theme levels was reached, I finalised the analysis, and as Figure 3.4 illustrates, 4 high-level themes emerged from the thematic analysis, namely, "Pedagogical", "Technology", "Social", and "Feedback".

The high-level theme named "Pedagogical" refers to the advantages and the disadvantages of using Facebook and WhatsApp for language learning as perceived by the participants of this study. Specifically, this theme encapsulates the interviewees' perceptions of the impact of the two social media platforms on their language skills, the learning outcomes, their views of the teaching approach, the online collaboration as well as the overall impact on their language learning. The features provided by the two social media platforms, their affordances and constraints as well as the potential challenges faced during their use are articulated under the high-level theme "Technology". Another theme that emerged from the thematic analysis is "Social", and as its name indicates, it concerns interviewees' attitudes and perceptions towards using the online environments to communicate and interact with their peers and the tutor. Finally, the fourth high-level theme to emerge was identified as "Feedback" and it entails how the learners and their teacher perceived using the Facebook and the WhatsApp groups to receive and provide feedback.
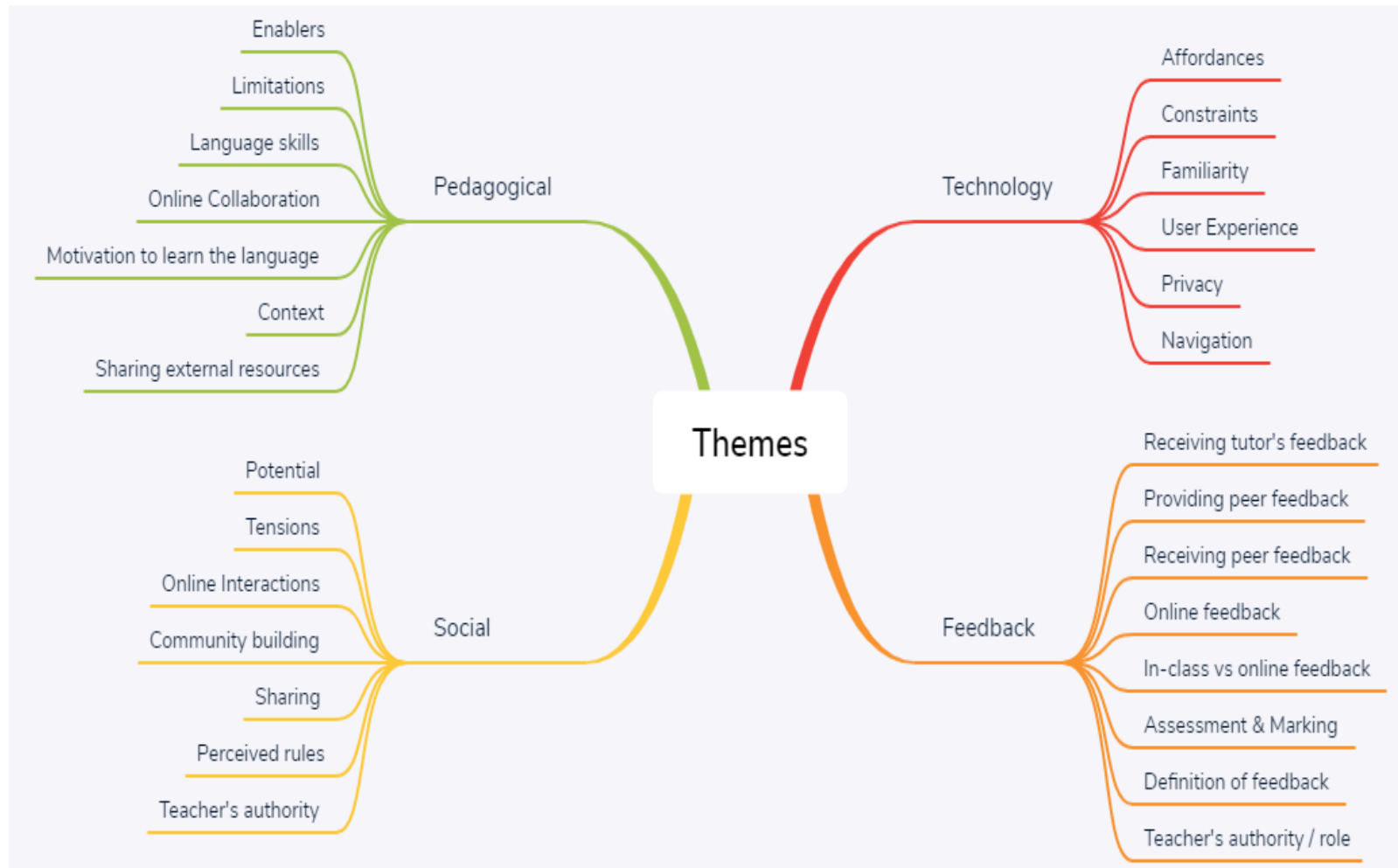
Figure 3.4: Codes & Themes emerged from the thematic analysis

The analysis of the interviews aimed to capture participants' attitudes towards their experiences of using Facebook and WhatsApp respectively. Most importantly, interview data were used to qualify the findings derived from the analysis of the online data, capture participants' self-reflection upon their sharing practices and identify the reasons why learners demonstrated specific participation preferences in both online environments.

The next section outlines the overarching ethical considerations that guided the methodological choices and procedures discussed above.

3.5 Ethics

As this research project entailed the participation of human subjects, ethical approval was sought for both the pilot and the main study. The Open University's Human Research Ethics Committee granted ethical approval to conduct both studies (HREC/2018/2772/Vogiatzis). The studies were conducted in accordance with the Open University's ethical guidelines. In addition, the Code of Human Research Ethics and Ethics Guidelines for Internet-mediated Research published by the British Psychological Society (BPS) (found at: https://www.bps.org.uk/news-and-policy/ethics-guidelines-internet-mediated-research) were followed throughout this research project.

Following the requirements of the Open University's Human Research Ethics Committee and to ensure that the participants in this doctoral study were fully informed a set of documents were administered to participants prior to data collection. As discussed in Section 3.3.1, in addition to obtaining permission from the curriculum manager of the adult education centre, an information leaflet (see Appendix 5) with details of the research project and its aims, and two consent forms (one for the main study and one for the interviews) (Appendices 6 and 8) were sent to all participants. Teachers' and learners' participation was completely voluntary, and they were free to withdraw at any time (up to the point of analysing the data), without giving a reason.

Personal information related to participants' backgrounds was collected (i.e. age and gender), but no sensitive information (for example ethnicity, religion, disability, health matters, sexual orientation, etc.), as defined by the Data Protection Act 2018, was collected. Throughout the analysis and the reporting processes, steps were taken to ensure the protection of participants' identities. All data were anonymised, and pseudonyms have been used in reporting the findings. With reference to data storage, all data are stored on an encrypted external drive and all relevant documents (i.e. Pdf documents and

spreadsheets) are password protected. The deletion of the data will be completed in September 2022, to allow sufficient time to permit post-viva publications.

3.6 Summary

This chapter served three purposes; firstly, it outlined how a combination of data collection methods were used within a case study methodology to offer insights into Facebook and WhatsApp use in adult education contexts. The research design made it possible to describe and interpret what occurred in both online environments and gather insights and reflections from participants. Secondly, it detailed the methodologies used to achieve the study objectives, and finally, it provided a clear "audit trail" of how results were produced and allows replication of methods by describing the way the research design was operationalised.

The following two chapters present the two case studies that comprised this thesis and explore the use of Facebook (Chapter 4) and WhatsApp (Chapter 5) for language learning by two groups of adult learners and their teachers.

4 Case Study 1: Adult learners' use of Facebook for language learning purposes

This study examines the use of Facebook for language learning by a group of adult learners of French and their teacher. Throughout the duration of the study (12 weeks), a mixed-methods approach to data gathering was followed, including semi-structured interviews, pre- and post-questionnaires as well as systematic online observations (see Chapter 3). This chapter investigates participants' perceptions of using Facebook for language learning, explores how they participate in this online environment and examines the extent to which the use of Facebook facilitates (or impedes) language learning interaction.

This chapter is structured as follows: First, Section 4.1 presents participants' demographic characteristics and their background information based on their responses to the pre-questionnaire. The insights derived from the post-questionnaire and the interviews are discussed in Section 4.2 which explores participants' perceptions of their use of Facebook. Following this, Section 4.3 examines participants' online activity in terms of social, cognitive, and teaching presence as envisaged in the Community of Inquiry (CoI) framework (see Chapter 3). Section 4.4 offers a quantitative analysis of participants' online contributions and examines the extent to which they participated in the Facebook group. Then, Section 4.5 presents an overview of the activities and the learning material used by the teacher and examines four communicative events to explore how the French teacher used the online platform to implement learning activities and how learners engaged with these. The final two sections (Sections 4.6 and 4.7) provide an analysis of participants' sharing practices in the Facebook group and a synthesis of the main findings of this case study.

4.1 Participants' background

The participants in this study were five L1 speakers of English who were learning French as a foreign language. All learners were adults and fell into several age categories, with one of them in the age range of 40 to 49 years old, while two were in the age range of 30 to 39 and 50 to 59 respectively. Participants were attending one of the weekly French language classes offered by an adult education centre in the UK. All learners attended an intermediate level course. A full description of the educational centre can be found in Section 3.3.

4.1.1 Students' profiles

A pre-questionnaire was used to identify participants' prior experiences in using Facebook and ascertain their use of social media platforms for non-educational purposes in everyday life. The results showed that all participants were already using Facebook, while four out of five participants were using WhatsApp and YouTube (Question 3, Appendix 3). All participants had had a Facebook account for more than four years and stated that they felt very confident (n=4) or confident (n=1) using Facebook (Questions 6 & 9, Appendix 3). In their questionnaire responses, three participants reported accessing Facebook more than twice per week, one learner stated that they accessed the platform 5 to 6 times a week, and another once or twice per week (Question 7, Appendix 3). These data highlight participants' familiarity with Facebook and their confidence in using the medium, which can be attributed to their previous experiences of using the platform for non-educational purposes in everyday life. None of these learners had previously used Facebook for language learning.

4.1.2 Students' expectations

The pre-questionnaire included a question interrogating learners' preferences regarding the use of Facebook to enhance their language skills (Question 19, Appendix 3). All students agreed (n=2) or strongly agreed (n=3) with the statement that they would like to use Facebook to enhance their reading and writing skills as well as their vocabulary knowledge. Participants' responses also show that all of them viewed positively the idea of using Facebook to enhance their cultural awareness, their listening skills as well as their grammar, but not their speaking skills.

The pre-questionnaire also included three open-ended questions (Questions 12, 13 & 14, Appendix 3). The first concerned the challenges students anticipated facing during their French language learning. Time was reported as the main challenge with students (n=3) commenting that it was difficult for them to find the time to revise, do their homework and practise their French during the week. Another challenge reported by two respondents was related to their difficulty in learning and remembering the vocabulary, the spelling and the grammar in the target language. Students' reports about the difficulty in finding the time to practise and remembering some elements of their French language learning are not surprising once we consider that all participants were adults and some of them had busy working lives.

A follow-up question asked students to state how the use of Facebook could help address these challenges. Other than one student who was unsure about this point, students noted that they could have more time to practise their French during the week (n=2) or might use the FB space for sharing links to exercises (n=2).

Finally, the third open-ended question focused on students' perceptions of the challenges they expected to face when using Facebook for language learning. Two participants referred to challenges around the confidence to post messages in French and the fact that their peers could see their language mistakes. Another participant referred to potential challenges, the first being a possible lack of activity in the online group and the second being their difficulty in remembering to log in to the Facebook group. The rest of the participants (n=2) did not provide a response to this question.

4.2 Participants' perceptions of using Facebook following the study

The post-questionnaire and interviews were used to examine students' perceptions of using Facebook for language learning. In their responses, all learners reported that they had enjoyed using Facebook for language learning and they would like to use social media in other language classes in the future (see Questions 6 & 8, Appendix 4). Most learners agreed (n=2) or strongly agreed (n=2) with the statement that overall their participation in the study had been beneficial for them, and only one student slightly disagreed with that statement. Finally, all learners agreed with the statement that posting activities and resources was useful for their language learning (see Question 10, Appendix 4).

More specifically, in the context of interviews, one learner suggested that *"it [Facebook] was an interesting thing to do"* and that *"it's always useful to have something added in"* (Juliette), also evident in the following quote by Amelie:

> *"Well I think it was a good idea yeah I think it's good to use (…) so I would like it to continue because it makes me think (…) I think it's been successful and I want to see it continued" (Amélie)*

According to all interviewees, the Facebook group met their expectations (see Section 4.1.2), since it expanded the limited class time and enabled them to be more exposed to the target language:

> *"It encourages you overall to do a bit more French during the week (…) some kind of group outside of the class to have these discussions and ideas and make suggestions and having activities posted twice a week and I think this was great because that was like a prompt" (Marion).*

127

Marion's comment that the Facebook group was like 'a prompt' between the face-to-face sessions reflects more widely shared views among students. Given that in this educational setting students attend weekly sessions of 2 hours each (a total of 30 lessons per academic year), offering opportunities to practise their French outside of the class points to one advantage of using Facebook to support students' language learning. Amélie and Juliette reinforce this point and describe how the Facebook group helped them expand the limited class time and engage more with the target language:

> *"It made me do something that was outside of the lesson and outside of the homework so it did make me look and think so that was good" (Amélie)*

> *"There'd be another time in the week where something would pop up and say what does this mean or how do you do that (…) so it's another opportunity to actually think about the language because quite often it's very easy for apart from doing your homework for the whole week to go by and get back to your class" (Juliette)*

On similar lines, data from interviews suggest that learners perceived that the Facebook group supplemented their in-classroom learning. In their responses, participants acknowledged the limited class time and perceived the online environment as a supplement to their face-to-face sessions, affirming this aspect of the study design. Given that in this study the use of Facebook aimed to supplement in-classroom learning, students' responses show that this aspect of the study design was perceived well. Moreover, the Facebook group enabled them to be further exposed to the target language by elaborating on topics that they did not have the chance to discuss during the lessons. In this ACL context, learners are not exposed to the French language regularly and their exposure to the L2 in communicative use is limited. According to the learners, the use of Facebook in this study complemented the limited and discontinuous periods of face-to-face instruction in this adult education centre. As Amélie and Matthieu stated:

> *"It made me think about things that we didn't have time to discuss in the French class (…) there was something else about Easter and we had discussed Easter in the class but we hadn't gone further into it like customs and local customs which was on the Facebook page so we did a bit more on that" (Amélie)*

> *"It had complemented the lessons because 2 hours just once a week doesn't feel like enough (…) it is not there to replace the lessons it's meant to complement them and it does that it does that very well I think" (Matthieu)*

Learners also highlighted some differences between in-classroom learning and learning through Facebook. Two of the interviewees argued that the use of Facebook

"[took] the learning away from the textbook and [turned] it into more realistic and easier to relate to situations" (Matthieu). These views suggest that the use of everyday tools (such as Facebook) offers an opportunity for the teacher to design tasks that enable students to engage with authentic situations. As Juliette also stated:

> *"The classes are very focused on a particular element (…) whereas with Facebook it might be something that's interesting or maybe to do with the time of the year so maybe something different to link in so it's kind of broadening rather than just focusing entirely on what you did in the class" (Juliette)*

With regard to the perceived impact of Facebook on the development of students' language skills, post-questionnaire responses indicated that the French group felt that using Facebook helped them to enhance their cultural awareness, their writing and reading skills, their grammar as well as their vocabulary knowledge (Question 12, Appendix 4). As regards their listening skills, students' responses varied – three of them perceived using the Facebook group as beneficial for the development of their listening skills, while two demurred. Unsurprisingly, given its predominant focus on text-based communication, participants reported no impact of the use of Facebook on their speaking skills.

Interview data reveals similar perceptions of the impact of the Facebook group on students' language development:

> *"It made me look a bit more into imperfect and future tense for the verb "avoir" [to have] and so what was meant to be fun eventually took me off down into a path learning more about the actual structure of sentences even though that wasn't what I started with and that helped a little bit with conjugating verbs" (Matthieu)*

> *"I think like I said for me it opened up the conversation with other students in my class which has benefited me long term with my language skills" (Marion)*

As regards participants' experiences with using the platform, the post-questionnaire included some questions aiming to identify potential technical issues that students faced (Question 7, Appendix 4). Students reported no technical challenges and said that they could easily navigate the online environment, download and upload resources, and find any information in the Facebook group. They could also use the features provided by the platform and easily access all the relevant information and/or learning resources. These views resonate with those expressed in the pre- and the post-questionnaire responses, emphasising students' familiarity with the platform and their competence in navigating the online environment. The following views expressed by Marion point out students' familiarity with the online medium:

"I find it easy because Facebook really started when I was 19 so I used it for our university a lot so (…) I think it's been around for a long time so it's just normal to me" (Marion)

Moreover, some students (n=3) found particularly useful the affordance of Facebook for accessing the online group irrespective of time or place. As Marion mentioned:

"What I really liked about that was I had my own time to engage with it and go look things up and kind of gather my thoughts and write down what I wanted to say and present it coherently" (Marion)

A few interviewees (n=2) reported a few constraints related to the devices used to access the online environment such as not being able to use other applications simultaneously when accessing the Facebook group via their mobile devices. For Marion *"it was too difficult I [she] need[ed] more time to process because I might need[ed] to use a dictionary or google translate"* (Marion). Similarly, for Amélie:

"The only difficulty would be I would be looking at Facebook on my phone [name of the teacher] would have put something out there in French and I couldn't use my Google translate cause the app is on my phone" (Amélie)

Information about the devices students used to access the platform was collated in the analysis of responses to the post-questionnaire. Three of the five respondents indicated that they primarily used their mobile phones to access the Facebook group, while two used their laptop and desktop computers respectively.

As discussed in Chapter 2, the most commonly reported issue around Facebook use appears to be privacy hence at interview, students were asked to share any concerns about Facebook as a platform (see Appendix 9). The analysis of the interviewees' responses indicates that all participants felt comfortable with using the Facebook group thanks to its privacy settings. The group was set up as a closed group in order to avoid any unwanted interventions from strangers and make sure that students' contributions could not be viewed by other online users. According to the interviewees, these privacy settings made them feel comfortable in the online environment and did not raise concerns about the use of the Facebook group. The following quotes demonstrate these views:

"It's a private group and then I know all my French classmates before we joined it so I don't have any concerns" (Marion)

"It's a closed group isn't it so it's only the people in the group that can access it and I use it every day so and the fact that it's a closed group I find it quite more secure than if it was a general group" (Amélie)

Similar findings were obtained from the post-questionnaire indicating that most learners slightly agreed (n=2), agreed (n=1) or strongly agreed (n=2) with the statement that *"the Facebook group provided a friendly and safe environment for sharing ideas and communicating with their classmates and the teacher"* (Question 7, Appendix 4).

However, two students expressed some concerns about Facebook as a social media platform. Matthieu was concerned regarding data protection in Facebook and referred to the app as a "necessary evil". Similar concerns were shared by Juliette, especially around the personal information that users reveal on social media. She stated that, despite joining the study, she was not actively participating in social media in her day-to-day life due to these privacy concerns.

The interviewees also saw Facebook as an easy-to-use technology for interacting online. Before its adoption, email was the only means of contact between the teacher and the students. Interviewees felt that Facebook offered more immediate communication and acted as a useful reminder for students' language learning:

"I find it a useful tool to find out what is going on I mean [name of the teacher] would use it to say if she was sick or something I would probably see it on Facebook sooner than I would see that in an email so I find it a useful tool" (Amélie)

"I thought it was a good idea I thought it was another way because previously everything has been done by email so that's a useful tool and then there's a reminder of where the things were and you can send out documents and so on" (Juliette)

Even though these quotes show that several students perceived Facebook as an immediate and easy-to-use communication tool, the post-questionnaire responses suggested that other participants were not at ease in posting to the Facebook group. While three learners agreed (or strongly agreed) with the statement that they *"felt comfortable posting to the online group"*, two slightly disagreed. Participants' divergent views were also evident in their responses on the topic of collaboration. Three students slightly agreed with the statement that *"collaborating with other peers was helpful to them in learning French"*, while the rest (n=2) slightly disagreed with the same statement.

Summing up, the discussion above showed how participants in this study perceived using Facebook for language learning. Overall, learners viewed the use of the online

platform positively. However, students' positive views can be attributed to the novelty of Facebook as a learning environment, their familiarity with the medium as well as their informal everyday life use of the platform. In other words, learners' views emanate from their positive stances to Facebook as a communication platform used in their everyday life rather than their use of the medium as a pedagogical tool. Students also perceived that the Facebook group expanded the limited in-class time, provided a prompt between classroom lessons, and enabled greater continuity of exposure to the French language.

Nevertheless, online data suggest that students' rates of activity in the Facebook group were extremely modest, which reveals a possible mismatch between learners' ostensible engagement and their actual interactions. Moreover, while interviewees suggested that Facebook was perceived as an easy and immediate way of interacting, post-questionnaire responses revealed that some students felt uncomfortable about posting their contributions to the online environment. These contradictory testimonies necessitated further investigation of students' actual participation in the Facebook group.

From a methodological standpoint, the above findings are based on self-reported data (i.e. questionnaires and interviews) which are prone to some forms of bias (social desirability, self-deception and acquiescence bias) and are subject to possible discrepancies between what people say and what they actually do (see Section 3.2). Consequently, it was deemed important to look beyond the self-reported data and pay close attention to learners' and their teacher's actual contributions to the Facebook group. The CoI framework was selected for the analysis of the online data using the CoI indicators (Garrison, 2011, 2017) to examine participants' online activity in terms of social, cognitive, and teaching presence (see Garrison & Anderson, 2003; Garrison & Arbaugh, 2007).

4.3 Participants' social, teaching, and cognitive contributions

As Garrison and Cleveland-Innes (2005) argued, interaction in online environments is a complex concept which needs to be understood in a comprehensive way. The CoI framework can offer a thorough view of online interactions by examining the complexities of an online educational environment through three interdependent elements – the social, teaching and cognitive presences (Garrison & Anderson, 2003).

Social presence involves the development of interpersonal and purposeful relationships within an online educational environment. Cognitive presence focuses on students' learning process and the development of their higher-order thinking and knowledge acquisition. The third element of a CoI – teaching presence – focuses on the roles of the educator and concerns design, facilitation and instruction in an online educational environment.

CoI is a widely adopted explanatory educational framework for online learning, because of its comprehensive view of learning in online environments and its practicable application (Garrison & Akyol, 2013). In this study, the CoI framework was used to scrutinize participants' online activity by examining online discussions in terms of social, cognitive and teaching presence. The teacher and the students' initiating posts (n=32) and comments (n=74) were subject to content analysis, and the online transcripts were coded using the established indicators of the CoI elements (i.e. social, cognitive, and teaching presence). A full description of how the CoI framework was used in this study and how the online transcripts were coded can be found in section 3.4.2. The following sections discuss those indicators that were evident (or conspicuous by their absence) in the Facebook group and examples[10] that help to illustrate this discussion.

4.3.1 Social Presence

In a CoI, education is viewed as a collaborative experience which needs to engender participants' sense of belonging and acceptance in an online group with common interests. Social presence plays a mediating role between cognitive and teaching presence and focuses on participants' ability to *"project themselves socially and emotionally, as real people (i.e. their full personality), through the medium of communication being used"* (Garrison et al., 1999, p. 94) (also see Section 2.4.1).

---

[10] Note that these examples reproduce participants' comments *verbatim.* These occasionally contain linguistic or expressive errors, which will remain uncommented on.

Social presence is responsible for setting the climate for learning and consists of three overlapping categories – interpersonal and affective communication, open communication, and group cohesion (Garrison, 2017). Evidence of social presence in the Intermediate French Facebook Group is presented in Table 4.1 below:

Table 4.1: Social presence categories, indicators and examples

	N	Examples from the Facebook group
Interpersonal Communication	**27**	
Affective expression	3	*"je ne peux pas regarder la télévision parce que cela me rend triste 😟"* (I can't watch TV because it makes me sad 😟)
Self-disclosure	14	*"Heureusment, je suis programmeur, donc je m'assios pres de tout le jour."* (Fortunately, I am a programmer, so I sit down almost all day.)
Use of humour	10	*"froid crepes ugh!"* (Cold crepes ugh!)
Open Communication	**97**	
Continuing a thread	52	Software dependent
Quoting from others' messages	-	
Referring explicitly to others' messages	22	*"Merci beaucoup [name of the teacher], tout est clair"* (Thank you very much [name of the teacher], everything is clear)
Asking Questions	13	*"J'ai une question - quelle est correct? J'ai eu mal à la tête, ou j'avais mal à la tête?"* (I have a question - what is correct? "J'ai eu mal à la tête" or "j'avais mal à la tête"?)
Complimenting, expressing appreciation	5	*"j'aime les leçons et je m'amuseapprendre de plus en plus français 😊"* (I like lessons and I have fun learning more and more French 😊)
Expressing agreement	5	*"Je suis d'accord 😊 "* (I agree 😊)
Cohesive Communication	**22**	
Vocatives	18	*Bonjour à vous! (name of the teacher)* Hello to you! (name of the teacher)
Group reference	-	
Phatics / Salutations	4	*"Bonjour à tous et à toutes!"* (Hello everyone!)
Total	**146**	

According to the CoI framework, interpersonal communication consists of three major indicators – affective communication, self-disclosure and use of humour. The analysis of students' comments in the Facebook group shows that indicators of interpersonal communication were present in 27 posts (or parts of posts) (see Table 4.1). Students and the teacher expressed their emotions (i.e. affective communication) in three instances, revealed details about their personal lives (n=14) (i.e. self-disclosure) and in ten instances they used humour (see Table 4.1). In a Facebook group where visual cues and vocal intonations are not present, the presence of the above indicators is crucial for developing a sense of belonging and a purposeful connection to the online group (Garrison, 2009).

The second category of social presence is open communication, which is achieved through the process of *"recognising, complimenting and responding to the questions and contributions of others"* (Garrison, 2017, p. 46). As Table 4.1 shows, participants' contributions largely focused on open communication which was identified in 97 instances. Students and their teacher continued a thread by using the reply feature 52 times. However, this indicator of open communication (i.e. continuing a thread) is software dependent. Consequently, the presence of this indicator is attributed to the nature of communication that Facebook offers, rather than participants' efforts to establish open communication within the online environment. As Table 4.1 shows, members of the Facebook group made direct references to the contents of others' posts (n=22), asked questions (n=13), expressed agreement with others (or the content of others' messages) (n=5) and complemented others' contributions (n=5) in the online environment. It is noted that all students' questions were asked directly of the teacher and that none of them directed any questions at their peers. This point will be discussed further in section 4.5.

Interpersonal and open communication contribute directly to the third category of social presence – group cohesion. As Table 4.1 illustrates, cohesive responses such as phatic communication and greetings (n=4) as well as vocatives (n=18) were also evident in participants' online comments. According to Garrison (2017), the use of group references indicates that students perceive themselves as part of a community of inquiry. However, the absence of group references in this group and the use of simple cohesive behaviours, such as greetings, by both the teacher and the students suggests that group cohesion was not developed at more than the basic level needed for participants' communication in this context.

4.3.2 Teaching Presence

Teaching presence within a CoI focuses on the roles of an educator and has been defined as *"the design, facilitation, and direction of cognitive and social processes for the purpose of realizing personally meaningful and educationally worthwhile learning outcomes"* (Anderson et al., 2001, p. 5) (also see Section 2.4.2). Teaching presence consists of three categories – instructional design and organisation, facilitating discourse and direct instruction (Anderson et al., 2001; Garrison, 2017).

According to the CoI framework, instructional design and organisation involves the teacher's decisions about the structure of the course and the learning process. As shown in Table 4.2, the most commonly used indicator within this category was "setting curriculum" (n=30). This is not surprising once we consider that the teacher used the Facebook group as a medium for language learning and had to design, organise, and introduce language activities to the members of the group. Contributions related to the other indicators of design and organisation (i.e. utilizing medium effectively, designing methods and making macro-level comments) were less frequently used by the teacher, while others such as "establishing time parameters" and "netiquette" were not evident at all (see Table 4.2). This suggests that the teacher mainly focused on introducing the language tasks (i.e. setting curriculum) and only rarely made comments related to the design of these tasks (e.g. *"I am going to divide you into groups, and you will debate"*) or the rules (e.g. *"Keep your messages short"*) or guidelines (e.g. *"Please post a message by Friday"*) for students' participation in the online environment (i.e. time parameters and netiquette) (Garrison, 2017, p. 73).

The second category of teaching presence – facilitating discourse – deals with providing support and guidance and plays a key role in establishing and maintaining other presences (Garrison, 2017). Online interactions in the Facebook group suggest that two indicators of "facilitating discourse" were evident in teacher's online contributions. The teacher's comments frequently aimed to engage participants and prompt discussion (n=20), while she also encouraged and acknowledged students' contributions (n=14). However, facilitating discourse indicators such as "identifying areas of agreement/disagreement", "seeking to reach consensus/understanding", "setting climate for learning" and "assessing the efficacy of the process" were not present in the Facebook group (see Table 4.2).

Table 4.2: Teaching presence categories, indicators and examples

	N	Examples from the Facebook group
Instructional Design & Organization	**36**	
Setting curriculum	30	*"Et vous, depuis quand parlez-vous français?"* (And you, since when do you speak French?)
Designing methods	2	*"Vous pouvez essayer de corriger les erreurs linguistiques identifiées et revoir le contenu des contributions de vos camarades."* (You can try to correct the linguistic errors identified and review the content of your peers' contributions.)
Establishing time parameters	-	
Utilizing medium effectively	3	*"Enfin, partagez votre texte en répondant à ce message et commentez le travail des autres!"* (Finally, share your text by replying to this message and comment on the work of others!)
Establishing netiquette	-	
Making macro-level comments	1	*"Quand on ne va pas à [name of the educational centre] pour avoir cours de Français, on peut toujours faire des révisions ..."* (When you don't go to [name of the educational centre] to have French lessons, you can always do revisions ...)
Facilitating Discourse	**34**	
Identifying areas of agreement/disagreement	-	
Seeking to reach consensus/understanding	-	
Encouraging, acknowledging learners' contributions	14	*"Je ne connaissais pas le dicton, merci pour le partage."* (I didn't know the saying, thanks for sharing.)
Setting climate for learning	-	
Drawing in participants, prompting discussion	20	"Quand pensez-vous les autres? Marion (Tag), Matthieu (Tag), Juliette (Tag), Amélie (Tag)?" (What do you think of this, you others? [names of students] (Facebook's tag feature)?
Assess the efficacy of the process	-	
Direct Instruction	**46**	
Present content/questions	18	*"Film français / excellents acteurs / sous titres en anglais.... Après avoir vu ce film, quelle pièce vous intéresserait?"* (French film / excellent actors / English subtitles .... After watching this film, which play would interest you?)
Focus the discussion on specific issues	-	
Summarise the discussion	1	*"Hier soir, nous avons essayé d'expliquer "emballer" avec plusieurs significations ..."* (Last night we tried to explain " emballer " with several meanings ...)
Confirm understanding through assessment & feedback	4	"😉 *Vous avez bien compris l'expression alors!"* (😉 You understood the expression correctly then!)
Diagnose misconceptions	-	
Inject knowledge from diverse sources	23	Teacher's use of images, YouTube videos, links, etc.
Responding to technical concerns	-	
Total	**116**	

The most frequent contributions related to teaching presence were those associated with direct instruction (see Table 4.2). In direct instruction, more direct guidance is required to provide subject knowledge and feedback, diagnose misconceptions, inject knowledge or summarise the discussions (Garrison, 2017). The analysis of the teacher's contributions suggests that in many instances (n=23) she shared various sources of information with the Facebook group (i.e. injecting knowledge from diverse sources) and guided the online discourse by presenting content and questions to the members of the group (n=18). However, the teacher confirmed understanding through assessment or explanatory feedback only in four instances, while only one of her comments summarised the discussion in the online environment. The other three indicators from this category of teaching presence (i.e. "focus the discussion on specific issues", "diagnose misconceptions" and "responding to technical concerns") were not attested in the Facebook group. The fact that students were familiar with the platform (see Section 4.1) can explain the absence of this indicator. In addition, there were no apparent misconceptions in the group's discussion, thus the absence of this indicator (i.e. diagnose misconceptions) is understandable.

4.3.3   Cognitive presence

A core element of CoI is cognitive presence, which focuses on students' ability to construct meaning through interaction and collaboration. Cognitive presence is defined as the process of *"facilitating the analysis, construction, and confirmation of meaning and understanding within a community of learners through sustained discourse and reflection"* (Garrison, 2017, p. 50). It is operationalised through four phases – "triggering event", "exploration", "integration" and "resolution".

The first phase – a triggering event – initiates the inquiry process and is associated with conceptualising a problem or issue. As Table 4.3 shows, the two indicators of a triggering event – recognise problem (n=3) and puzzlement (n=12) – were present in the Facebook group discussions.

Table 4.3: Cognitive presence categories, indicators and examples

	N	Examples from the Facebook group
Triggering event	**15**	
Recognize problem	3	*"Je trouve parler français très difficile! Je ne peux pas me rappeler les mots assez vite"* (I find speaking French very difficult! I can't remember the words fast enough)
Puzzlement	12	*"Je reconnais seulement Bonnie Tyler, Vanessa Paradis et Celine Dion. Les autres je ne sais pas."* (I only recognize Bonnie Tyler, Vanessa Paradis and Celine Dion. The others I don't know.)
Exploration	**20**	
Divergence	3	*"Malheureusement, je n'ai jamais visité de montagnes de France, et je ne sais pas faire du ski, mais quand j'étais en france pour mon travail la dernier année j'ai vu le Mont Blanc."* (Unfortunately, I have never visited any of the mountains in France, and I don't know how to ski, but when I was in France for work last year I saw Mont Blanc.)
Information exchange	4	*"Something I heard a French-Canadian say on a Facebook group yesterday in a video (I hope I'm writing it correctly!) Dans la vie comme au hockey, il y a toujours de l'espoir! I think it's "in life, like in hockey, there is always hope"*
Suggestions	4	"Vous devez essayer de dire encore et encore et encore..." (You must try to say over and over and over again ...)
Brainstorming	5	*"J'ai bien aimé, même si certaines sont un peu injustes ! Il y a beaucoup de similitudes avec les Parisiens. Ils sont raison à propos des Anglais agressifs passifs, nous ne sommes pas très doués pour parler directement."* (I liked it, even if some are a bit unfair! There are a lot of similarities with the Parisians. They are right about the passive aggressive English, we are not very good at speaking directly.)
Intuitive leaps	4	*"Je suis desole mais en hiver je vais en vacances au soleil comme Sri Lanka pas de montagne francais"* (I'm sorry but in winter I go on vacation in the sun like Sri Lanka no French mountains)
Integration	**7**	
Convergence	3	*"C'est bon, avoir l'amour pour votre pays, et aussi parler à propos les choses mauvais en plus les choses bon."* (It's good, to have love for your country, and also to talk about bad things in addition to good things.)
Synthesis	-	
Solutions	4	*"J'aime beaucoup les carnivals où les gens portent les masques colorés et bizzares. En particulier je trouve les masques qui ont les grands nez très amusants"* (I really like carnivals where people wear colourful and bizarre masks. In particular I find the masks that have big noses very funny)
Resolution	**0**	
Apply	-	
Test	-	
Defend	-	
Total	**42**	

The triggering event is followed by exploration, which is an inquiry-oriented and divergent process where students search, gather and exchange information and ideas to explore a topic (Garrison, 2011, 2017). The analysis of participants' online contributions suggests that most comments (n=20) were associated with the exploration phase of inquiry (see Table 4.3). Students' online contributions included brainstorming (n=5), offering supportive or contradictory ideas and concepts (divergence, n=3), eliciting ideas from their perspectives or experiences (intuitive leaps, n=4), exchanging information (n=4) as well as making suggestions (n=4).

The third phase – integration – is the process of constructing and synthesising possible and meaningful solutions or explanations (Garrison & Cleveland-Innes, 2005). As Table 4.3 illustrates students' contributions related to this phase were infrequent (n=7). In the fourth phase – resolution – students critically assess the viability of the possible solutions through direct or vicarious application and implement the best one (Garrison, 2017). The analysis of students' contributions suggests that none of the indicators from this phase (i.e. apply, test and defend) were present in the Facebook group (see Table 4.3). The limited presence of the "integration" phase and the absence of "resolution" phase in the group discussion are not entirely surprising. Garrison (2017) acknowledged that it is challenging for educators to move the discussion and students' cognitive development from problem recognition (triggering event) through to exploration, integration, and resolution. In addition, he argued that there is a tendency to *"do the first two phases very well, the third phase less well, and the last phase hardly at all"* (Garrison, 2017, p. 67).

4.3.4   The Facebook group as a Community of Inquiry

The discussion above explored participants' online activity by examining which elements of CoI were present (or absent) in the Facebook group's discussion. The analysis shows that social postings (i.e. social presence) comprised a clear majority (n=146, 48%) of learners' and the teacher's online contributions (see Table 4.4). These contributions were mainly related to *open communication* (n=97, 66.4%). Contributions associated with *interpersonal* (n=27, 18.5%) and *cohesive communication* (n=22, 15.1%) were present but less frequent.

Table 4.4: Overall online contributions

	Number of codes	Percentage
Social Presence	**146**	**48%**
Interpersonal Communication	27	18.5%
Open Communication	97	66.4%
Cohesive Communication	22	15.1%
Teaching Presence	**116**	**38.2%**
Instructional Design & Organization	36	31%
Facilitating Discourse	34	29.3%
Direct Instruction	46	40%
Cognitive Presence	**42**	**13.8%**
Triggering event	15	35.7%
Exploration	20	47.6%
Integration	7	16.7%
Resolution	0	0%

As Table 4.4 illustrates, all three categories of teaching presence (i.e. instructional design and organisation, facilitating discourse and direct instruction) were evident in the Facebook group (n=116, 38.2%). Most of these contributions were associated with direct instruction (n=46, 40%) since the teacher mainly used diverse sources of information to inject knowledge and guided the online discussion by presenting content and questions to her students. Nevertheless, some strategies of direct instruction (i.e. providing feedback and summarising the discussion) only occurred rarely. The teacher's views on using the Facebook group to provide feedback to her students are further discussed in Section 4.5.4.

Comments related to course design and organisation were also apparent (n=36, 31%) in the Facebook group (see Table 4.4). The predominant strategy within this category was "setting curriculum". In other words, the teacher primarily used the online environment to introduce language activities, while she rarely used other strategies in this category (i.e. utilizing medium effectively, designing methods and making macro-level comments) and never used strategies such as "establishing time parameters and netiquette". The teacher's contributions also focused on facilitating learning discourse (n=34, 29.3%). The teacher mainly tried to stimulate students' engagement and prompt discussion, while she also encouraged and acknowledged her students' contributions.

The analysis above revealed a strong teaching and social presence within the online environment. According to CoI, a balanced teaching and social presence can encourage meaningful learning (Garrison et al., 2010). However, the analysis of students' contributions in this group reveals their limited cognitive presence. Even though the first two phases of cognitive presence (i.e. triggering event and exploration) were evident in the online discussion, students' contributions only rarely reached the integration phase (n=7, 16.7%), while there were no contributions related to resolution.

Overall, the total number of indicators identified in each category shows that contributions related to social (n=146, 48%) and teaching presence (n=116, 38.2%) constituted a clear majority of participants' comments, while 42 (13.8%) contributions were coded as cognitive presence. This suggests that students' contributions focused heavily on social rather than cognitive presence. Given that social media platforms are used in everyday life to get into contact with new users, keep in touch with friends and socialise (Brandtzæg & Heim, 2009), students' orientation to social sharing in the Facebook group can plausibly be attributed to their personal everyday life use of this medium. In addition, according to Garrison (2017), the nature of the tasks and/or the lack of teaching presence in the online environment are important factors that influence students' cognitive development within a CoI. In this study, the teacher posted a significant number of contributions to structure, design and organise the activities as well as seeking to facilitate online discourse and provide direct instruction. Nevertheless, the absence of some indicators of teaching presence (see Section 4.3.2) and the design of the tasks that the teacher uploaded might account for the limited cognitive presence within the Facebook group. The language learning activities and the material uploaded in this group are discussed in Section 4.5.

Reflecting on the results of this analysis, the categories and indicators of social and teaching presence can be easily conceptualised and applied within the context of this study. However, considering students' language competency in L2 (intermediate level), certain phases of cognitive presence (such as resolution) are arguably difficult to operationalise in the context of Facebook use for language learning. According to Garrison (2017), in the resolution phase students need to critically assess *"the viability of the proposed solution through direct or vicarious application"* by testing the solution *"through vicarious implementation or thought experiment"* (p. 66). Notwithstanding that this phase of cognitive presence can be conceptualised and operationalised in other contexts (e.g. higher education), due to learners' proficiency level (intermediate) and their lack of expressive resources, it is implausible to expect that they could move the discussion to the final stage of cognitive development (i.e. resolution).

This analysis offered an understanding of the elements and dynamics of the Facebook group. It also opened-up some further areas for investigation. The predominance of social and teaching presence in the online environment as well as the limited cognitive presence merit closer attention. The analysis of the online data using the CoI framework provided valuable insights into the content of individual posts and their functions in terms of the three presences, but it did not look at the context of the teacher's and the students' modes of participation in specific exchanges in the online environment. Consequently, there was a need to explore the ways in which learners and their teacher participated in the Facebook group in more detail. To scrutinise this, Androutsopoulos' (2014) empirical framework for the analysis of sharing practices in social media was adapted for use in this study.

As discussed in Chapter 3, the analysis of participants' sharing practices was performed in three stages. The first stage involved a quantitative analysis of participants' online contributions (see Section 4.4). The second stage concerned with the identification of relevant communicative events[11] which were qualitatively analysed (see Section 4.5). The third stage involved another qualitative analysis of the selected communicative events aiming to provide an in-depth understanding of how Facebook was used in this study in terms of selecting (i.e. what participants chose to share and why), styling (i.e. how participants style their content) and negotiating (i.e. how participants responded to what

---

[11] Communicative events are defined as "spatially and temporally delimited, multi-authored sequence[s] of contributions" (Androutsopoulos, 2014, p. 7) (also see Section 3.4.3).

was being shared by other users) (see Section 4.6). At all the above stages of analysis interview data were used to identify participants' self-reflection upon their sharing practices in the online environment and to shed light on the aspects of CoI discussed above.

The following section reports on the first stage of analysis and presents a quantitative analysis of participants' online contributions to the Facebook group.

4.4 Participation and sharing practices in Facebook

This section examines the ways in which the students and the teacher in this study participated in the Facebook group. Aiming to identify the participants' level of engagement in the online environment all their initiating posts and responsive comments were counted. An initiating post was identified when a participant shared a post with the Facebook group to initiate conversation on a new topic, while a reply to an initiating post was categorised as a responsive comment (Androutsopoulos, 2014).

As Table 4.5 below shows, the learners and the French teacher shared a total of 106 posts and comments. These data demonstrate an extremely modest rate of activity in the Facebook group throughout the duration of the study (i.e. 12 weeks). Students' low participation is also highlighted by the fact that more than half (n=58, 54.7%) of these contributions were made by the teacher. Moreover, the total number of the initiating posts to the Facebook group was 32 (see Appendix 9). Almost invariably, it was the teacher who shared a post to initiate conversation in the online environment (n=30, 93.75%). She also commented on 37.8% (n=28) of these initial posts. These data strongly emphasise the teacher's central role in the Facebook group, since her contribution in initiating, coordinating, and participating in interactions was key.

Table 4.5: Level of contribution

	Teacher	Louis	Amélie	Juliette	Marion	Matthieu	**Total**
Individual contributions	58	25	10	6	5	2	**106**
Initiating posts	30	1	1	0	0	0	**32**
Responsive contributions (Comments)	28	24	9	6	5	2	**74**

Moreover, adult learners in this study presented different levels of participation in the online environment. One student, Louis, was very active, sharing 24 (out of 74, 32.4%) responsive contributions to the initiating posts, while the number of contributions of the rest of the students were very limited. For instance, one learner, Matthieu, contributed only twice to the Facebook group, replying to two initiating posts.

In terms of the students' contributions, the data in Table 4.5 show that their participation in the Facebook group was reactive in the sense that they did not take the initiative to start a new topic or conversation, but rather they were mainly responding to posts made by the teacher. Only two learners shared a post to initiate conversation in the Facebook group. The reactive nature of learners' participation became apparent from the early stages of Facebook use, and as captured in my observational notes more teacher-led initiating posts and prompts were needed to trigger students' responses:

"Without the teacher's posts and prompts none of the students take the initiative to share a post or a comment" (Research diary, week 3, 26/02/2019)

The online data show that students' participation was limited and the activity in the Facebook group relied heavily on the teacher's efforts to initiate conversation and coordinate the discussion in the online group. A possible reason for this seems to be the lack of time that students had available for engaging with activity in the Facebook group, as three of them reported in the post-questionnaire (see Question 14, Appendix 4).

Other than time, additional reasons for students' reactive and limited participation were identified in the interview data. Firstly, all interviewees perceived that only the teacher had the authority to initiate conversation in the Facebook group, as shown in the quote that follows:

"I was thinking that [name of the teacher] would put things on there and she would say which day she was going to do that and she would put things like French phrases for people to work out (…) think people tended to expect [name of the teacher] to be the leader on it" (Juliette)

However, such an expectation was never formally set and on the contrary learners had the freedom to initiate conversation in the online group had they wanted to. What this testimony offers is an explanation of why the interactions in the Facebook group were heavily dependent on the teacher who initiated the vast majority of the online exchanges.

The second reason that affected students' participation in the online environment was their lack of confidence in posting to the Facebook group in French. Already in Section

4.2 it was evident that some students felt less than comfortable posting to the group. Similarly, the interview data suggest that three out five students *"didn't have the confidence to get involved in ongoing discussions in French"* (Amélie) or *"you [they] are [were] so conscious about writing the correct thing in French because French is not easy and it stops you [them] almost [from] posting sometimes you are worried about getting it wrong"* (Matthieu). Juliette's response also highlights this point:

> *"It's not something you can do quickly and easily if your French isn't at a particularly high standard you have to do quite a lot of work in order to formulate your response so (…) you got to make quite an effort so that you don't feel that you've put something on there that's not very good or a bit foolish maybe" (Juliette)*

This section has discussed students' reactive and limited participation in the Facebook group, which is attributable to time issues, lack of confidence, learners' L2 proficiency levels and an expectation that the teacher should lead the discussions online. This section also highlighted the centrality of the teacher's role as the most active participant in the Facebook group. The following section examines closely four communicative events looking at how the French teacher used the Facebook group to implement activities in the target language (i.e. teaching presence) and how learners participated in these.

4.5 Activities and learning materials in the Facebook group

Facebook allows users to make an initiating post and to comment on other uploaded posts and material (text, video, audio, document, etc.). Users can upload any type of digital content often combining different types of modes (e.g. texts, videos, YouTube videos, audio files, images, links, office documents, etc.). A total of 32 initiating posts were shared in the Facebook group, and 93.75% (n=30) of them were made by the teacher. The French teacher used various features provided by the platform when uploading the learning material and resources. As Table 4.6 shows, 11 of the 30 (36.6%) initiating posts made by the teacher included an image, 8 (26.6%) of her posts were YouTube videos and 7 (23.3%) were text entries (also see Appendix 9). The images, the YouTube videos and the links shared on the Facebook group were always accompanied by text as a caption of the shared content indicating the teacher's preference for sharing multimodal posts.

Table 4.6: Teacher's posts in the Facebook group

	Number of initiating posts
Images	10
YouTube videos	8
Text Entries	7
Links	4
Facebook videos	1
Total	**30**

43.3% of these initiating posts (n=13) contained tasks that aimed to enhance learners' vocabulary, 20% (n=6) of them were related to the development of students' cultural awareness, while some activities aimed to enhance their writing (n=2), grammar (n=2), listening (n=1) and pronunciation (n=1). The teacher also uploaded some material (n=5) such as comic videos, a French movie, etc. (see Appendix 9).

The four activities presented in the following sections are examples of communicative events and were chosen for qualitative analysis, following the criteria of repetition, responsiveness and reflexivity as described by the framework for the analysis of sharing practices (see Section 3.4.3). The first communicative event (see Section 4.5.1) satisfies the first criterion (i.e. repetition) and offers a typical example of the activities which were repeatedly used by the teacher. The second criterion is responsiveness. Communicative events characterized by "responsiveness" are identified when posts receive a significant number of responses from the networked audience (Androutsopoulos, 2014). However, the total absence of responses in a communicative event can be deemed to be as significant as an abundance of responses. Especially in this study where none of the initiating posts generated a significant number of responses (see Appendix 9), and students demonstrated very low levels of activity in the Facebook group, it is important to also examine communicative events that showcase participants' lack of responsiveness (see Section 4.5.3). The other two communicative events (see Sections 4.5.2 and 4.5.4) satisfy the third criterion (i.e. reflexivity) since they demonstrate participants' self-reflection upon their sharing practices in the online environment. The communicative events dealt with here are presented in chronological order in which they took place.

4.5.1 Example 1: Design of writing tasks, use of images & participants' social presence

The first communicative event presents a typical example of how the teacher used Facebook to distribute writing tasks. The teacher uploaded ten images to Facebook, nine of which were aimed at teaching new vocabulary. This shows the teacher's typical practice in selecting educational content (i.e. images) focusing on specific areas of learning (i.e. vocabulary acquisition). In terms of styling her content, the teacher preferred using multimodal representations of vocabulary, phrases and related images in the target language. Figure 4.1 below, offers a typical example of how the teacher used images as a means of supporting the students in their vocabulary acquisition. Chronologically, this was also the first activity she introduced to the group (11.02.2019, see Appendix 9).

Figure 4.1: Example of a writing task using images

In this communicative event, the teacher used the image-sharing feature of Facebook to broadcast to the group an image retrieved from a blog and containing useful

phrases that refer to medical ailments and symptoms (i.e. headache, toothache, sore throat, etc.) in the target language. The image also contained a visual representation of each symptom, which aimed to reinforce students' vocabulary understanding. The image was accompanied by text as a caption – *"Rappel de la semaine ... et vous, vous allez bien cette semaine?"* (Reminder of the week ... and you, are you well this week?) addressing students directly and prompting them to offer a reply to a question about their own health. All images uploaded to Facebook visually represented vocabulary-related content and were accompanied by a short caption placed on top of the image presenting the content and the questions of the tasks and prompting the students to elaborate on the vocabulary and post their own contributions.

As Gee (2003) argued, language is not the only significant communication system in digital content, since visual symbols and signs are as important as written or spoken language. Lomicka and Lord (2016) also highlighted the growth in popularity of image sharing on social media platforms, and they argued that descriptive language could be developed through the use of these visual elements. In the example above, the image uploaded by the teacher contained a phrase and a syntactic structure (i.e. j'ai mal à) in the target language. At the same time, the image offered a visual representation of the meaning to reinforce students' understanding. In other words, this multimodal source conveyed meaning through a combination of textual and visual elements.

Following the teacher's initial post, Louis and Amélie engaged with the language content presented in this image in different ways and responded differently to this task. Amélie shared her contribution communicating in French that she felt tired, but without using the vocabulary presented in the uploaded image. Instead, she used the image as a prompt and a reminder of relevant phrases and contributed different phrases related to the initial post. Louis also responded to the initial post by sharing a relatively longer text offering a detailed account of his health. He used the lexical frame *"j'ai mal à ..."* (My ... hurts.) presented repeatedly in the uploaded image and added a new item *"la cheville"* (the ankle).

As regards the teacher's contributions in this communicative event, she did not respond directly to Amélie's comment but shared another post giving an account of her own health (see Figure 4.1). In terms of negotiating, then, in this exchange the teacher is seen to claim a role as a participant. In her follow-up post, she used three different ways to

say *"I caught a cold"* probably aiming to inject knowledge by sharing variations of this phrase. Following a different approach, the teacher commented sympathetically on Louis' post, which prompted another contribution by the student. In this case, the teacher facilitated the production of online discourse by opening up additional possibilities for participation in the online environment, and her reply to Louis' post encouraged him to share more, thereby sustaining interaction between the teacher and the learner.

In this communicative event, the two students (i.e. Amélie and Louis) as well as the French teacher shared details of their personal life when describing their health (see Figure 4.1). This was also evident in Louis' second contribution: *"Heureusment, je suis programmeur, donc je m'assios [sic] pres de tout le jour"* (Fortunately, I am a programmer, so I sit down almost all day). Sharing personal information (i.e. self-disclosure) is an indicator of interpersonal communication, and according to CoI contributes to the creation of a positive and supportive climate within the online environment (see Section 4.3). In his first contribution, Louis also used a greeting – "Bonjour à tous et à toutes!" (Hello everyone!) – which serves a purely social function and contributes to the development of cohesive communication within an online environment (Garrison, 2017). In section 4.3, it was seen that the majority of students' contributions were related to social presence. And interview data suggest that all students perceived the Facebook group as a link outside of the classroom, which positively affected their social relationships. Matthieu and Marion expressed their views as follows:

> *"It was just that link outside of the classroom because we only see each other for2 hours on a Tuesday and then when we leave on Tuesday then we won't see each other for a week" (Matthieu)*

> *"It's improved my relationship with them a little bit so I feel like I know a little bit more about them and I feel that some of them are a bit more approachable (…) I think it opened up my class French class before was very much you go to the class you study as a group in the class but then you go in you are on your own" (Marion)*

These two students, Matthieu and Marion, had the lowest participation rates in the Facebook group sharing a total of two and five replies respectively (see Table 4.5: Level of contribution, Section 4.4). However, what these rates might not show is that students could still be part of the group without actively contributing posts. In other words, even though forms of participation might not be visible, the quotes above indicate that both students viewed themselves as part of the online group and felt that it broadened the social relationships within the French class. This suggests that even though these students were

not posting comments in the Facebook group they were passively engaged with the online discussion possibly by reading the teacher's and their peers' contributions.

Marion also stated at interview that she used Facebook Messenger (an instant messaging application provided by Facebook) to converse with Louis about their French language learning. This suggests that the Facebook group provided an opportunity for the learners to become "friends" in the online environment and use additional features provided by the platform. As Marion stated:

> *"One of my French classmates and I from the group now have that Facebook messenger chat going on and we chat everything about what we've done in the class encourage each other to do our homework" (Marion)*

Marion and Louis could have used the Facebook group to communicate with each other, but instead they preferred to use another space within the platform (i.e. Facebook Messenger) that affords one-to-one private communication. These students might have used Messenger because they preferred to chat privately (without being monitored by the teacher and the members of the group) or because of the instant nature of communication it offers. Notwithstanding that these reasons might explain their decision to move to Messenger, the probable interpretation is that due to their habituated and everyday communicative practices they perceived Facebook Messenger as a more appropriate tool to mediate interpersonal relationship building and sustain their motivation to practice French (see Thorne, 2003, 2016).

While most interviewees (n=3) seemed to think that the use of Facebook helped them enhance their relationship with their French tutor, Juliette strongly believed that it is inappropriate to be friends with a teacher:

> *"I think there was also the awareness of not overstepping boundaries because it does mean that Facebook pops up occasionally suggests friends which obviously is inappropriate with a tutor no I think that [student-to-teacher relationships] remained the same but she's got a very warm a friendly way with her to a limit and not beyond that and stayed like that" (Juliette)*

Juliette's perceived boundaries were not formulated during her use of Facebook, but were grounded in her former educational experiences. In other words, these perceived boundaries are related to the power dynamics and hierarchies within a non-virtual educational setting (i.e. a classroom), which led Juliette to construct her own beliefs concerning the relationship between a student and a teacher (see Thorne, 2003). This suggests that students come to online environments with their pre-defined experiences,

views and expectations, which inevitably influence the ways in which they perceive Internet communication tools and shape the way in which they participate and interact in an online environment.

As regards the French tutor's views on the social aspects of using Facebook, she perceived that the use of this platform had a positive impact on the social relationships amongst the members of the group. As she argued, *"we [the members of the Facebook group] became more intimate haha not intimate like going into their private life but we had the use of humour more and you can discover that your students are a bit different"* (French Teacher). According to the teacher, the online platform also helped her to know her students better, while she also stated that some students were more open on Facebook than in the face-to-face lessons. As the teacher points out, one learner changed their attitudes during in-classroom learning as a result of the social relationships established via the use of Facebook:

> *"One of them was more open on Facebook than in class [they] would have been very shy or [they] wouldn't have laughed to joke or [they] wouldn't make jokes but [they] were more open on Facebook" (French Teacher)*

> *"I discovered that [name of student] had a good humour and now [they] brings it into the class but I discovered that through the Facebook group" (French Teacher)*

Overall, this communicative event offered a typical example of how the teacher used images to introduce writing tasks and how the learners responded to these. Moreover, this section looked more closely at students' social presence within the online environment and learners' and their teacher's perceived impact of the Facebook group on their social relationships. The following communicative event examines the teacher's use of text entries, learners' use of external resources and explores participants' self-reflection upon their sharing practices in the online environment (i.e. reflexivity).

4.5.2   Example 2: Teacher's use of text entries and learners' use of external resources

This communicative event was centred on the topic of traditions and celebrations, and particularly the French tradition La Chandeleur (Candlemas), which takes place on the 2nd of February and is the last event of the Christmas celebration cycle. A few days after this celebration (i.e. 20.02.2019), the teacher shared a text entry (see Appendix 9) where she asked the learners to share their knowledge about *"la Chandeleur"*. This activity had an aim to enhance their cultural awareness, engage learners with aspects of French culture and draw attention to what happens in France at a particular time of year. At the same

time, the learners had the opportunity to practice their writing skills while responding to this initiating post.

In terms of styling, the teacher's post is divided into two parts which are separated by punctuation marks (i.e. …) (see Figure 4.2). The first part summarises the discussion of the previous week and presents the topic (*"Last week, I asked you about "other" French traditions…"*) and the second introduces the online task (*"have you heard about "Chandeleur"?"*) prompting the students to share their knowledge about this French tradition (see Figure 4.2).

Figure 4.2: Teacher's use of text entries & learners' use of external resources

In this post, the teacher used only English to share the task. This choice of language was observed in a total of six (out of 30) initiating posts shared by the teacher as a strategy

153

to ensure that the learners comprehend the language task. The end of the teacher's post is marked by a "thinking face" emoji (i.e. 🤔), representing a sceptical or puzzled person in deep thought. In this instance, the emoji was not used to express the teacher's emotional condition, since she obviously knew what *"La Chandeleur"* is, but to prompt her students to think about the task and share their answers. The use of an emoji at the end of a post is a very typical styling choice of Facebook users and in this case also highlights the teacher's orientation to social media writing norms.

A feature of the teacher's sharing practice on this occasion is her use of another Facebook feature, the Background[12] to customise her text entry (see Figure 4.2). This was evident in a total of four (out of seven) instances when the teachers shared text entries in the Facebook group. The teacher in this instance used a background of brightly coloured balloons possibly to evoke the party atmosphere of *"la Chandeleur"* by creating a visually appealing post that would attract the students' attention.

The teacher's initial post received no response in the two days that followed, whereupon she followed-up with an additional comment in support of the initial post to encourage participation. In terms of negotiating, the teacher now used French instead of English and rephrased her initial question as *"Que font les français? Quelle est l'origine?"*.

Louis was the first to respond, by describing "La Chandeleur" and sharing a French saying related to this event. Examining Louis' – *"Je n'ai pas su déja la Chandeleur, mais je vien de lire un peu l'à propos"* (I didn't know about Chandeleur before, but I just read a little about it) – and Amélie's – *"Oui I had to look it up too!"* (Yes I had to look it up too!) posts, it is clear that both students were unfamiliar with this tradition. Nonetheless, the online medium and the asynchronous nature of communication allowed them to carry out research on other sites by using an array of online tools (e.g. online dictionaries and Google Translate), that might not be available in the physical space of a classroom, to answer the teacher's question. Similar evidence is offered by the analysis of the interview data where interviewees stated that they had used other apps to explore online spaces beyond the Facebook group to support their French language learning. This suggests that students were able to adjust to new situations and integrate the online environment into their learning ecology. As the quotes below point out, Marion used a dictionary or Google

---

[12] The Background feature on Facebook allows users to customise text-only posts with various designs and colours.

translate to be able to overcome some language barriers and then do her own research using external spaces. Similarly, Juliette did some research to comprehend the learning material, or the activities uploaded on Facebook, before being able to compose a response.

"My teacher was posting links to a lot of things that I didn't understand and I did go away trying to understand it (…) and I might need to use a dictionary or Google Translate and things (…) It would send me away to do a bit more research" (Marion)

"Something would pop up and say what does this mean or how do you do that so that you could then do a bit of research and respond to it so it's another opportunity to be actually think about the language" (Juliette)

In relation to teacher to student interactions, the teacher first replied to Louis, stating that she was not aware of the saying he had shared and thanked him for his contribution – *"Je ne connaissais pas le dicton, merci pour le partage."* (I didn't know the saying, thanks for sharing.). The teacher followed another approach when replying to Amélie's comment, by doing so in a more intimate way, and prompted the student to respond by posting a direct question – *"Est-ce que vous faites des crèpes aussi? Pour la chandeleur (Candlemass) [sic] ou pourmardi gras (ShroveT.)"* (Do you make pancakes too? For Candlemas or Shrove Tuesday). In terms of styling, the teacher used French and provided in parentheses the translation of the traditions to ensure that Amélie understood her question. As the teacher received no response by Amélie, she followed up by sharing a question mark (?), indicating that she is expecting a response (see Figure 4.2). After the teacher's comment, Amélie shared a brief response – *"pour fat pourmardi"* (For Shrove Tuesday). The teacher replied to this orienting to the reinforcement of interpersonal ties also posing another question for the student to respond – *"Vous nous en ferez pour le cours? 😉 Bon dimanche."* (Will you make us some for the class? 😉 Enjoy your Sunday.). Amélie briefly responded to the teacher's question – *"froid crepes ugh!"* (cold crepes ugh!) – while the teacher used one of Facebook's "reaction" emojis (😆) to convey her acceptance of Amélie's humorous comment.

When replying to Amélie's post, the teacher attempted to open up the discussion by prompting her to share more details. This strategy (i.e. facilitating discourse) led to the production of online discourse (see Section 4.3.2) and resulted in more teacher-to-student interaction. On the other hand, in response to Louis' comment the teacher acknowledged his contribution – *"merci pour le partage"* (thanks for sharing) – but did not prompt him to elaborate on the uploaded content and share more comments. This highlights the

importance of teaching presence within an online environment and shows how different strategies of facilitating discourse (i.e. encouraging and acknowledging learners' contributions, drawing in participants, prompting discussion) influenced the way in which students participated, resulting in different levels of student engagement.

4.5.3 Example 3: Student inactivity & the teacher's efforts to stimulate participation

The third communicative event provides an example of an activity posted by the teacher a day after the one examined above (i.e. 21.02.2021). It received no response from the students. This example demonstrates how the teacher dealt with student inactivity and discusses the strategies she used to try to encourage their participation.

Figure 4.3: Students' inactivity and teacher's strategies to encourage participation

As Figure 4.3 illustrates, the teacher shared a YouTube video (https://youtu.be/KEoSFmj3P6A) related to the use of the perfect tense (i.e. *passé composé*) in French. This initiating post is also accompanied by a text caption placed on top of the image – *"Quand on ne va pas à Rivers pour avoir cours de Français, on peut toujours faire des ré visions ..."* (When you don't go to Rivers [the educational centre] to have French lessons, you can always do some revision ...). This post was uploaded during the half-term break (February 21st) when students do not receive face-to-face tuition in the language centre. Using the text caption, the teacher aimed to encourage her students to revise their use of past tense auxiliaries by watching the video during the half-term break.

In support of the initial post, the teacher shared a comment including a website link. The shared link (https://learningapps.org/547464) leads to a Web 2.0 application, which offers short quizzes asking the students to identify verbs using the auxiliaries "être" (to be) and "avoir" (to have) in compound past tenses. The teacher's comment also included a text entry – *"easy exercice to recap ... excercice [sic] facile pour vérifier vos connaissances."* (easy exercise to recap ... easy exercise to check your knowledge.) – introducing the content of the link (see Figure 4.3).

The teacher chose to share relevant multimodal material (i.e. a YouTube video) aiming to reinforce their understanding of the selected grammatical phenomenon, before introducing the language exercise (i.e. the quiz). Even though she injected knowledge from diverse sources, she did not present the questions of the activity. In other words, and in terms of negotiating, the framing of the activity did not indicate clearly what she was expecting her students to do and how they should respond to this task.

As Figure 4.3 shows, none of the students replied to the teacher's post. Accordingly, after two weeks, and while in the meantime, the teacher posted another six activities in the Facebook group (from 23.02.2019 to 06.03.2019, see Appendix 9), she revisited her post and shared another comment – *"Qui a testé ces exercices?"* (Who tested these exercises?) – directly asking the students with a yes/no question to state whether they had completed the exercise she had introduced. However, this did not induce students to engage with her post. In another attempt to generate engagement, the teacher used the "tag" feature directly calling out learners and prompting them to participate. The "tag" feature provided by Facebook links a user's profile to the post, while the "tagged" user receives a notification about it. This feature allows the sharer to attract the attention of individual participants and potentially to stimulate more engagement. Nonetheless, in this communicative event, the teacher's efforts (i.e. commenting on her initiating post and using the "tag" feature) elicited no participation.

It seems evident that, in revisiting her initial post, the teacher was aiming to stimulate engagement from her students by adding comments to it. The teacher also used follow up questions in another five instances when there was no responsive contribution by the students. To try to encourage learners' participation the teacher also used the "tag" feature. These were two commonly used strategies that the teacher employed in her attempts to stimulate students' engagement in the online environment.

Examining the teacher's final comment in more detail (see Figure 4.3), it can be seen that she "tagged" all students (i.e. Marion, Amélie, Juliette and Matthieu) except for Louis. As mentioned, Louis was the most active participant in the Facebook group, contributing 32.4% (n=24) of the replies to the initiating posts (see Section 4.4). During the interview, the teacher acknowledged the differences among the students in the Facebook group. In addition, referring to teacher-to-student feedback she explained that in some instances she did not provide feedback to learners because she did not want to be unfair to the students who did not actively participate in the online environment. As the teacher said:

"I wanted to praise more some of them but because everyone could see I didn't because I didn't want to be unfair but still I knew there were differences between [name of student] and [name of student] for example so I was more aware with Facebook so because I was more aware I did it less I think." (French Teacher)

In other words, the teacher's effort to ensure balanced participation by the students was evident in the way she was using the "tag" feature to engage the less active members of the group. Even though the teacher sought to ensure balanced participation by using the "tag" feature, this strategy did not seem to have any apparent impact on students' engagement. In a face-to-face environment (i.e. the physical classroom) it is easier for the teacher to achieve a balance of participation (e.g. by posing direct questions to the learners), while in this digital environment it seems easier for the learners to ignore the teacher's prompts and avoid responding.
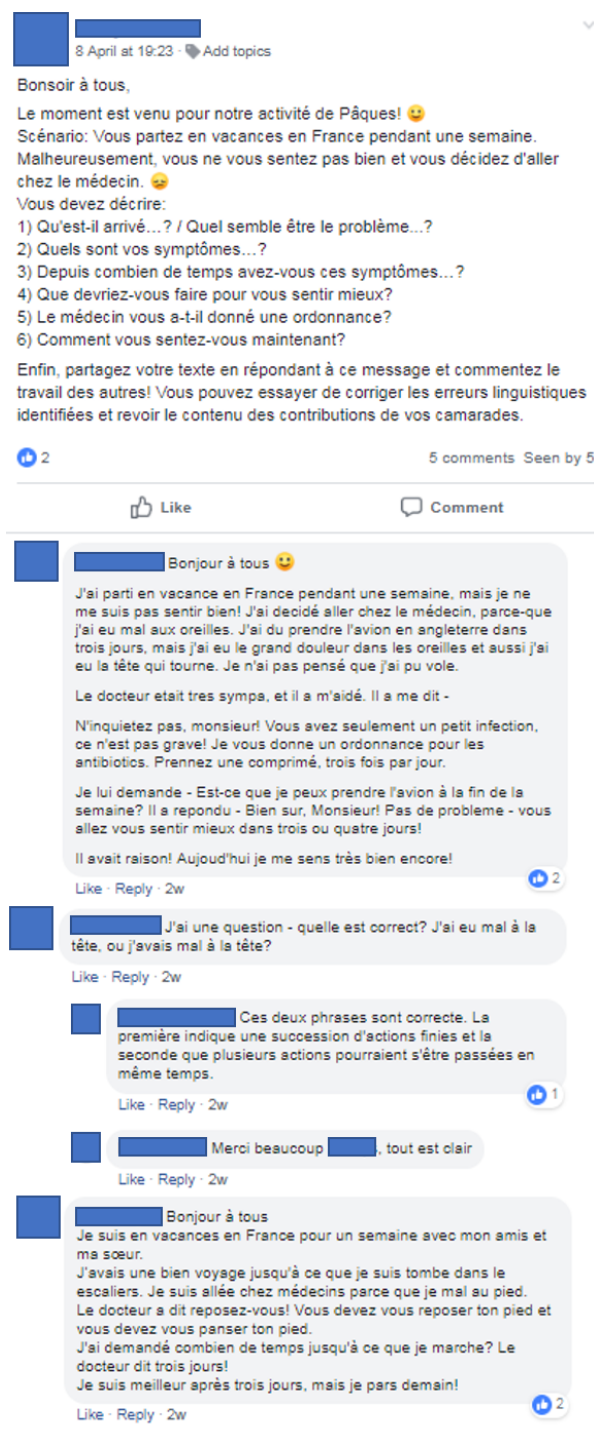
Nonetheless, the lack of a visible contribution in this communicative event does not mean that students failed to engage with the content posted in the group. One participant claimed that *"even if I didn't respond sometimes I would read what was on there and think about it and try to work out what was said"* (Juliette) pointing to passive engagement with the online content. Aligned with Juliette's view are responses to the post-questionnaire which suggest that learners slightly agreed (n=2) or agreed (n=3) with the statement that *"reading corrections and comments on other students' posts"* was useful to them in learning French (see Question 10, Appendix 4).

 Clearly, learners found it useful to read other members' contributions and the teacher's uploaded content even though they left no trace of their participation in the online environment. Most importantly, the fact that some students' participation was not made visible (by sharing posts and comments), does not indicate that they were not engaging with the online discussion nor that they were not learning.

4.5.4   Example 4: The place of feedback & the use of the "like" feature

Two activities posted by the teacher in the Facebook group required students to provide feedback to their peers, but the analysis of the online data reveals no peer-to-peer feedback interactions, nor any comments related to their peers' language use, in any of the posts made by the learners. The following communicative event (see Figure 4.4) offers an illustrative activity in which the students were prompted to provide peer-feedback.

As Figure 4.4 below illustrates, on the 8th of April, the teacher shared an initiating post with the Facebook group introducing a task aimed at encouraging students to practise writing. The task included in this post concerns a scenario where the students visit a doctor in France and are asked to provide answers to a number of questions about their health. As part of this task the students were instructed to provide feedback to their peers – *"Enfin, partagez votre texte en répondant à ce message et commentez le travail des autres! Vous pouvez essayer de corriger les erreurs linguistiques identifiées et revoir le contenu des contributions de vos camarades."* (Finally, share your text by replying to this message and comment on the work of others! You can try to correct the linguistic errors identified and review the content of your peers' contributions.).

Bonsoir à tous,

Le moment est venu pour notre activité de Pâques! 🙂
Scénario: Vous partez en vacances en France pendant une semaine. Malheureusement, vous ne vous sentez pas bien et vous décidez d'aller chez le médecin. 😞
Vous devez décrire:
1) Qu'est-il arrivé...? / Quel semble être le problème...?
2) Quels sont vos symptômes...?
3) Depuis combien de temps avez-vous ces symptômes...?
4) Que devriez-vous faire pour vous sentir mieux?
5) Le médecin vous a-t-il donné une ordonnance?
6) Comment vous sentez-vous maintenant?

Enfin, partagez votre texte en répondant à ce message et commentez le travail des autres! Vous pouvez essayer de corriger les erreurs linguistiques identifiées et revoir le contenu des contributions de vos camarades.

👍 2   5 comments Seen by 5

👍 Like   💬 Comment

Bonjour à tous 🙂

J'ai parti en vacance en France pendant une semaine, mais je ne me suis pas sentir bien! J'ai décidé aller chez le médecin, parce-que j'ai eu mal aux oreilles. J'ai du prendre l'avion en angleterre dans trois jours, mais j'ai eu le grand douleur dans les oreilles et aussi j'ai eu la tête qui tourne. Je n'ai pas pensé que j'ai pu vole.

Le docteur etait tres sympa, et il a m'aidé. Il me dit -

N'inquietez pas, monsieur! Vous avez seulement un petit infection, ce n'est pas grave! Je vous donne un ordonnance pour les antibiotics. Prennez une comprimé, trois fois par jour.

Je lui demande - Est-ce que je peux prendre l'avion à la fin de la semaine? Il a répondu - Bien sur, Monsieur! Pas de probleme - vous allez vous sentir mieux dans trois ou quatre jours!

Il avait raison! Aujoud'hui je me sens très bien encore!

Like · Reply · 2w   👍 2

J'ai une question - quelle est correct? J'ai eu mal à la tête, ou j'avais mal à la tête?

Like · Reply · 2w

Ces deux phrases sont correcte. La première indique une succession d'actions finies et la seconde que plusieurs actions pourraient s'être passées en même temps.

Like · Reply · 2w   👍 1

Merci beaucoup ___, tout est clair

Like · Reply · 2w

Bonjour à tous

Je suis en vacances en France pour un semaine avec mon amis et ma soeur.
J'avais une bien voyage jusqu'à ce que je suis tombe dans le escaliers. Je suis allée chez médecins parce que je mal su pied. Le docteur a dit reposez-vous! Vous devez vous reposer ton pied et vous devez vous panser ton pied.
J'ai demandé combien de temps jusqu'à ce que je marche? Le docteur dit trois jours!
Je suis meilleur après trois jours, mais je pars demain!

Like · Reply · 2w   👍 2

Teacher: Good evening everyone,
The time has come for our Easter activity! (emoji)
Scenario: You go on vacation to France for a week. Unfortunately, you don't feel well and decide to go to the doctor. You must describe:
1) What happened...? / What seems to be the problem...?
2) What are your symptoms...?
3) How long have you had these symptoms...?
4) What should you do to feel better?
5) Did the doctor give you a prescription?
6) How do you feel now?
Finally, share your text by replying to this message and comment on the work of others! You can try to correct the linguistic errors identified and review the content of your peers' contributions.

Louis: Good evening everyone (emoji)
I went on vacation to France for a week, but I didn't feel well! I decided to go to the doctor because my ears hurt. I had to fly to England in three days, but I had great pain in my ears and also felt dizzy. I didn't think I could fly.
The doctor was very nice, and he helped me. He told me – Don't worry, sir! You only have a small infection, it's not severe! I'm giving you a prescription for antibiotics. Take one tablet, three times a day.
I ask him - Can I take a plane at the end of the week? He replied - Of course, sir! No problem - you'll feel better in three or four days!
He was right! Today I feel even better!

Louis: I have a question - what is correct? "J'ai eu mal à la tête", or "j'avais mal à la tête"?

Teacher: These two sentences are correct. The first indicates a succession of finished actions and the second that several actions may have occurred at the same time.

Louis: Thank you very much (name of the teacher), everything is clear
Marion: Good evening everyone
I'm on holiday in France for a week with my friend and my sister.
I had a good trip until I fell down the stairs. I went to the doctors because my foot hurt. The doctor said rest! You have to rest your foot and you have to bandage your foot.
I asked how long until I walk? The doctor says three days!
I'm better after three days, but I'm leaving tomorrow!

Figure 4.4: Going to the doctor activity

Two students, Louis and Marion, shared their contributions responding to the first part of the activity, but did not provide feedback to each other. This was a recurrent pattern in all posts asking students to provide feedback, which clearly suggests their reluctance to do so. This pattern was evident in the data retrieved from the Facebook group, but the online observations could not shed light on the reasons for it. Interview data were used for this purpose and the analysis suggests that the primary reason was that none of the learners felt comfortable about providing peer feedback. Such discomfort seemed to be

161

related to the existing relationships they had as a group (or not), established experiences of providing peer-feedback in-person, as well as their perceived proficiency in French language in relation to others in the group. To explain, Marion perceived the process of providing peer feedback as an uncomfortable experience because *"at that point I didn't know everyone from the classroom very well"* (Marion). Another view expressed by Juliette concerns the differences between providing feedback in a face-to-face context as compared with feedback through Facebook. Specifically, Juliette argued that *"I'd be far more likely to do it face-to-face because I can see the verbal responses the physical responses and I can see if the person receiving that ok [sic]"* (Juliette).

The second reason why the interviewees did not provide peer feedback was related to their French language proficiency. Specifically, two (n=2) learners acknowledged that they did not feel entitled to provide feedback to their peers because they were not proficient enough and *"I wouldn't actually ever correct it, I'd probably be wrong anyway"* (Juliette). These views are also reflected in the following quote:

> *"The peers in my class I feel a lot of them have got a lot more skills than I have so it'd difficult for me to give them feedback "oh that was really good the use of that grammar was excellent" when I don't know what I am talking about" (Amélie)*

All the above views explain why adult learners in this study demonstrated a reluctance to provide feedback to their fellow students.

Even if Louis and Marion did not comment on each other's posts, they both "liked" each other's contributions. Facebook describes "liking" as an *"easy way to let people know that you enjoy it without leaving a comment"* (Facebook, 2022). Louis' and Marion's "likes" might be interpreted as an implicit way of providing feedback, expressing approval of each other's contributions. Online data also suggest that the "like" feature was used by the participants in the Facebook group in a total of 47 instances. The "like" feature was also perceived as an affordance by the teacher who stated at interview that *"because of like Facebook's thumbs up then you know what [the students] want to do or not"* (French Teacher). Nevertheless, this *"easy way"* of interacting with a Facebook post *"without leaving a comment"* seemed to obviate participants' need to interact linguistically. In other words, the use of "likes" offered no support for processes like language production which are central to language learning (see Swain, 1985) and in this communicative event resulted in no peer-to-peer feedback interactions in the target language.

As regards teacher to student feedback, the teacher did not directly comment on the students' responsive contributions, possibly because she was expecting her students to provide peer feedback, and just "liked" the comments posted by both students (see Figure 4.4). Louis then posted a follow-up comment asking a question – *"J'ai une question - quelle est correct? J'ai eu mal à la tête, ou j'avais mal à la tête?"* (I have a question - what is correct? "J'ai eu mal à la tête", or "j'avais mal à la tête"?). The teacher then replied to Louis' query, explaining the differences between the two sentences – *"Ces deux phrases sont correcte. La première indique une succession d'actions finies et la seconde que plusieurs actions pourraient s'être passées en même temps."* (These two sentences are correct. The first indicates a succession of finished actions and the second that several actions may have occurred at the same time.). This was one of only two instances (n=2) in which the teacher provided extensive feedback to her students. But in the Facebook group, she never corrected her learners' linguistic errors. The reasons for this became apparent at interview when she described what she saw as a cultural difference in providing feedback between France and England. She argued that feedback in France is more negative and focuses on students' mistakes without the need to praise the learners' effort. As the teacher stated:

> *"For me feedback in French culture would only be negative but it's a bit caricatural but if you do something as a work and there are mistakes the teacher will spot the mistakes and would say you need to improve this and you need to work on that to improve that but you will not be praised for what you have done right because what you have done right is what is expected end to the question [sic]" (French Teacher)*

On the contrary, the French teacher perceived feedback in the United Kingdom as more positive and emphasised the need to praise students' effort. According to the tutor, in England, teachers tend to praise the students regardless of their mistakes to help them feel stronger and make progress, as she carried on saying in the interview. The following quote represents these points:

> *"Whereas in England you always praise your students if even if they can't and even if they are mistaken you need to state it in a positive way so they would feel stronger to progress so I am aware of that and maybe for my students they don't think oh [name of teacher] is not praising us enough but for me I am feeling like I am praising them a lot more than I should do in France" (French Teacher)*

Whether accurate or not, the teacher's perception, as well as her effort to adapt to what she saw as an English practice, appears to have shaped her feedback strategy. The

interview revealed another aspect of her views on feedback in that she feels uncomfortable giving feedback to less competent students. Specifically, the teacher described the process of providing feedback to them as "awkward" and "weird", while it was easier for her to provide feedback to more proficient students, as illustrated in the quote below. Here she refers to an example of an activity they did as a group in the classroom:

"Sometimes I feel a bit awkward ehm I will talk about Tuesday because it is fresh in my memory ehm each one had to do a presentation and some was obvious they did well so it was easy to provide feedback but when they are not doing well I find it awkward but I feel like I have to and yeah and its weird its very weird" (French Teacher)

The teacher's views on peer feedback online resembled some of her students, and related to their existing experiences of giving and receiving feedback respectively in-classroom, in the sense of being physically co-located in the same setting. Yet more differences between in-classroom and online feedback emerged in the course of our interview. According to the teacher – and illustrated in the quote below – in a classroom setting feedback is more spontaneous, and she provides feedback impulsively to the learners. On the contrary, feedback in Facebook is more premeditated since it is in a written form, and visible to all students. Moreover, as the following quote makes clear, providing feedback through Facebook was "hard" and perceived as a challenge by the teacher. She mentioned that she was more "conscious" while using the Facebook group for providing feedback to the learners since everyone in the group could see her comments. The teacher also mentioned that in some instances she did not "praise" some learners because she did not want to be unfair to the students who did not actively participate in the online environment. As the teacher said:

"If I am in the class I don't think much of what I do I just I am just me I don't really think of what they [students] think ehm but if I do it through Facebook I am more aware of what they think about what I think of them so I think I was more conscious and yes and it was hard because I wanted to praise more some of them but because everyone could see I didn't because I didn't want to be unfair but still I knew there were differences between [name of student] and [name of student] for example so I was more aware with Facebook so because I was more aware I did it less I think." (French Teacher)

In the case of this teacher, the visibility of everyone's comments[13] on the Facebook group inhibited the way she was delivering feedback. In a non-virtual environment (e.g. a

---

[13] Any corrections to individual learners in the Facebook group remain visible to the entire group.

classroom) spoken interactions, such as oral feedback, are impermanent, while written feedback (e.g. on a writing task) is customarily private, whereas on Facebook any interaction remains visible to all. In other words, providing public feedback on Facebook and managing its implications is more problematical than giving individual feedback offline. This suggests a tension between a norm of impermanent and/or private individual feedback and the public and permanent nature of Facebook. The above discussion also underlines a challenge that teachers may face when they are trying, in an online environment, to engage in practices (oral or written individual feedback) that are common in face-to-face language teaching.

Overall, the previous sections provided an analysis of four communicative events to show how the teacher used the Facebook group to distribute learning activities and examined students' engagement (or non-engagement) with these. In the following section these communicative events are further analysed in terms of selecting, styling, and negotiating (see Section 3.4.3).

4.6   Sharing practices: selecting, styling, negotiating

Aiming to offer an in-depth understanding of how Facebook was used in this study, this section provides a synthesis of the main insights that emerged from the analysis of the above communicative events by bringing these together in a more systematic consideration of the three interrelated practices of selecting, styling and negotiating (see Section 3.4.3).

As regards selecting, most of the learning tasks selected by the French teacher aimed to develop students' vocabulary acquisition, grammar and writing competence. The teacher chose to use various multimodal resources afforded by the platform, namely images (see Section 4.5.1), YouTube videos (see Section 4.5.3), text entries (see Sections 4.5.2 and 4.5.4) and links (see Section 4.5.3). These choices highlight the teacher's adaptation to the online environment and the use of its affordances (i.e. sharing multimodal resources), which are not possible (or straightforward) in a traditional in-classroom environment.

When selecting and styling visual artefacts (i.e. images, YouTube videos and links) as the basis for learning tasks, the French teacher accompanied them with textual captions, containing instructions for the activity. When using text entries to initiate activities, she tended instead to choose a visually appealing way of presenting tasks by using colourful backgrounds to engage learners (see Section 4.5.2). As regards the teacher's language

choice, most of the initiating posts (24 out of 30) were introduced in French. However, in some activities (n=6) the teacher used only English to introduce the tasks (see Section 4.5.3). This choice of language can be interpreted as an attempt to ensure that her learners understood the uploaded task and what was expected from them.

Students' styling choices were more limited, since they primarily used text (97.3%) when replying to the activities introduced by the teacher, and only in some instances (20.7%) did they include emojis in their textual contributions. These styling choices can be attributed to the fact that all the uploaded activities required students to share their answers in writing and they were not prompted to share in any other form (e.g. voice messages, videos, images, presentations, etc.).

The third stage of analysis (i.e. negotiating) revolved around audience engagement and examines how participants responded to what was being shared with other users. The communicative events examined above show that learners often used the "like" feature provided by the Facebook platform (see Section 4.5.4). In fact, they "liked" their teacher's and their peers' contributions in a total of 47 instances. The use of "likes" in this study was perceived as an affordance by the teacher who viewed these reactions as a way of evaluating her students' preferences. "Liking" one's comment can also be conceptualised as an implicit way of providing feedback on their uploaded content since these reactions can convey agreement, appreciation or even emotional engagement with the post. However, as pointed out in Section 4.5.4, in this study the use of "likes" which offer an easy way of interacting online does not really promote language production in the online environment.

As regards students' engagement with the uploaded activities, the online data suggest their limited and reactive participation (see Section 4.4). The teacher's choice of activities and her use of various multimodal resources (i.e. selecting) did not have any apparent impact on students' pattern of participation. Even though some students participated in the online discussion, there is no evidence to support that a particular type of task or digital resource (i.e. images, YouTube videos, etc.) stimulated or hindered students' active engagement. In addition, the teacher's styling choices (i.e. use of captions, choice of language and use of backgrounds) even though they aimed to stimulate more engagement, did not visibly affect learners' participation. The activities examined in this study whether aimed at the practice of language forms, or comparative cultural discussion, resulted in no (see Section 4.5.3) or limited (see Sections 4.5.1 and 4.5.2) participation, with

regards to the number of posts and the number of students who contributed to the tasks. Moreover, students' engagement with the selected activities was limited to responding directly to the teacher and only in a few instances (see Section 4.5.4) did learners interact with each other (using "likes") or with the teacher.

Another activity required students to share personal information by reporting on their health (see Section 4.5.1). When replying to this activity, students shared details about their personal life and triggered some teacher to student interactions which emphasised social sharing in the online environment. When interviewed, (as discussed in Section 4.5.1) participants in this study declared that the impact of Facebook on their social relationships had been positive, while the analysis of students' contributions (discussed in section 4.3) revealed that most of these were related to social presence.

The teacher made efforts to stimulate students' engagement by revisiting and adding comments to her initiating post aiming to encourage students' participation (see Section 4.5.2 and 4.5.3). In section 4.5.3, this strategy was not seen to elicit a response. On the other hand, in the second communicative event (see Section 4.5.2), after the teacher's follow-up comment, Louis and Amélie shared their contributions to the uploaded task. In addition, the teacher's replies to Amélie's comments (see Section 4.5.2) facilitated the production of online interaction by prompting the student to share more. This was also evident in the interaction between the teacher and Louis in the first communicative event (see Section 4.5.1).

In another attempt to stimulate learners' engagement, the teacher used the "tag" feature and explicitly prompted them to share their contributions (see Section 4.5.2). By "tagging" only the less active learners the teacher also aimed to maintain a balance with respect to students' participation and to encourage them to engage with the uploaded activities. Nevertheless, this strategy failed to produce widespread engagement, nor did it ensure balanced participation amongst learners in the Facebook group.

As regards the place of feedback in the Facebook group, online data revealed no peer-to-peer feedback interactions, nor any comments related to the learners' language use. The reasons that emerged from the interviews (see Section 4.5.4) included learners' discomfort to provide peer feedback and their language proficiency (i.e. learners felt that they were not entitled to provide peer feedback because they were not proficient enough). As a result, the teacher's styling choices, which involved explicit requests to student to "correct" their peers' errors, seemed to discourage learners from providing peer feedback,

instead of encouraging them to do so. Moreover, the communicative events presented above revealed that the French teacher was also reluctant to provide feedback to her learners. Especially in terms of error correction, the teacher's feedback was non-existent. The reasons for her online practices emerged from the interview data. The factors involved in teacher's reluctance to give feedback were related to the nature of the platform since her comments were visible to all group members. Other personal and idiosyncratic factors inhibited the way she was delivering feedback and concerned her perceived effort to approach feedback as practice to be contextualised in a UK setting (see Section 4.5.4) as well as to keep feedback balanced amongst the students.

Regarding the affordances of the platform, the communicative events examined in this study show that the online nature of the platform enabled participants to access it at will (also evident at interview, see Section 4.2). The communicative events examined in Sections 4.5.1 and 4.5.4 show that the members of the Facebook group were able to reply to the activities posted by teacher within a day. This suggests that Facebook can afford synchronous (or near synchronous) communication. On the other hand, in the communicative event presented in Section 4.5.2 the teacher revisited her post after two weeks aiming to stimulate students' participation by adding comments and using the tag feature. Such observations show that the online platform can also enable asynchronous communication.

What is more, the archived nature of Facebook seemed to have enabled some non-contributing students (see Section 4.5.2) to read other participants' contributions even though they did not actively participate in the online environment. Students' passive engagement was also evident in Matthieu and Marion's views on the positive impact of Facebook on the development of their social relationships even though they rarely shared posts in the online environment (see Section 4.5.2). Students' passive engagement is associated with the concept of vicarious learning which is defined as *"learning through observing others in the act of learning"* (Mayes, 2015, p.361). In this study, some students perceived this form of learning as beneficial for their language development, which suggests that students who don not visibly participate in an online environment might nonetheless benefit from reading their peers' or the teacher's output (see Cox et al., 1999).

168

4.7   Summary of Case Study 1

This case study examined the use of Facebook by a group of adult learners and their teacher in an adult education centre in the UK. The discussion above dealt with students' perception of using Facebook. Based on the post-questionnaires and the interview data, learners in this study expressed positive attitudes towards their use of the platform and perceived that the Facebook group expanded the limited in-class time, provided a prompt between the discontinuous in-classroom lessons, and enabled them to be more exposed to the French language.

The quantitative analysis of participants' online contributions (see Section 4.4) suggests that students' participation was limited and reactive. In addition, a strong teaching presence was evident in the analysis of the online contributions using the CoI framework. The teacher also had a central role in initiating, coordinating, and participating in the online interaction, since she was the most frequent instigator of interaction and the most active participant with respect to the number of initiating posts and replies she shared (see Section 4.4). The reasons for the above participation patterns emerged from the post-questionnaire and the interview data. Firstly, based on the post-questionnaire responses, some learners' contributions were limited due to the small amount of free time they had available for their language. Interview data also reveal that students perceived that only the teacher had the authority to initiate conversation in the Facebook group, while their lack of confidence in posting messages in French as well as their limited levels of L2 proficiency also inhibited their engagement in the online environment. These findings reveal a mismatch between learners' perceptions of the potential of the platform and their actual engagement in the Facebook group. Even though the post-questionnaire responses and the interview data suggest that participants perceived Facebook as an easy and immediate way of interacting online (see Section 4.2), the quantitative analysis of students' online contributions to the Facebook group (see Section 4.4), their limited cognitive presence (see Section 4.3) as well as the communicative events examined in this study (see Section 4.5) emphasise their limited and reactive participation, which heavily depended on the teacher's efforts to initiate discussion in the online environment.

The analysis of the communicative events in Section 4.5 revealed how the teacher and the learners mobilised specific affordances provided by Facebook. First, the analysis showed that Facebook can enable both synchronous (or near synchronous) and asynchronous communication (see Section 4.5). This shows that users were able to

communicate without any temporal constraints through their use of Facebook, which could not be achieved in a face-to-face learning environment. Second, the Facebook group allowed learners to carry out their own research in other virtual spaces by using various digital tools (e.g. online dictionaries and Google Translate) that are not available (or as easily accessible) in the physical space of a classroom. Third, due to its archived nature, Facebook can offer opportunities for engaging vicariously (Mayes, 2015). This highlights the potential of indirect participation within the Facebook group and shows that even though some students did not visibly contribute to the online discussions they had the chance to enhance their French by reading other participants' output in the target language.

In relation to the teacher's online contributions, the analysis suggests that all three categories of teaching presence (i.e. instructional design and organisation, facilitating discourse and direct instruction) were evident in the Facebook group (see Section 4.3). As regards the learning activities posted by the teacher, the analysis showed that she used a variety of externally sourced visual material (i.e. images) and digital content (i.e. YouTube videos and links). The teacher also styled her uploaded activities with captions to accompany the uploaded digital content (i.e. images, YouTube videos and links) and introduce task instructions. Other "styling" choices involved the use of French and in some instances (n=6) English when introducing the activities, while in fewer instances (n=4) she used "Backgrounds" (see Section 4.5.3) and on two occasions she also used emojis. Nevertheless, none of the above "styling" choices had any apparent impact on students' participation nor did they result in any substantial engagement with the online environment.

The teacher also used specific affordances of Facebook to try to stimulate learners' engagement and encourage equal participation amongst the participants of the group. Specifically, she used the "tag" feature to prompt less active learners to share their contributions. She also tried to encourage students to participate by revisiting and adding comments to her initial posts. However, neither of the above strategies ensured balanced participation amongst learners in the Facebook group nor were they successful in encouraging students' engagement.

As regards the online interactions, the analysis of the online data suggests that students' contributions were limited to providing their answers to the uploaded tasks and in some instances, they interacted with the teacher (see Sections 4.5.1, 4.5.3 and 4.5.4). In

addition, in the communicative events examined above, peer-to-peer interactions were limited to "liking" each other's contributions (see Section 4.5.4), while – judging by the online data - learners demonstrated a reluctance to engage in peer-to-peer feedback interactions. However, one activity that prompted students to share personal information (see Section 4.5.1) generated some teacher-to-student interactions which also highlight the ease of social sharing in the Facebook group (also evident in Section 4.3). These acts of sharing enabled them *"to project themselves socially and emotionally, as 'real' people (i.e., their full personality), through the medium of communication being used"* (Garrison et al., 1999, p. 94). In other words, participants' acts of sharing personal information (see Section 4.5.1) as well as their use of emojis and "likes" (see Sections 4.5.3 and 4.5.4) contributed to the development of interpersonal communication. Interview data (discussed in Section 4.5.1) also suggest that participants in this study perceived that the Facebook group strengthened their social relationships.

Summing up, this case study explored the use of Facebook by a group of French language learners and their teachers and examined their participation, engagement, sharing practices and interaction in the online environment. In addition, it offered insights into how Facebook was used in the ACL context and how adult learners and their teacher used this digital tool for language learning and teaching purposes. The analysis showed that students' participation was limited to responding to tasks posted by the teacher and a few unsolicited exchanges with each other. Moreover, the lack of peer-to-peer interactions in the Facebook group emphasises that the use of this social media platform does not ensure language learning interaction. Notwithstanding that there is a scope for using social media platforms to supplement adult language learning, the use of these platforms needs to be organised around more student-centred and creative pedagogies which should aim to stimulate learners' active participation and communicative interaction. To further investigate the efficacy of social media in the context of adult language learning and look at another group of language learners and a different platform, the following chapter focuses on the use of WhatsApp by a group of learners of German.

5   Case Study 2: Adult learners' use of WhatsApp for language learning purposes[14]

The previous chapter dealt with the use of Facebook by a group of adult learners of French and their teacher. The case study presented in this chapter explores the use of WhatsApp by a group of adult learners of German language and their teacher in an adult education centre in the UK (also see Vogiatzis et al., 2022).

This chapter examines how WhatsApp was used to support language learning and what affordances and limitations are associated with its use in this context. The chapter is following a similar structure to the previous chapter, as follows. Section 5.1 introduces participants' demographic characteristics as well as their background information and discusses the findings derived from the pre-questionnaire. Based on the findings of the post-questionnaire and the interview data, Section 5.2 examines participants' perceptions of their former use of WhatsApp to supplement their language learning. Section 5.3 presents insights from the analysis of participants' online activity using the Community of Inquiry (CoI) framework. Following this, Section 5.4 provides a quantitative analysis of participants' online contributions and explores the extent to which the learners and the teacher participated in the WhatsApp group. Section 5.5 provides an overview of the activities uploaded by the teacher and examines four communicative events to demonstrate how the teacher used the messaging app to implement language learning activities as well as how the students participated in the online environment to provide answers to these activities. Section 5.6 offers an analysis of participants' sharing practices in WhatsApp in terms of "selecting", "styling" and "negotiating" (see Section 3.4.3), and Section 5.7 discusses the main findings of this case study.

5.1   Participants' background

Participants in this study were eight L1 speakers of English who were learning German as a foreign language, attending one of the weekly German courses at intermediate level. A full description of the educational centre as well as the recruitment procedures that were followed in this study can be found in section 3.3. All learners were

---

[14] As noted on page iv, some parts of Chapter 5 have been edited and published as the book chapter: Vogiatzis, D., Charitonos, K., Giaxoglou, K., & Lewis, T. (2022). Can WhatsApp facilitate interaction? A case study of adult language learning. In Open World Learning (pp. 44–62). Routledge. https://doi.org/10.4324/9781003177098-5

adults and fell into several age categories, with three (n=3) of them being from 60 to 69 years old, while two (n=2) were in each of the age ranges 40 to 49 and 50 to 59 respectively, and one participant was over 70 years old.

5.1.1 Participants' profiles

The pre-questionnaire was used to identify participants' prior experience and interest in using social media for non-educational purposes (see Section 3.4.1). The findings indicate that all participants were using WhatsApp in their everyday life (see Questions 15 & 16, Appendix 3), while most of them (n=6) had had a WhatsApp account for more than four years and the rest (n=2) had been using the app for 3 to 4 years. Moreover, half of the students stated that they accessed WhatsApp more than twice per day, three of them once a day and one learner five to six times per week. These reports suggest participants' familiarity with WhatsApp, a reflection of its popularity at the time of writing. Therefore, any failure to use this platform for language learning cannot by attributed to learners' lack of familiarity with this digital tool. However, the questionnaire responses revealed that none of them had previously used WhatsApp to communicate with their language learning peers or for educational purposes. Even though students were familiar with using WhatsApp in everyday life, their lack of experience in using the platform for language learning might entail that they would need more support or guidance for extending their knowledge of everyday social media to the language learning context.

5.1.2 Students' expectations

The pre-questionnaire aimed to identify learners' attitudes towards the enhancement of their language skills (see Question 19, Appendix 3). Results indicate that all students (n=8) were willing to use WhatsApp to enhance their grammar, their reading and writing skills as well as their vocabulary knowledge but not their speaking skills. Considering that WhatsApp is mainly used as a text-messaging service, even though it also has features that allow users to share multimodal resources (e.g. images and voice messages), such responses are not surprising. In addition, students did not appreciate the potential of WhatsApp for the enhancement of their speaking skills possibly because they prefer using the app for written, rather than audio messages in their everyday use of this instant messaging app.

Questions about the main challenges that students reported facing during in-classroom learning were also included in the questionnaire (see Question 12, Appendix 3).

Three learners referred to grammar as the most challenging element of their German language learning while half the students (n=4) stated that they found it difficult to remember the language between the lessons and one pointed out the insufficient number of in-classroom lessons. Such findings are not surprising. Similar to the French group in Case study 1 this group attends only 30 lessons a year (2 hours a week). Learners are exposed to the target language only intermittently and the long breaks between the terms seem to make it difficult for them to recall and assimilate knowledge. WhatsApp use in this study aimed to address the challenges reported above by extending the limited class time and providing an informal online environment for language learning which could extend student-to-student and tutor-to-student interactions.

Finally, students were asked to consider the challenges that they might face while using WhatsApp for language learning (see Question 14, Appendix 3). Of five responses received, challenges included having only a limited time to read the posts and contribute online (n=3) and understanding messages in German and having the confidence to reply (n=1). Another anticipated challenge concerned the possibility that dominant members of the group might prevent others from participating in the online conversation. These responses point at learners' general awareness of WhatsApp sharing affordances as well as the potential challenges based on their personal experience of using the platform for their everyday interactions as well as their experiences in face-to-face language learning contexts.

The discussion so far has focused on students' demographic characteristics, their prior experience of using WhatsApp as well as their expected use of the tool for language learning. Following the completion of the project a post-questionnaire (see Appendix 4) was administered and semi-structured interviews (n=6) were conducted to examine how participants perceived using WhatsApp for language learning. The results derived from the post-questionnaire and the interview data are presented in the following section.

5.2   Students' perceptions of using WhatsApp

The post-questionnaire included a 6-point Likert scale (1=Strongly Disagree, 6=Strongly Agree) question to identify students' perceptions towards their use of the WhatsApp group (see Question 7, Appendix 4). Participants strongly agreed (n=3), agreed (n=3) or slightly agreed (n=2) with the statement that overall, the use of WhatsApp had been beneficial to them. Similarly, interview data emphasised students' positive attitudes

towards their use of WhatsApp, which was described as *"an interesting thing to participate in and yeah that was quite good fun"* (Otto) or as another student noted:

> *"Well it was a good thing to have done and it's stimulated interest and yeah I was glad I had it on an offer it'd be useful to have it in the future courses"* (Emma)

Another Likert scale question (see Question 10, Appendix 4) examined if sharing learning material had been helpful for their language learning. All students agreed (n=6) or strongly agreed (n=2) that it had. In addition, learners strongly agreed (n=2), agreed (n=5) or slightly agreed (n=1) with the statement that posting activities and resources had been beneficial for their language learning process.

Based on the interview data, it seems that the use of WhatsApp prolonged the limited in-class time by offering the learners continued exposure to the target language between the weekly classes. All interviewees (n= 5) stated that the WhatsApp group was *"a very good prompt to keep German in mind (…) [and] it encourages you [them] to keep thinking and doing some German between classes"* (Louisa). The ability of WhatsApp to offer engagement with the target language in between the formal lessons was highlighted by another interviewee as following:

> *"It [WhatsApp] does give you the incentive (…) it pushes you a little bit further (…) so it [WhatsApp] forces me to do a little bit more than I'd probably would"* (Jürgen)

In a similar vein, students perceived the WhatsApp group as a useful tool *"supplementary to the main course [which offered] the opportunity for [them] to write German (…) and the sense of involvement and participation was motivating"* (Emma).

As regards students' perceptions of the enhancement of their language skills, participants stated that the WhatsApp group helped them strengthen key areas of language learning (see Question 12, Appendix 4). Specifically, students reported that they felt they had improved their writing and reading skills, their grammar as well as their vocabulary knowledge. Participants reported little impact of the use of WhatsApp on their speaking or listening skills. Such responses about listening and speaking skills need to be understood in the context of the use of WhatsApp in this group, where students were not prompted to share any voice messages, and the activities posted by the teacher on WhatsApp did not target students' speaking or listening skills.

Interview data reveal similar responses suggesting that students perceived the use of WhatsApp as beneficial for the development of their language skills. All participants

stated that the use of WhatsApp helped them enhance their vocabulary knowledge as well as their writing and reading skills by practising the language and translating from English to German in the context of teacher-led activities. The following quotes demonstrate these points:

> *"I would say it helped me practice writing in German (…) so that was an addition beyond the course"* (Emma)

> *"It also helped in learning more vocabulary (…) yeah more vocabulary because I had to translate whatever someone had written"* (Helmuth)

> *"Translating really just you know you post a question and then you got to research and you might research it in English but then of course you need to translate back and (…) you are learning when you are doing that you know enhancing the language"* (Otto)

Regarding the use of the platform, learners did not report facing any technical issues when using WhatsApp (Appendix 4, Question 7; participants strongly disagreed (n=6) or disagreed (n=2) with the statement that they met some technological problems). They also strongly agreed (n=2) or agreed (n=6) with the statement that they could easily retrieve information from the WhatsApp group. These responses suggest that learners could easily navigate in the online environment without facing any technological issues.

Interview data point to some benefits of using the platform. The first was that interviewees argued that they could access the application without any temporal or spatial constraints. These views are articulated in the following quote:

> *"This is something you can do it on your own time your own pace where you like so that's very flexible (…) you can do when you are away from home as well so you know WhatsApp is something you carry with you so then because I was on holidays for at least some of the earlier tasks"* (Emma)

Such advantages, although not specific to WhatsApp, are inherently associated with the affordances of mobile learning (see Kukulska-Hulme, 2009; Kukulska-Hulme & Shield, 2008; Stockwell, 2007, 2008).

The second affordance that learners noted was that WhatsApp made it easier to interact with one another due to group members' familiarity with each other and the communication features provided by the platform. WhatsApp seemed to generate interaction amongst the group members because *"you have a group that you know each other so it's just like easy to interact"* (Helmuth). As Louisa stated:

"So it brings some new dimension to the German group because (…) you have more engagement with them so I can see [name of a student]'s response there oh I can see [name of a student]'s there and yeah there is more interaction" (Louisa)

Despite what was reported in the interviews, as regards students' engagement in the online environment the results derived from the post-questionnaire indicate that views were divided in terms of how comfortable students felt posting to the group. Specifically, half the learners (n=4) disagreed with the statement *"I felt comfortable posting to the WhatsApp group"*, while the other half of them (n=4) agreed with that statement. Other responses emphasising the divergent perceptions amongst the members of the group concern collaboration. More specifically, half of the students disagreed (n=3) or strongly disagreed (n=1) with the statement that *"collaborating with other peers was helpful"* to them in learning German, while the other half (n=4) agreed with the same statement.

To sum up, the evidence presented above suggests that participants viewed the use of WhatsApp for their German language learning positively. Based on the interview data, the WhatsApp group was perceived as a prompt which expanded the limited in-class time and enabled learners to become more exposed to the target language. Moreover, the results derived from the post-questionnaires and the interviews suggest that learners found that the WhatsApp group enabled them to practise their writing and reading skills, and their grammar as well as to acquire new vocabulary. However, as regards students' engagement and their online interactions, the evidence discussed above suggests a possible mismatch. On the one hand, adult learners suggested that the use of WhatsApp facilitated student-to-student interaction. On the other hand, data from the post-questionnaire revealed that some students' (n=4) confidence in posting to the group was low, whilst their views about collaboration with their peers were divided. Similar to Case 1 involving the use of Facebook, this contradictory evidence needs to be further investigated.

Even though self-report data can offer valuable factual, behavioural and attitudinal insights, at the same time, these data mostly rely on individuals' subjective evaluations and reports of their thoughts, feelings, behaviours, or experiences (Dörnyei & Taguchi, 2010; Salkind, 2007; Wagner, 2015). As a result, it was deemed important to also explore the learners' and their teacher's visible participation in the online environment. As in Case Study 1, the CoI framework, which is a widely adopted model of effective e-learning (see Garrison, 2011, 2017) was used to examine the interaction in the online environment. The online data were analysed based on the CoI indicators (Garrison, 2011, 2017) and participants' online activities were examined in terms of social, cognitive, and teaching

presence as described by the CoI framework (see Garrison & Anderson, 2003; Garrison & Arbaugh, 2007).

5.3 Participants' social, teaching, and cognitive contributions

The CoI framework conceptualises learning as the interaction of three interconnected elements within an online environment. These elements are social, teaching and cognitive presence (see Garrison, 2017; Garrison et al., 2010; Garrison & Akyol, 2013; Garrison & Anderson, 2003; Garrison & Cleveland-Innes, 2005). Social presence focuses on the projection of participants' personal characteristics within the online community. Cognitive presence refers to participants' ability to construct meaning and develop higher-order thinking. Finally, teaching presence involves the design, organisation, and facilitation of the learning process.

The CoI framework can enable us to scrutinise the complexities of online interaction by examining how learning takes place in an online community through the development of the three interdependent elements (i.e. social, cognitive and teaching presences). This widely adopted framework was used in this study to explore participants' online activity by studying the online discussions in the WhatsApp group. All learners' and the teacher's messages (n=243) were subject to content analysis and were coded using the established indicators of the CoI elements (also see Section 3.4.2). The following sections discuss the indicators of social, cognitive and teaching presence that were present (or absent) as evidenced in the analysis of the WhatsApp group discussions alongside illustrative examples[15] that shed light on this discussion.

5.3.1 Social Presence

According to CoI, social presence involves participants' ability to project their individual personalities aiming to identify and communicate with the community and develop interpersonal relationships (Garrison, 2017).

As Table 5.1 below shows, social presence manifests itself in three ways – interpersonal and affective communication, open communication, and expressions of group cohesion (Garrison, 2017). The analysis of the learners' and the teacher's messages shows that indicators of interpersonal communication were present in a total of 48 instances (see Table 5.1). Participants' messages involved the expression of emotion (i.e.

---

[15] It is to be noted that these examples reproduce participants' comments *verbatim*, without correcting or commenting on any errors.

affective expression) in five instances, information about their personal lives (i.e. self-disclosure) (n=25) and humour (n=18).

Table 5.1: Social presence categories, indicators and examples

	N	Examples from the WhatsApp group
Interpersonal Communication	**48**	
Affective expression	5	*"Bin ich nur der einzige Überlebender? 🙁"* (Am I the only survivor? 🙁)
Self-disclosure	25	*"Unser neuer Enkel, [name], wurde vor einer Woche geboren. 😊 Ich bin letzten Samstag zu einem Besuch gefahren."* (Our new grandson, [name], was born a week ago. 😊 I went to visit last Saturday)
Use of humour	18	*"Du kannst deinen Enkel Deutsch lehren, oder? 😊"* (You can teach your grandson German, right? 😊)
Open Communication	**207**	
Continuing a thread	93	Software dependent
Quoting from others' messages	-	
Referring explicitly to others' messages	73	*"Sehr nûtzlich Otto! Danke schön! 🙂"* (Very useful Otto! Thank you very much! 🙂)
Asking Questions	12	*"Could someone remind me what the homework is for tonight, please?"*
Complimenting, expressing appreciation	21	*"🤣 Sehr witzig! Ein hervorragender Dialog."* (🤣 Very funny! An excellent dialogue.)
Expressing agreement	8	*"Otto, genau, ich konnte nicht den deutschen Namen errinern! "* (Otto, exactly, I couldn't remember the German name!)
Cohesive Communication	**56**	
Vocatives	39	*"Hallo Nicole, ich habe zwei tolle Sätze für dich gefunden."* (Hello Nicole, I found two great sentences for you.)
Group reference	2	*"Das ist meine erste Nachricht In unserer WhatsApp Gruppe"* (This is my first message in our WhatsApp group)
Phatics / Salutations	15	*"Hallo alle. Ich hoffe, es geht Euch gut."* (Hello all. I hope you are well!)
Total	**311**	

Open communication, which constitutes the second category of social presence, comprised a clear majority of participants' contributions since its indicators were identified in 207 instances (see Table 5.1). Members of the WhatsApp group continued a thread by

replying to an initiating post (n=93) and referred explicitly to others' messages (n=73). They also complimented others on their contributions (n=21), asked questions (n=12) and expressed agreement with others (or with the content of others' messages) (n=8). According to CoI, the strong presence of this category indicates that members of the WhatsApp group created and maintained a climate of trust and acceptance (see Garrison, 2017).

The third category – cohesive communication – has a key role in establishing social presence in an online community (Garrison, 2017). Cohesive responses such as addressing others by name (i.e. vocatives) were identified in 39 messages in the WhatsApp group (see Table 5.1). Phatic communication was also identified in 15 instances, while only in two messages did participants use inclusive pronouns, such as 'we' or 'us' to refer to the group. According to the CoI framework (see Garrison, 2017), the limited presence of this indicator suggests that the learners and the teacher used cohesive behaviours such as vocatives and greetings, but did not take group cohesion to the next level by making group references.

5.3.2 Teaching Presence

Teaching presence refers to *"the design, facilitation, and direction of cognitive and social processes for the purpose of realizing personally meaningful and educationally worthwhile learning outcomes"* (Anderson et al., 2001, p. 5). As Table 5.2 shows, teaching presence is built on the processes of instructional design and organization, facilitating discourse and direct instruction.

Instructional design and organisation refer to the teacher's decisions about the structure of the course and the learning process. As Table 5.2 illustrates, the most commonly used indicator within this category was "setting curriculum" (n=17). The presence of this indicator is to be expected since the teacher posted messages in the WhatsApp group to introduce language activities to the members of the group. Other indicators such as establishing netiquette (n=5), time parameters (n=2) and designing methods (n=4) were less frequently identified in the teacher's contributions, while the rest (i.e. using medium effectively and making macro-level comments) were barely evident at all. This suggests that the teacher mainly used WhatsApp to introduce language tasks (i.e. setting curriculum) and only rarely did his messages focus on "designing methods", the rules or guidelines for students' participation in the online environment (i.e. time parameters and netiquette).

Table 5.2: Teaching presence categories, indicators and examples

	N	Examples from the WhatsApp group
Instructional Design & Organization	**28**	
Setting curriculum	17	*"Wort des Tages: die Errungenschaft(en) = achievement. Kann jemand einen Satz bilden?* 😊 *"* (Word of the day: achievement(s) = achievement. Can anyone make a sentence? 😊)
Designing methods	4	*"I'd like others in the group to comment on your sentences and / or correct them. Then I'll give feedback too."*
Establishing time parameters	2	*"A fun activity for the next two weeks…"*
Utilizing medium effectively	-	
Establishing netiquette	5	*"In two sentences say what you did over the Easter weekend in German (…) Two sentences only please.* 🙂 *"*
Making macro-level comments	-	
Facilitating Discourse	**46**	
Identifying areas of agreement/disagreement	-	
Seeking to reach consensus/understanding	1	*"Aber für diese Aufgabe habe ich zwei kurze Sätze gemeint, weil es nicht möglich ist, so viel zu korrigieren. Das hätte ich betonen sollen!* 🙂 *"* (But for this assignment I meant two short sentences because it is not possible to correct that much. I should have emphasized that! 🙂)
Encouraging, acknowledging learners' contributions	30	*"Vielen Dank alle für die vielen Botschaften."* (Thank you all for the many messages.)
Setting climate for learning	4	*"Let's try to have everybody taking part. All contributions welcome!* 🙂 *"*
Drawing in participants, prompting discussion	8	*"Möchte jemand eine andere Stadt beschreiben?* 😊 *"* (Would anyone like to describe another city? 😊)
Assess the efficacy of the process	3	*"Keiner hat bisher richtig geantwortet…!* 🙁 *"* (No one has answered correctly so far…! 🙁)
Direct Instruction	**64**	
Present content/questions	13	*"Hier ein kurzes Video, das zeigt, wie man die Tastatur des Handys auf deutsch umstellen kann.* 🙂 *"* (Here is a short video that shows how to change the keyboard of the mobile phone to German 🙂)
Focus the discussion on specific issues	-	
Summarise the discussion	-	
Confirm understanding through assessment & feedback	42	*"Aber 'bewältigen' ist transitiv, deshalb braucht man nicht 'mit'.* 🙂 *"* (But 'bewältigen' is transitive, so you don't need 'mit''. 🙂)
Diagnose misconceptions	2	*"Deswegen habe ich vorgeschlagen, dass ihr Kapitel 9 nochmal durchlest und Vokabeln lernt. Was Emma gegeben hat, ist für April."* (That's why I suggested you read chapter 9 again and learn vocabulary. What Emma gave is for April.)
Inject knowledge from diverse sources	7	Teacher's use of YouTube videos & links
Responding to technical concerns	-	
Total	**138**	

The second category – facilitating discourse – enables and encourages the construction of meaning as well as shaping and confirming mutual understanding within an online community. The analysis of the online data suggests that the teacher's contributions

related to this category mainly focused on encouraging and acknowledging learners' contributions (n=30). The teacher also aimed to engage participants and prompt discussion (n=8), set a climate for learning (n=4), assessed the efficacy of the process (n=3) and in one instance sought to reach consensus.

As Table 5.2 shows, the most frequent contributions related to teaching presence were associated with direct instruction. This third category of teaching presence involves the guidance related to providing subject knowledge and feedback, diagnosing misconceptions, injecting knowledge or summarising the discussion. The most commonly used indicator within this category was "confirm understanding through assessment and feedback" (n=42). The teacher also presented content and questions to the members of the group (n=13), shared diverse sources of information with the WhatsApp group (n=7) (i.e. injecting knowledge), and in two instances diagnosed misconceptions in the online environment. The other three indicators in this category (i.e. "focus the discussion on specific issues", "summarise the discussion" and "responding to technical concerns") were not present in the WhatsApp group. The absence of the "responding to technical concerns" indicator can be attributed to learners' familiarity with the medium (see Section 5.1). Overall, the analysis of the online data suggests a strong teaching presence (n=138) and shows that all three categories of teaching presence were evident in the WhatsApp group.

5.3.3 Cognitive presence

The third element of the CoI framework – cognitive presence – involves the extent to which learners are able to construct and confirm meaning through sustained reflection and discourse (Garrison, 2017). Cognitive presence is operationalised through four phases – a "triggering event", "exploration", "integration" and "resolution" (see Garrison, 2017; Garrison et al., 2001; Garrison & Cleveland-Innes, 2005) (see Section 2.4.3).

The first phase – a triggering event – is associated with conceptualising a problem or issue. The two indicators in this phase – recognise problem (n=3) and puzzlement (n=7) – were present in the WhatsApp group, albeit with limited frequency.

Table 5.3: Cognitive presence categories, indicators and examples

	N	Examples from the WhatsApp group
Triggering event	10	

Recognize problem	3	*"Sie hat man schon vorgeschlagt – [name of the teacher] hat 'nein' gesagt."* (It has already been suggested - [name of the teacher] said no'.)
Puzzlement	7	*"🤔 Vielleicht...? Die neue Regulierung wird auf alle Bürger zutreffen."* (🤔 Maybe ...? The new regulation will apply to all citizens.)
Exploration	**63**	
Divergence	2	*"Aber, was wirklich unglaublich ist, ist das solchen einen rechtsgerichteten ‚Brexiteer' kann Deutsch so gut sprechen."* (But, what is really incredible is that such a right-wing 'Brexiteer' can speak German so well.)
Information exchange	38	*"Ich habe gerade Informationen zu diesem kostenlosen Open University-Online-Kurs erhalten. 😊 - just in time for half term. 😉 "* (I have just received information about this free Open University online course. 😊 - just in time for half term. 😉)
Suggestions	11	*"Könnte sie Köln sein?"* (Could it be Cologne?)
Brainstorming	6	*"Wie peinlich 🙂. Alle Substantiven, die eine -ion Endung haben, sind weiblich. Das weiß ich schon ganz genau. Kommt an Schreiben ohne Voraussicht."* (How embarrassing 🙂. All nouns that have an -ion ending are feminine. I already know that for sure. Comes to writing without forethought.)
Intuitive leaps	6	*"Ich denke es ist Oschersleben? Ich weiß der Bode Fluss. Ich habe Freunde, die in der Nähe von Thale leben"* (I think it's Oschersleben? I know the Bode River. I have friends who live near Thale.)
Integration	**17**	
Convergence	5	*"Diese Stadt könnte entweder Hamburg oder Bremen sein. Ich glaube, dass Bremen keinen großen Flughafen hat. Daher wähle ich Hamburg 🤔"* (This city could either be Hamburg or Bremen. I believe that Bremen does not have a large airport. Therefore I choose Hamburg 🤔)
Synthesis	4	*"Ich glaube, dass die beiden von Hamburg und Bremen Bundeslände sind, und also ist sie eine dieser Städte?"* (I think that Hamburg and Bremen are federal states, so is it one of those cities?)
Solutions	8	*"Der heiligen Bonifatius stammte aus Der Grafschaft Devon, ein einheimischer Sankt, na so was. So, muss die Stadt Fulda sein."* ("Saint Boniface was from Devon, a local saint, well, well. So, the city has to be Fulda.)
Resolution	**0**	
Apply	-	
Test	-	
Defend	-	
Total	**90**	

Following the first phase, "exploration" refers to the process where learners search for, gather and exchange information and ideas to explore a topic (Garrison, 2011, 2017).

As shown in Table 5.3, the vast majority of the learners' comments (n=63) were related to the exploration phase of the inquiry. Learners mainly used the WhatsApp group to exchange information (n=38). In fewer instances they made suggestions (n=11), elicited ideas from their own perspectives or experiences (intuitive leaps, n=6), generated ideas in discussion (brainstorming, n=6) and offered supportive or contradictory ideas and concepts (divergence, n=2).

The third phase – integration – refers to the process of constructing and synthesising possible and meaningful solutions or explanations (Garrison & Cleveland-Innes, 2005). Indicators of this phase (n=17) were also evident in the WhatsApp group (see Table 5.3). Students' comments in this phase were related to convergence (i.e. integrating and connecting ideas and information) (n=5), synthesis (n=4) and solutions (n=8). The integration phase is followed by a resolution which involves students' ability to   critically assess the viability of the possible solutions through direct or vicarious application and implement the best one (Garrison, 2017). As Table 5.3 illustrates, none of the indicators from this phase (i.e. apply, test and defend) were present in the WhatsApp group. As pointed out in relation to Case Study 1 (see Section 4.3.3), the absence of resolution phase in the group discussion is not surprising, since as Garrison (2017) acknowledged, within a CoI it is common there is tendency to *"do the first two phases very well, the third phase less well, and the last phase hardly at all"* (p. 67).

Overall, the above discussion explored participants' online activity in terms of social, cognitive, and teaching presence as described by the CoI framework and identified which categories and indicators were present (or absent) in the WhatsApp group. The following section brings these insights together and examines the WhatsApp group as a CoI.

5.3.4   The WhatsApp group as a Community of Inquiry

As Table 5.4 illustrates, social posting (i.e. social presence) comprised a clear majority (n=311, 57.7%) of learners' and the teacher's online contributions. These contributions were mainly related to open communication (n=207, 66.6%), while contributions associated with interpersonal (n=48, 15.4%) and cohesive (n=56, 18%) communication were present but less frequent.

Table 5.4: Overall online contributions

	Number of codes	Percentage

Social Presence	**311**	**57.7%**
Interpersonal Communication	48	15.4%
Open Communication	207	66.6%
Cohesive Communication	56	18%
Teaching Presence	**138**	**25.6%**
Instructional Design & Organization	28	20.3%
Facilitating Discourse	46	33.3%
Direct Instruction	64	46.4%
Cognitive Presence	**90**	**16.7%**
Triggering event	10	11.1%
Exploration	63	70%
Integration	17	18.9%
Resolution	0	0%

All three categories of teaching presence (i.e. instructional design and organisation, facilitating discourse and direct instruction) were evident in the WhatsApp group (n=138, 25.6%). It was found that the majority of the teacher's contributions were related to direct instruction (n=64, 46.4%). With respect to this category of teaching presence (i.e. direct instruction), the teacher very frequently (n=42) used the online environment to provide feedback to his learners and presented the content and questions (n=13) of the uploaded language tasks. However, other key aspects of teaching presences such as "focus the discussion on specific issues" and "summarise the discussion" were not evident in this teacher's contributions.

Instead, the teacher's contributions focused on facilitating online discourse (n=46, 33.3%). Within this category, the teacher's messages were mainly aimed at encouraging and acknowledging his learners' contributions (n=30). The teacher also used other strategies to facilitate online discourse, such as prompting discussion (n=8), setting the climate for learning (n=4), assessing the efficacy of the learning process (n=3) and seeking to reach understanding (n=1).

Aspects of instructional design and organization were also evident in the WhatsApp group (n=28, 20.3%). More specifically, the majority of the teacher's contributions focused on "setting curriculum" (n=17) which is not surprising since he was using WhatsApp as a means of sharing language tasks with the learners. Less frequently did the teacher use

strategies such as establishing netiquette (n=5), time parameters (n=2) and designing methods (n=4), while he never shared any contributions related to "utilizing medium effectively" or "macro-level comments" about the series of activities.

As regards the third element of a CoI, the above analysis indicates that a total of 90 (16.7%) contributions were coded as cognitive presence. The integration phase comprised a clear majority of learners' contributions (n=63, 70%) which suggests that they were able to search for, gather and exchange information and ideas and explore a topic in the online environment. Contributions related to the "triggering event" (n=10, 11.1%) and "integration" (17, 18.9%) phases were not identified with the same frequency in the WhatsApp group, while none of the learners' contributions were coded as "resolution". Taking into consideration learners' language competency in L2 (intermediate level), it is arguably difficult for higher order processes (i.e. integration and resolution phases) to be operationalised in the context of this study. Nevertheless, as Garrison (2017) highlighted, the incapacity to move the discussion through each of the phases of cognitive development can also be attributed to the nature of the tasks and/or the lack of teaching presence to move the discussion forward. In this respect, given that the German teacher was aware of students' competence in L2, he appears to have intentionally designed the tasks to meet his learners' abilities and did not offer opportunities to his students to go through such higher order processes (i.e. Integration and Resolution).

Overall, the above analysis offered valuable insights into the elements and dynamics of the WhatsApp group as a CoI and opened-up further areas that need investigation. The analysis showed that participants' contributions focused largely on social rather than cognitive presence, which reflects that uses of social media in everyday life were being transferred and had a dominant presence in the context of this study. Similar to the discussion in Chapter 4, this raises questions about the suitability of the medium and its potential with regard to learners' cognitive development. In addition, the role of the teacher within the online environment as well as the nature of the tasks introduced to the learners necessitate closer attention. Consequently, moving from a macro-level to a micro-level of analysis, the ways in which the learners and their teacher participated in the WhatsApp group and interacted with each other need to be investigated. As discussed in section 3.4.3, the empirical framework for the analysis of sharing practices in social media platforms introduced by Androutsopoulos' (2014) was adapted and used for the purposes of this study.

Following this framework, the analysis was carried out in three stages. First, a quantitative analysis of participants' online contributions was carried out (see Section 5.4). The second step involved the identification and selection of "relevant" communicative events, which were qualitatively analysed (see Section 5.5). As proposed in Androutsopoulos (2015) the basic unit of analysis is not a single post but a communicative event which is defined as a *"spatially and temporally delimited, multi-authored sequence of contributions"* (Androutsopoulos, 2014, p. 7) and consists of an initial chat entry followed by other users' responsive contributions. To identify and select communicative events relevant to the analysis, three criteria were followed, namely (1) "repetition", (2) "responsiveness", and (3) "reflexivity" (see Section 3.4.3). The third stage involved a qualitative analysis of the selected communicative events aiming to provide an empirically evidenced account of how WhatsApp was used as means of facilitating student's language learning (see Section 5.6). This analysis is performed on three different levels, namely, "selecting", "styling" and "negotiating". Selecting concerns what participants choose to share and why, while styling involves the design of what is being shared (i.e. how participants style their content), and negotiating deals with audience engagement (i.e. how participants respond to what is being shared with other users) (see Androutsopoulos, 2014, p.8).

Interview data were used during all three stages of analysis to provide more insight into the results derived from the online data and to identify the reasons why learners demonstrated specific participation patterns in the online environment.

The following section discusses the first stage of analysis which involves a counting of participants' online contributions.

5.4 Participation and sharing practices in WhatsApp

To examine the extent to which the learners and the teacher participated in the WhatsApp group, all chat entries were counted. A chat entry was identified when a participant published a message in the text-chat window (Cho, 2017), including typed text, embedded images, videos, YouTube videos, emojis, links to web content or a combination thereof. Counting and coding the chat entries in this online environment involves distinguishing between initiating and responding contributions (Androutsopoulos, 2014). An initial entry was identified when a participant published a message to initiate conversation on a new topic, while a chat entry was categorised as a responsive contribution when a participant replied to an initial entry within the online environment.

As Table 5.5 shows, the learners and their teacher made a total of 243 chat entries over 22 weeks. Approximately a third of these (n=78, 32.1%) were made by the teacher, a finding that shows that he had a leading role in initiating, coordinating and participating in the online discussion. Apart from the individual messages, the teacher made 22 (56.4%) initial entries and replied to 56 (27%) of all the posts shared by the learners. These initial findings suggest that the teacher had a central role in this WhatsApp group.

Table 5.5: Level of contribution

	Teacher	Emma	Louisa	Otto	Frieda	Jürgen	Helmuth	Petra	Klaus	Total
Individual chat entries	78	52	27	23	20	19	17	6	1	**243**
Initial Entries	22	9	1	2	3	2	0	0	0	**39**
Replies	56	43	26	21	17	17	17	6	1	**204**

As Table 5.5 illustrates, levels of participation among the students varied. One student, Emma was very active in the online environment posting 52 out of 243 chat entries (21.4%), while others like Petra and Klaus were more passive and posted six and only one chat entry respectively. As regards the students' type of contribution, the data suggested that their participation in the WhatsApp group was reactive, rather than proactive. Specifically, students rarely took the initiative to start a new topic, so the number of initial entries per student is very low, while most of their contributions (89.7%) were replies to previous conversations or activities that had been posted by the teacher. The reactive nature of learners' participation was obvious from the early stages of the intervention. A possible reason for this emerged from the analysis of the interview data. Specifically, all students felt that they did not *"have the right or the authority to initiate something so [they] sit back wait for [name of the teacher] and then [they] respond"* (Louisa). The view that only the teacher had the authority to initiate conversation in the online environment points to the different expectations about using WhatsApp in the context of a non-formal education (where the teacher is still viewed as an authority) rather than as a messaging application in everyday life. It seems that this was a rule (or norm) adopted by students arbitrarily, as it was never formally established. In fact, in the beginning of the study, they were given

complete freedom to interact, initiate conversations and share any information they wanted on WhatsApp (see Section 3.3.2).

The next section provides an overview of the activities uploaded by the teacher and examines four communicative events, which demonstrate how the teacher used the messaging app for language learning activities as well as how the students participated in these activities in the online environment provided by WhatsApp.

5.5 Activities in the WhatsApp group

A total of twelve language learning activities were uploaded by the teacher (see Appendix 10). Half of them (n=6) were writing tasks which required the students to compose sentences using vocabulary (often verbs) supplied by the teacher, while three activities asked learners to describe their weekend using the target language. The teacher also uploaded another activity asking the students to plan a trip to Germany discussing its practicalities (i.e. where to go, what to do, what to see, when to go and for how long), while another activity required learners to compose a dialogue in a restaurant or a shop. Finally, an activity shared by the German tutor asked learners to choose and describe a city in Germany or Austria for their peers to guess which it was (see Appendix 10).

The four activities presented here are chosen and qualitatively analysed following the selection criteria (i.e. repetition, responsiveness and reflexivity) discussed in Section 3.4.3. Specifically, the first communicative event (see Section 5.5.1) satisfies the first criterion (i.e. repetition) and offers a representative example of the activities, which were repetitively used by the teacher. The second and the third communicative events (see Section 5.5.2 and 5.5.3) showcase participants' self-reflection upon their sharing practices in the online environment (i.e. reflexivity). The fourth event (see Section 5.5.4) is selected because it generated the most significant number of responses by the students (i.e. responsiveness). All the communicative events examined in the following sections are presented in chronological order.

5.5.1 Example 1: Design of writing tasks

The first communicative event offers a typical example of how the teacher used the messaging application to distribute writing tasks. As Figure 5.1 illustrates, the teacher posted a writing task asking the students to construct a sentence using the separable verb *"zutreffen auf"* (apply to). Louisa and Frieda followed the teacher's instructions and generated sentences using the suggested verb. Then, Emma drew on political

developments related to Brexit and shared a much longer and complex response as compared to the other two students (see Figure 5.1). The teacher waited for three days, possibly to allow the rest of the learners to share their answers. Then he posted a message thanking the three students and affirming that they had understood the given verb well. His chat entry on the 18th March marked the end of this communicative event.
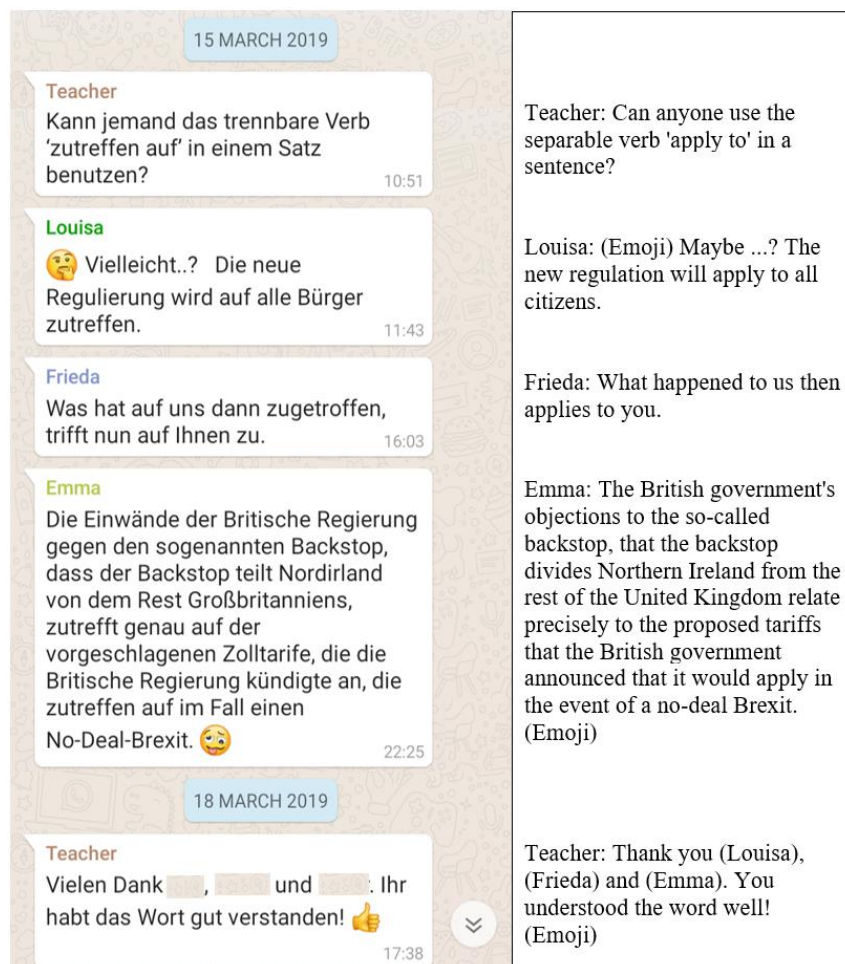
Figure 5.1: Example of a writing task posted by the teacher

In relation to learners' engagement, Figure 5.1 shows that the three students engaged with the task by responding directly to the teacher's post. In all writing tasks (n=6) uploaded by the teacher, the learners followed the same participation pattern, i.e. responding directly to the teacher. This type of response is also shaped by the form of the initiating post (i.e. styling) which prompts students to share their individual contributions (i.e. *"Kann jemand (…) benutzen"*, Can anyone use) (see Figure 5.1).

This section presented a typical example of the writing tasks uploaded by the teacher to the WhatsApp group. The following communicative event concerns an activity which involves teacher-to-student feedback and focuses on the students' self-reflection

upon their peers' sharing practices in the online environment which emerged from the interview data.

5.5.2   Example 2: Teacher-to-student feedback and tension amongst the participants

The second communicative event presents a writing activity where the teacher asked the students to describe what they had done over the Easter weekend. Chronologically, this was the 9th activity he introduced (25.04.2019, see Appendix 10). Six (out of eight) learners were engaged in this activity posting a total of 17 messages, while the teacher shared 10 messages to provide feedback on his students' contributions. Due to the number of posts in this communicative event, it is divided into four different parts. The first two parts (see Figure 5.2 and 5.3) concern how the teacher structured the activity and how the students engaged with the activity and shared their contributions. The third part (see Figure 5.4) examines how the teacher used WhatsApp to provide feedback to his students and the last part (see Figure 5.5) discusses a tension that arose amongst the participants of the group.
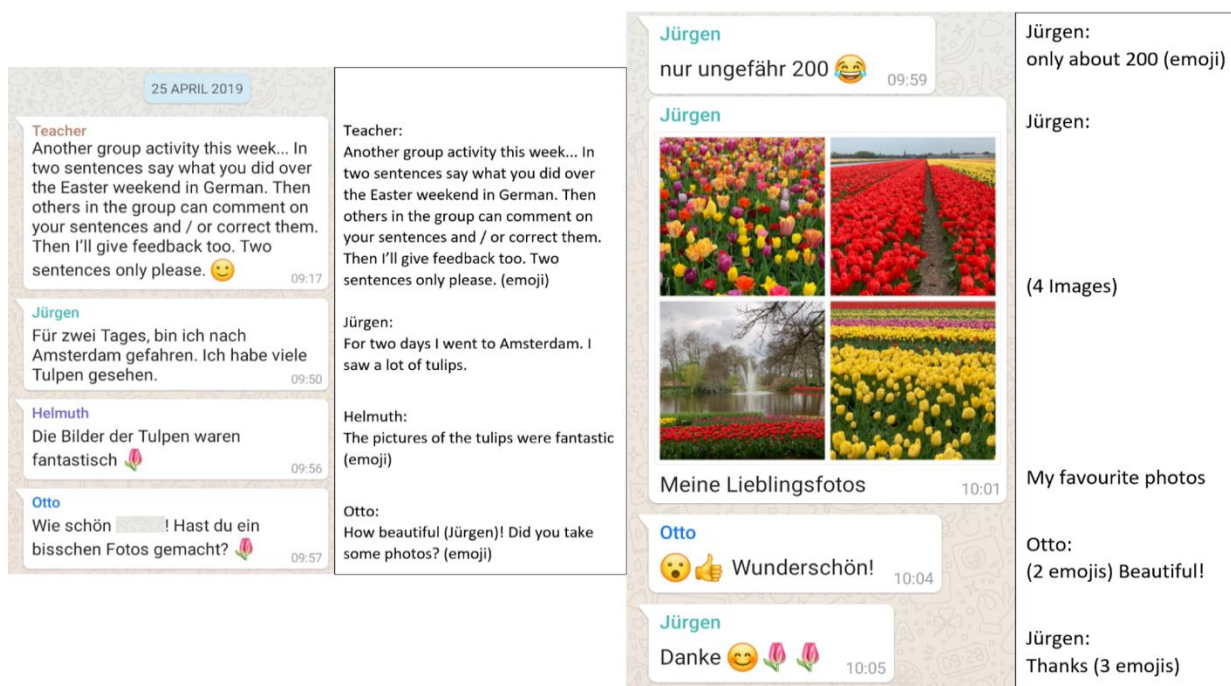
Figure 5.2: "Your Easter weekend activity" (part 1)

As Figure 5.2 shows, the teacher introduced an activity clearly prompting the learners to comment on and/or correct each other's contributions and stated that he would also provide feedback on their contributions. The students responded partially to the

activity, since none of them left any comments on their peers' language use. Learners' reluctance to provide peer-feedback is discussed in section 5.5.3.

The teacher also emphasised twice in his initial entry that students should limit their contribution to only two sentences (see Figure 5.2). Interview data shed light on his attempt to moderate the length of the students' contributions when he referred to a learner who *"[was] quite confident and in fact really he/she is [was] an advanced learner (…) I do feel sometimes he/she [was] perhaps quite confident on the WhatsApp and might deter the others from posting."* (Teacher)

One student, Emma was indeed very active in the online environment posting 52 out of 243 chat entries (21.4%). The teacher's comment, at interview, reveals that his awareness of Emma's active participation led him to add the specific instruction to the task.

Following the teacher's instruction, Jürgen took the initiative to describe what he had done over the Easter weekend (see Figure 5.2). Helmuth and Otto replied to Jürgen's text entry and after Otto's prompt, Jürgen shared some photos of tulips from his trip to Amsterdam.
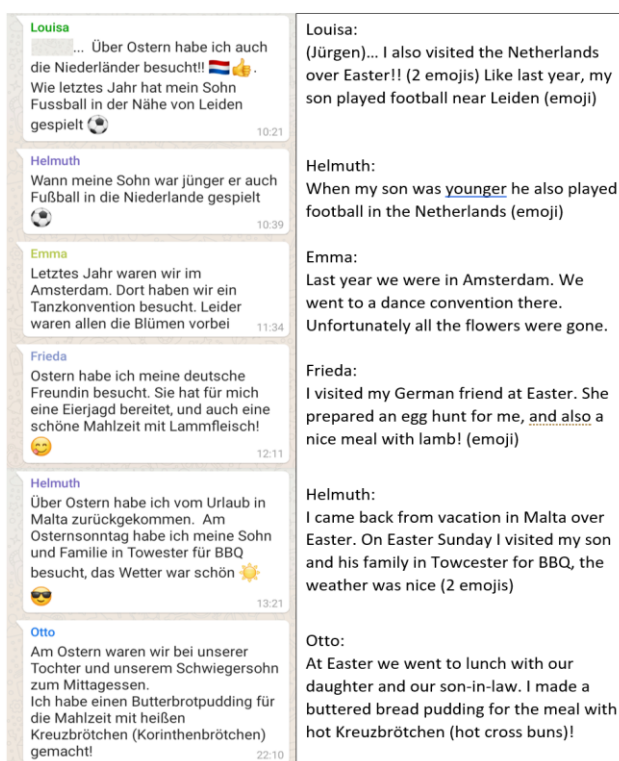
Figure 5.3: "Your Easter weekend activity" (part 2)

Louisa, Helmuth and Emma also participated in this communicative event (see Figure 5.3). These students did not describe their Easter weekend as the instructions of the

task indicated, but instead they replied to Jürgen's initial post by sharing their own experiences of trips to the Netherlands.

These explicit references to other learners' messages can be studied using the CoI framework (Garrison & Anderson, 2003) (see Section 5.3) since they are associated with participants' social presence. According to Garrison (2011, p. 39), *"open communication is built through a process of recognizing, complimenting, and responding to the questions and contributions of others".* The direct references to Jürgen's initial post (see Figures 5.2 and 5.3) are indicators of open communication within the WhatsApp group. Another indicator of open communication is *"complimenting others or the content of others' messages"* (Garrison, 2011, p. 38). Such complimenting communicative practices were evident in Helmuth's – *"Die Bilder der Tulpen waren fantastisch"* (The pictures of tulips were fantastic) and Otto's – *"Wie schön Jurgen!"* (How beautiful Jurgen!) – messages (see Figure 5.2).

Moreover, in this online exchange Louisa explicitly referred to another participant (i.e. Jürgen) by name (see Figure 5.6). This was also evident in another instance when Otto directly replied to Jürgen's post, addressing him by name (see Figure 5.5). Such communicative practices are indicators of the third category of social presence which is "cohesive participation" (see Garrison, 2011; Garrison & Anderson, 2003). According to CoI's conceptual framework interpersonal and open communication contribute to the establishment of group cohesion, which *"begins with activities such as addressing others by name"* (Garrison, 2011, p. 39).

Students' contributions to this communicative event show how student to student social interactions can be enabled in the WhatsApp group. Moreover, learners' sharing and communicative practices in this activity (see Figures 5.2 and 5.3) are related to the three categories of indicators (i.e. interpersonal, open and cohesive communication), which construct participants' social presence within the online environment.

After having discussed the instructions for the selected activity, the students' contributions to this communicative event and their social presence, the next section (see Figure 5.4) examines how the teacher used WhatsApp to provide feedback to his students. As mentioned above, peer-to-peer feedback was advocated as part of the uploaded activity (see Figure 5.2), and the teacher asked learners to comment on their peers' contributions. Five days after his initial post, even though six learners had posted accounts of their weekend activities, none of them had left any comments related to their peers' language

use, and the teacher provided feedback on all students' contributions in this communicative event.

In WhatsApp, users can employ the "reply" feature to respond to a specific message. As Figure 5.4 shows, the teacher used the "reply" feature to reply to each student's chat entry. The teacher also copied the text entry posted by each learner and then replied to their message and provided feedback by making corrections in bold font to draw attention to his comments. As Figure 5.4 illustrates, the teacher used corrective feedback and explicitly pointed out the linguistic errors identified in learners' contributions. Based on the quantitative analysis of the teachers' online contributions, 37 out of his 56 replies (66%) (see Section 5.4) served the purpose of providing feedback. The teacher always followed the same pattern when providing feedback (i.e. replied to each message, copied the text and made the corrections in bold), as illustrated in Figure 5.4.

Figure 5.4: Example of teacher to student feedback

As regards the use of emojis in this example, the teacher used the thumbs-up gesture emoji (👍) when providing feedback to his students (see Figure 5.7). The teacher

used this emoji (i.e. 👍) in the majority (n=35, 94.6%) of his feedback-related replies, while on some occasions (n=4, 10.8%) his comments were marked by a smiling emoji (😊). The teacher's use of these emojis aimed to mitigate the illocutionary force of a face-threatening speech act (public error correction) (Yus, 2014). In other words, the above paralinguistic features (i.e. 👍 and 😊) were used to acknowledge students' effort, add a positive tone, and mitigate any potential offence when providing feedback to the learners. As the German tutor stated at interview:

> *"Correcting their post with the corrected versions highlighted in bold and maybe just a positive emoji to finish off that just to acknowledge their contribution but also to point out where they could have done better or more accurately" (German tutor)*

The last part of this communicative event reveals an observed tension between two students in the WhatsApp group. As Figure 5.5 shows, four days after the teacher's initial post, Emma shared another lengthy (91 word) contribution in response to the activity posted by the teacher. Jürgen then criticised the length of Emma's contribution remarking that she had posted *"the longest two sentences ever"* and *"managed to squeeze in so many commas to make it into 'only two sentences' as the teacher requested"*. A "tears of joy" emoji (😂) marked the end of Jürgen's message. This emoji is often used to express that something is extremely funny (shedding tears from laughing so hard). In this instance, Jürgen textually expressed his discomfort (or even frustration) and used this emoji (i.e. 😂) to strengthen the sarcastic tone of his message.

Emma's lengthy post and Jürgen's sarcastic comment sparked some tension between the students. Emma replied equally sarcastically to Jürgen's post – *"ich bedanke mich fürs Lob"* (thank you for your praise) – and argued that long sentences are common in German literature. Interestingly, Jürgen did not respond to this comment, but after four days, Emma followed up with another post, sharing two long sentences by the Austrian novelist Stefan Zweig (see Figure 5.5). The teacher then intervened to dispel the obvious tension between the two students, and kindly clarified that he was expecting two short sentences for this activity. He also used a smiling emoji (😊) at the end of his message to add a positive tone to his message, possibly aiming to "restore harmony" in the group and offer a resolution to the observed tension.

In this case study, participants used various emojis to set a positive tone to what had been textually said and compensate for the lack of face-to-face cues (this is further discussed in the following section). On the contrary, in this exchange the absence of emojis

in Emma's messages (see Figure 5.5) may signal her orientation to the context of interaction as a formal one. More specifically, in her first comment (see Figure 5.5) Emma did not use any emojis emphasising her focus on the learning aspect of her contribution. Similarly, when developing her argumentation, she did not use any emojis to convey emotion and/or interpersonal attitudes. The absence of emojis in Emma's messages as well as the use of German (as compared to Jürgen's post in English) undermined the social nature of communication within the online environment and resulted in a more formal and impersonal communication. Emma's inclination towards a more formal communication style in the WhatsApp groups also reflects the way she envisaged her relationship to the group. This is echoed in her interview where she stated that *"WhatsApp doesn't make a difference to [the social relationships amongst the members of the group]"*, and as the following quote illustrates, she professed indifference to the social aspect of her German language learning.

"Well I don't expect necessarily to come across the students again let's say I have to go to the course I am on so nothing more no follows up to that" (Emma)

Figure 5.5: Tensions between two participants

The interview data also reveal that Emma's excessively enthusiastic participation was negatively perceived by the other learners. Three of the interviewees appeared critical

of her participation in the online environment and expressed feelings of demotivation and discouragement when Emma posted long texts. Interview data also suggest that being confronted with learners who appeared more confident, more voluble, and more advanced than they were affected students' motivation and confidence in contributing to the online environment. As the following quotes show, Helmuth and Louisa felt intimidated by these long posts, while Jürgen lost the motivation to interact in the online environment because of Emma's tendency to dominate the conversation.

> *"It could be a slight intimidation by someone who can write an essay rather than a few lines that puts me off sometimes" (Helmuth)*

> *"If one member of the group sends a response "this" long ((shows long text)) everyone else is sending responses "this" long ((shows short text)) then I think that people find that slightly intimidating and perhaps they tend to go a little bit quieter" (Louisa)*

> *"There are a couple of guys who were just write paragraphs and paragraphs and you know they might get 90% perfect and I could post 2 sentences and get every single word wrong and so I just yeah it makes me want to not be quite so involved I mean I read all the posts and I like to read everyone's replies but for me I am not quite as confident" (Jürgen)*

Overall, the discussion above examined how the teacher structured the selected activity and how the students participated in this communicative event. This section also dealt with the teacher's use of WhatsApp to provide feedback to his students and discussed an observed tension between students within the online environment. The third communicative event concerns a similar activity posted by the teacher and involves students' self-reflection upon their sharing practices in the online environment (i.e. reflexivity) which emerged from the interview data, and discusses students' reluctancy to provide peer-feedback, their social presence, and their use of emojis.

5.5.3 Example 3: Reluctance to provide peer-feedback, social presence and emoji use

In three (out of twelve) of the activities uploaded by the teacher, learners were asked to provide peer-feedback. It was observed that even if the students replied to the activities, none of them left any comments related to the learners' language use in any of the chat entries posted by the learners (also see Section 5.5.2).

As Figure 5.6 shows, the teacher used the same task instructions, as in the previous section (see Figure 5.2). On this occasion, he introduced a similarly-styled activity instructing the students to describe what they had done over the bank holiday weekend,

and including a clear prompt for the learners to comment on and/or correct each other's contributions. The teacher further informed the group that he would also provide feedback to their contributions. The teacher followed the same pattern in all activities that required peer-feedback, and this activity (see Figure 5.6) provides a representative example of how the teacher structured and initiated these activities.

Figure 5.6: Activity involving peer-feedback

As Figure 5.6 shows, two days after the initial post, Jürgen replied to the activity by sharing a picture of him and Helmuth who were on holiday in Berlin. Louisa and Otto shared a chat entry in response to Jürgen's picture, and three days later Louisa took part in the activity by describing what she had done over the bank holiday weekend. The teacher then followed up with a comment related to the uploaded picture, thanking Jürgen and Helmuth for sharing, and prompting them to discuss their trip to Germany during their in-classroom lesson. Emma was the last student to engage with the activity.

As shown in Figure 5.6, the learners partially followed the task instructions by sharing their answers, but they did not provide feedback to their peers. The teacher gave the learners time to comment on their peers' contributions, and when this did not happen,

198

eight days after the initial post, he provided feedback to the ones who had participated in this. As with this activity, none of the other activities of this type evoked any peer-feedback (also evident in the previous activity, see Section 5.5.2), indicating that the learners might have felt reluctant to engage in correcting their peers.

This point was raised in the interviews, where four questions (see Appendix 8) were asked seeking to find out the extent to which learners were able to self-reflect upon their sharing practices. Accordingly, interviews made it possible to identify the reason(s) why learners in this study demonstrated a reluctance to provide peer-feedback. When interviewed, students reported that they did not feel comfortable providing feedback, because they perceived it as potentially offensive, as evidenced by Louisa in the following response:

> *"I wouldn't want to offend them by saying "oh I think you should have done this or you could have done that" I feel uneasy about that to be honest" (Louisa)*

Indeed, students did not *"like to point the finger at anybody (…) because [they] value that they have taken time to do something"* (Otto). What is more, learners (n=3) felt that they were not entitled to provide peer-feedback as they were not proficient enough in the target language and that discouraged them from doing so. These views are articulated in the following quote:

> *"I wouldn't contribute to that because I don't feel that my knowledge is enough to give people feedback" (Jürgen)*

Another reason revealed by the interview data was related to the teacher's role. Specifically, two students seemed to think that *"that's more [name of the teacher]'s role to do that it's a bit uncomfortable sometimes"* (Otto), also evidenced in the following:

> *"I was quite happy to suggest things and correct them when we were working through some exercises if they welcomed it or not I don't know but I was very anxious not to undercut [name of the teacher]'s role who is obviously the teacher" (Emma)*

All the above views that emerged from the interviews shed light on students' reluctance to provide feedback to their peers.

Another observation in this communicative event is related to students' social sharing practices. As Figure 5.6 shows, three students (i.e. Jürgen, Otto and Emma) shared personal information presenting details about their personal life when replying to the writing task. Jürgen and Otto also shared images related to their Bank Holiday weekend.

Such sharing practices demonstrate participants' ability to *"to project themselves socially and emotionally, as 'real' people (i.e., their full personality), through the medium of communication being used"* (Garrison et al., 1999, p. 94).

In line with participants' acts of sharing details of their personal life, interview data suggest the use of WhatsApp positively affected the social relationships amongst the members of the group. Specifically, all students affirmed that WhatsApp created a *"sense of belonging which is quite nice when you are learning" (Helmuth)* and that *"you are [they were] all part of that one WhatsApp community" (Louisa).* This is also evident in the following:

> *"I think when you are doing the languages you are quite solitary learning and you are doing your homework whenever you do it and I think the WhatsApp tries to bring you together to encourage you to do that sort of thing" (Jürgen)*

The German teacher also referred to the impact of WhatsApp on participants' social relationships suggesting that the use of this messaging app created a bond, a sense of community and positivity.

> *"It has created a bond really which is nice so we feel connected and we sort of feel like we're working on German together sort of thing it's kind of a community so this is not something we just do on Tuesday night was something that we do also throughout the week and it's created a positive vibe really positive relationship really in the group" (Teacher)*

The above acts of sharing (see Figure 5.6) which project details about participants' personal life along with the interview data highlight that the WhatsApp group facilitated in some cases specific forms of interpersonal communication amongst the members of the group.

A further observation related to this communicative event concerns the students' use of paralinguistic features. The quantitative analysis of the participants' chat entries in the WhatsApp group suggest that the students and the teacher frequently marked their messages with emojis, i.e. *"unicode graphic symbols, used as a shorthand to express concepts and ideas"* (Kralj Novak et al., 2015, p. 1). As discussed in Section 5.4, the learners and their teacher made a total of 243 chat entries in the online group. 65% of these chat entries (n=158) included one or more emojis, pointing to the frequency in which emojis were used in this digital form of communication. In addition to the most commonly used emojis (e.g. 😃, 👍, 😂, 😉, 😮, etc.), half of the students (n=4) also used emojis

representing a wider spectrum of concepts (e.g. 🥖, 🍺,🥨,📺, 🌷, 🌳, 🌞, etc.) to complement the meaning of their posts.

As Figure 5.6 shows, all learners who participated in the activity (i.e. Jürgen, Louisa, Otto and Emma) and the teacher's messages included emojis. In her first entry, Louisa replied to Jürgen's post using seven emojis (i.e. ✈️ DE 🥖 🍺 🥨 😃 👍) (see Figure 5.6). Emojis on many occasions are used to accompany a text message aiming to convey feelings and/or thoughts (Alshenqeeti, 2016; Tang & Hew, 2019) and often modify the meaning of the typed text (Pavalanathan & Eisenstein, 2016). However, in Louisa's message emojis stood alone and evinced non-textual meanings, i.e. that Jürgen went on holidays (✈️) to Germany and had food and beer (🥖 🍺 🥨). Louisa also used a smile face emoji (😃) and a thumbs-up emoji (👍) to respond in a positive way to Jürgen's previous message. In addition, Louisa's styling choice to only use emojis can also be interpreted as an easy way to convey meaning and interact with Jürgen's post while avoiding the use of the target language.

Following a different approach, Otto used a smile face emoji (😃) and a winking emoji (😉) to accompany his text entry (see Figure 5.4). In this instance, both emojis were used to set a positive tone to what had been textually said, and do not represent a physical facial expression (Dresner & Herring, 2010, 2014). More specifically, the winking smiley emoji (😉) is often used as an indicator that the writer is joking, teasing, or otherwise not serious about the content of the message (Dresner & Herring, 2010). Here, this emoji is best conceived as a *"sign of the force of what has been (textually) said, rather as an indication of emotion"* (Dresner & Herring, 2010, p. 256).

In her second entry, Louisa replied to the activity by describing her weekend and enriched the accompanying text with various emojis. At the beginning of her post she used the "thinking face" emoji (🤔) not to express an emotion per se (i.e. pondering or deep in thought), but to set a supportive tone and serve the interpersonal functions that compensate for the lack of face-to-face cues. Afterwards, she started describing her weekend stating that on Saturday she watched football and marked the end of this sentence using the "soccer ball" emoji (⚽). Continuing this approach, Louisa used the "flexed biceps" emoji (💪), while stating that the youth football team won a league, a "party popper" emoji (🎉) and the "clinking beer mugs" emoji (🍻) representing a celebratory or convivial toast ("Cheers!") while describing in her text entry that she had

drunk a lunchtime beer. As Figure 5.4 illustrates, Louisa also used other emojis (i.e. 📺, 🌷, 🌳, 🌼) to visually accompany her written contributions. Finally, Louisa ended her chat entry using the thumbs-up gesture emoji (👍) and followed up with another entry with an image of the youth football team and a caption including three emojis (i.e. ⚽ 🏅 🏆). In this digital message, Louisa used emojis that do not map conventionally onto facial expressions (Dresner & Herring, 2010) but contribute to the sense of social bonding within the online environment (Li & Yang, 2018). Similarly, Emma also used two emojis (i.e. 🔎 and 👪) to accompany her textual contribution, while the teacher used a smiling face emoji (🙂) to add a positive feeling (or emotion) towards the propositional content of the utterance (i.e. when replying to Jürgen's post) (Yus, 2014).

The use of paralinguistic features is associated with students' social sharing practices. In this online environment (i.e. the WhatsApp group) where physical cues and vocal intonations are not present, affective expression can be communicated through emoji use. In other words, the discussion above shows that the WhatsApp group enabled participants of this study to overcome the lack of the non-verbal communication that is a feature of face-to-face interaction by using paralinguistic features (i.e. emojis).

Overall, the discussion above dealt with learners' reluctance to provide peer-to-peer feedback, their social sharing as well as their use of emojis. The discussion of the following communicative event considers learners' significant engagement with the "Guess the city" activity.

5.5.4 Example 4: Learners' significant engagement with the "Guess the city" activity

The fourth communicative event selected presents a different type of task, namely the "Guess the city activity", which was selected because it received the highest number of responses from learners of any WhatsApp task (i.e. it illustrates responsiveness)(see Androutsopoulos, 2014, p.8). Chronologically this was the 11th (out of 12) activity introduced by the teacher on June 17th. In this activity, each student was asked to describe a city in a German-speaking country for others to guess which city it was (see Figure 5.7). Seven (out of eight) learners were engaged in this activity, posting a total of 32 individual posts. The teacher also participated in this communicative event by sharing another 27 chat entries to praise students' effort (n=2), to prompt learners to describe their city (n=3) and to provide feedback on their contributions (n=22) (the latter have been discussed in section 5.5.2). Overall, a total of 59 individual chat entries were made in this activity, over a period

of nine days. Due to the length of this event, it is presented in two parts here. The first part (see Figure 5.7) concerns how the teacher structured and initiated the activity and shows how the students responded to the teacher's initial post. The second part (see Figure 5.8) involves the description of a city by one of the learners and his peers' contributions.

Figure 5.7: "Guess the city activity (part 1)"

In this communicative event the teacher posted the instructions for the activity using English and then shared a description of his selected city in German. This activity caught the attention of students and nine minutes after the teacher's initial post, Helmuth replied and made a guess regarding the city described by the teacher. In response to the teacher's post, four students (Helmuth, Frieda, Emma and Jürgen) used the target language and tried to identify the correct city. Students also tried to negotiate and renegotiate to reach an answer by sharing their own interpretation of the clues and using their knowledge to argue for or against a suggested answer (see Figure 5.7). Once all the students had shared their guesses, the teacher revealed the correct answer and used a thumbs-up emoji gesture indicating approval of their efforts. The teacher ended this part of the online exchange by prompting the students to describe their city with the question *"Wer ist jetzt dran?"* (who's next?).

Following the teacher's prompt, Otto took the initiative and shared a description of his city (see Figure 5.8). Frieda made a guess about the city in question, which however was

not the one indicated by Otto. Once he provided more information about his selected city, Emma followed-up with her another guess, which Otto confirmed was the correct one.
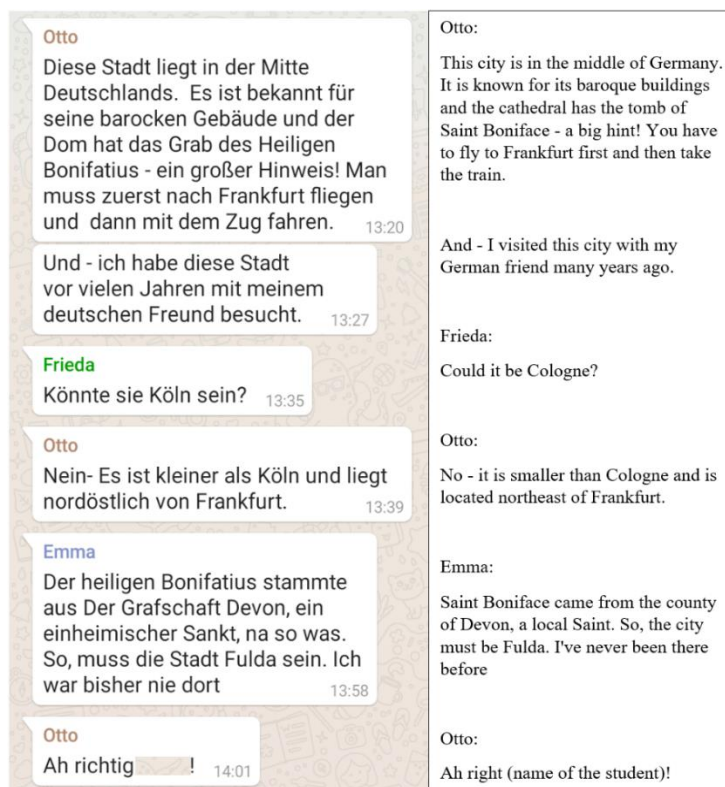
Figure 5.8: "Guess the city activity" (part 2)

Overall, this activity encouraged learners to read their peers' contributions, identify the clues provided and then guess the city. It also prompted students to interact with each other. The following section discusses students' and the teacher's key sharing practices and provides a deeper analysis of the communicative events presented above in terms of "selecting", "styling" and "negotiating" (see Section 3.4.3).

5.6   Sharing practices: selecting, styling, negotiating

The discussion so far has provided four examples of the activities uploaded by the teacher into the WhatsApp group and showed how students participated in these. This section provides a synthesis of the main insights discussed in the above communicative events and offers a deeper understanding of how WhatsApp was used in this study in terms of "selecting", "styling" and "negotiating".

Regarding "selecting", the language learning activities discussed in this study reveal a recurrent pattern in the sense that they were all chosen with the aim of enhancing students' writing competence and vocabulary acquisition.

As regards styling, it is evident that the activities discussed above involve different entextualisation patterns. Specifically, in terms of the teacher's language choice, the first activity (see Section 5.5.1) was introduced using German, while the instructions in the other three (see Sections 5.5.2, 5.5.3 and 5.5.4) were delivered in English. The teacher used German in all activities (n=6) which required students to compose sentences using the vocabulary provided. On the contrary, when the instructions of the activities involved a certain degree of complexity (e.g. "Guess the city activity") he styled them using English, as he also did when introducing activities which required students to provide peer-feedback (see Sections 5.5.2 and 5.5.3) the German tutor used English. It seems probable that the teacher's choice of language in these activities was to ensure that the learners had understood the language task and what was expected from them.

Regarding participants' styling choices, the discussion above (see Sections 5.5.2 and 5.5.3) highlighted the use of emojis in their shared content. Learners styled their contribution using emojis to set the tone for the interaction and negotiate interpersonal relations, compensating for the lack of face-to-face cues (e.g. physical cues and vocal intonations). Learners' use of "positive" emojis created a friendly atmosphere which can boost group rapport (Li & Yang, 2018) and contributed to communication development (Alshenqeeti, 2016). On the contrary, the absence of emojis (see Figure 5.5) can be interpreted in this context as an indicator of orientation to the norms of formal and impersonal communication.

Emojis were also used by the teacher, who followed a consistent pattern of adding an emoji when providing feedback to the language learners and when introducing the activities. Specifically, as discussed in Section 5.5.2, the teacher used emojis to praise students' effort, motivate and encourage them to share their contributions and most importantly minimise the potential feeling of demotivation and disappointment when receiving his corrective feedback. Moreover, the teacher used a smiley face emoji (🙂) at the end of his posts when introducing an activity. This emoji was used to set a positive tone for the textual instructions and possibly encourage students to engage with the uploaded activities.

As regards the teacher-to-student feedback interactions, the German tutor styled his feedback following a consistent pattern of use. Specifically, the teacher replied to each student's chat entry and used bold font to accentuate the linguistic errors identified in learners' contributions (see Section 5.5.2). Moreover, the teacher used explicit corrective

feedback which is defined *as "the process of providing the learner with direct forms of feedback"* (Varnosfadrani & Basturkmen, 2009, p. 83). That explicit correction of linguistic form or structure at or near the linguistic error involved *"crossing out of an unnecessary word/ phrase/morpheme, the insertion of a missing word/phrase/morpheme, or the provision of the correct form or structure"* (Bitchener & Knoch, 2010, p. 198)*.*

The next level of analysis – "negotiating" – offers a way of framing students' engagement with the shared activities (Androutsopoulos, 2014). The communicative events discussed above show that learners' responses to the uploaded activities generated different degrees of engagement. In the simplest case, students' participation was limited to responding directly to the teacher (see Section 5.5.1), while on other occasions (see Section 5.5.4) learners engaged in more peer-to-peer interactions. In terms of "selecting", those activities which prompted students to reply individually to the teacher's post and focused on the abstract practice of language form (e.g. *"Kann jemand das trennbare Verb 'zutreffen auf' in einem Satz benutzen?"* – Can anyone use the separable verb 'apply to' in a sentence?), resulted in no interactions amongst the members of the group (see Figure 5.1). On the contrary, the "Guess the city" activity encouraged learners not only to share their individual responses but also to read their peers' contributions in order to decipher the clues and then provide their answers. This activity also resembles a game (or a quiz) which is rooted in students' meaningful experience of Germany and obliges learners to draw on their personal knowledge, share their own interpretation of the clues, negotiate these clues with their peers and finally reach the correct answer.

Other activities which required students to share personal information (i.e. How did you spend your weekend?) (see Sections 5.5.2 and 5.5.3) also generated social interaction amongst the participants. Specifically, it is evident that sharing personal information when replying to these activities triggered student-to-student interactions emphasising social sharing in this platform. Interview data further confirm these points, highlighting positive perceptions of the effect of the WhatsApp group on participants' social relationships (see Section 5.5.3).

However, the discussion above revealed how the undue length of a student's contributions as well as her over-enthusiastic participation can discourage other learners from taking part in an exchange. This can also have a negative impact on participants' social presence and their participation in the online environment, directly affecting open communication within the group and potentially constraining group cohesion.

As shown in Sections 5.5.2 and 5.5.3, students demonstrated reluctance to engage in peer-to-peer feedback interactions. Apart from the reasons which emerged from the interview data, analytic attention should be paid to the "styling" of the instruction in these types of activities. Specifically, the teacher repeatedly and explicitly asked the students to comment on their peers' sentences and / or correct them. The exact same instructions were provided in all activities that required students to provide feedback to their peers. Moreover, in terms of styling, each of these activities (n=3) were divided into two parts. The first part involved the language task prompting students to reply individually to the activity (e.g. what you did over the Bank Holiday weekend?) and the second part directly asked the students to comment on or correct their peers' contributions. The design of the tasks prompted students to provide feedback in an overt way, while the first part of the tasks did not require learners' interaction. It seems clear that the selection and the styling of the tasks played a role in failing to encourage students to engage in such interactions.

Finally, the analysis of the communicative events examined above shows that students' engagement with the shared activities were not time-bound. For instance, in the online exchange discussed in Section 5.5.4, a student (i.e. Helmuth) replied to the teacher seven minutes after his initial post, while after 17 minutes another student (i.e. Frieda) also contribute to the online discussion. This shows that WhatsApp allows synchronous (or near synchronous) communication and emphasises the potentially immediate nature of interactions in this platform. Nonetheless, in the same activity (Section 5.5.4) participants continued to share their contributions for nine days. Such observations suggest that WhatsApp can also enable asynchronous communication. Moreover, since WhatsApp is an archived online environment, *"you can search back (…) you can look back into the Intermediate German WhatsApp group on your phone or iPad or whatever and you can find the conversation so that was quite good"* (Otto). This shows that WhatsApp has the potential to enable learners to access previous chat entries retrospectively and re-read as well as decipher what other users had shared at any point. In a traditional in-classroom learning environment, where students inevitably do not have the chance to archive any interactions, they are not able to access the learning context over time.

5.7   Summary of Case Study 2

This study explored the use of WhatsApp by a group of adult learners of German in an adult education centre in the UK. Following the CoI framework and the three analytical stages proposed by Androutsopoulos (2014), this study examined learners' and their teacher's participation, sharing practices and interactions in the WhatsApp group.

The first steps undertaken in the analysis concerned participants' online contributions and explored the extent to which the learners and the teacher participated in the WhatsApp group (see Sections 5.3 and 5.4). Confirming Keogh's (2017) study, the findings revealed students' reactive and limited participation, while the activity in the WhatsApp group relied heavily on the teacher's efforts to initiate conversation. A reason for these participation patterns emerged from the analysis of the interview data which suggests that students perceived that only the teacher had the authority to initiate conversation in the online environment. Such perceptions and predefined expectations highlight the different dynamics of participating and sharing when using WhatsApp for language learning as compared to personal everyday use of social media platforms (see Brandtzæg & Heim, 2009; Tankovska, 2021). These findings also suggest a mismatch between learners' perceptions of the potential and role of WhatsApp and their actual participation practices. More specifically, learners claimed that the messaging application offered an immediate and easy way to interact online and argued that the use of WhatsApp generated more engagement and interaction amongst the members of the group (see Section 5.2). On the other hand, as mentioned above, online data revealed learners' reactive and limited participation, and emphasised the teacher's key role in initiating and coordinating the discussion in the WhatsApp group (see Section 5.4).

The second step involved a qualitative analysis of the selected communicative events (see Section 5.5) and the third step in Section 5.6 was concerned with another layer of analysis which was performed on three different levels, namely, "selecting", "styling" and "negotiating" (see Androutsopoulos, 2014).

The analysis revealed some affordances associated with the use of the platform. Participants were able to use the platform and share their contributions regardless of time and place. It was evident from the analysis of the selected communicative events that participants also used WhatsApp both synchronously (or near synchronously) and asynchronously to communicate with each other. In addition, the archived nature of the

platform enabled participants to retrieve previous chat entries retrospectively and re-read as well as decipher what other users had shared at any point.

In terms of students' social presence, the analysis of participants' online contribution (see Section 5.3) and the analysis of the communicative events examined in this study (see Section 5.5) identified all three categories of indicators (i.e. interpersonal, open and cohesive communication) described in the CoI framework (see Garrison, 2011; Garrison et al., 1999, 2010; Garrison & Anderson, 2003). Specifically, learners' acts of sharing personal information (self-disclosure) and their use of emojis (affective expression) contributed to the development of interpersonal communication which created a positive climate and a sense of belonging to the group (Garrison, 2011). Moreover, open communication was evident in some instances (see Section 5.5.2) where learners explicitly referred to their peers' messages and complimented them on their uploaded content. The third component of social presence (i.e. group cohesion) was identified when some students addressed other peers by name (see Section 5.5.2). However, the analysis of participants' sharing practices revealed some tensions that can originate from the presence of a dominant personality in the group. The tensions observed in Section 5.5.2 along with the learners' concerns expressed in the interviews seemed to inhibit their participation, hinder open communication within the group and potentially constrain group cohesion.

Students' social presence is also inherently associated with peer-to-peer interaction. According to interaction theory, interaction between learners is perceived as the main mechanism by which languages are learnt (Mackey et al., 2012). Moreover, the interaction hypothesis (Long, 1983b, 1990) suggests that second language learning is acquired through communicative encounters and negotiation for meaning. In this study, it was evident from the analysis of the communicative events that learners on some occasions were engaged in peer-to-peer interactions (see Section 5.5.2, 5.5.3 & 5.5.4). As discussed above, in the communicative events examined in Sections 5.5.2 and 5.5.3, learners were socially interacting by sharing personal vignettes, directly referring to other students' posts and expressing approval of their content and enriching their contributions with emojis. In another activity (see Section 5.5.4), interaction between learners took the form of communicative (or content-related) interaction. More specifically, in the "Guess the city activity" learners challenged each other's' guesses and suggested alternative answers to the uploaded description. However, when replying to simple writing tasks introduced by the teacher (e.g. compose sentences using vocabulary and/or verbs) (see

Section 5.5.1) learners' participation was limited to providing individual answers and did not involve any peer-to-peer interaction (either social or communicative). Moreover, as discussed in Section 5.5.2, learners also demonstrated a reluctance to provide peer feedback which is a core element of the interactionist approach (Mackey et al., 2012).

Overall, the discussion above and the analysis of the communicative events examined in this study suggest that what is being shared (selecting), and how this is done (styling) influences the ways in which participants engage with the shared content (negotiating). In other words, selecting and styling the activities within the WhatsApp group can shape learners' participation, social presence, and peer to peer interactions in the online environment. While other studies (see Aburezeq & Ishtaiwa, 2013; Andujar, 2016; Keogh, 2017) suggested that WhatsApp can encourage language interaction among participants, this case study illustrates that students' participation and interaction cannot be ensured by the mere use of the platform, but relies heavily on task design. In addition, the careful selection and the styling of the language activities is key for stimulating other interactions, such as peer-to-peer feedback.

Summing up, this case study explored the use of WhatsApp by a group of German language learners and paid analytic attention to learners' participation, sharing practices and interactions in the online environment. This study also provided an empirically evidenced account of how WhatsApp was used by adult learners and their teachers for language learning and teaching purposes in the unique and under-researched educational context of ACL. In line with the findings reported in this study, it is argued that the mere use of WhatsApp cannot guarantee either communicative or social interaction among participants. Moreover, inflated expectations that WhatsApp can generate more interaction in language settings because of its communicative use in everyday life are questioned and the educational value of this platform and its appropriateness as a teaching and learning environment need to be further investigated.

6   Discussion

The previous two chapters have reported the two case studies that comprised this thesis. This chapter critically discusses the two case studies and their related findings presented in Chapters 4 and 5. First, Section 6.1 discusses adult learners' attitudes to and perceptions of using Facebook and WhatsApp for language learning. Students and their teachers' participation across the two case studies of this thesis are outlined in Section 6.2. Then, Section 6.3 examines how the teachers used both social media platforms to implement language learning activities as well as how the students interacted using the online platforms. Finally, Section 6.4 reviews the affordances of Facebook and WhatsApp and discusses the extent to which their use can support student-to-student and teacher-to-student interaction.

6.1   Students' perceptions of using Facebook and WhatsApp in their learning

One of the aims of this PhD thesis was to examine adult learners' perceptions of using Facebook and WhatsApp for language learning. Based on their responses to questionnaires and interviews, participants in both groups demonstrated positive attitudes towards the use of social media platforms as a means of supporting their language learning.

Self-report data across the two case studies (see Chapter 4 and 5) indicate that there is a high degree of commonality in terms of the potential and perceived impact of Facebook and WhatsApp on students' language development, their social relationships as well as their views on online interaction. Both Facebook and WhatsApp were perceived as beneficial in terms of expanding the limited class-time and enabling learners to become more exposed to the target language. Regarding students' reported language gains, participants in both groups stated that the use of social media platforms helped them enhance key areas of their language learning (i.e. writing and reading skills, grammar, and vocabulary knowledge). Both learners and their teachers reported that Facebook and WhatsApp positively affected the social relationships amongst the members of the group and helped build a sense of community within the online environments. As far as online interaction is concerned, participants' views indicate that both platforms offered an immediate and easy way to interact online.

Similar findings were reported in other studies that investigated students' attitudes and perceptions towards the use of Facebook and WhatsApp as a means of facilitating their language learning (Barrot, 2018; Manca & Ranieri, 2016) (see Chapter 2). However, as Blattner and Lomicka (2012) pointed out, these positive results may be attributed to the

novelty of Facebook and WhatsApp and/or to participants' interest in using social media. Moreover, the fact that these positive results rely on self-reported data tends to lessen the conclusiveness of these findings. Most importantly, the observation and analysis of participants' online activities, as discussed in Chapters 4 and 5, reveal what appears to be a mismatch between learners' perceptions of, and their actual participation and sharing practices in the online environments. Whilst learners in both groups reported that the use of Facebook and WhatsApp had a positive impact on their skills in the target language, enhanced their social relationships and generated more engagement and interaction amongst the members of the group, the evidence from the analysis of the online data (both through the use of the CoI framework and the framework for the analysis of sharing practices) only partly reflected this. In fact, online data revealed a pattern of participation that is reactive in nature with limited contributions online, which predominately focused on the completion of the tasks introduced by the teachers.

This mismatch between learners' perceptions of the potential role of Facebook and WhatsApp and their visible participation in both online environments emphasises the importance of measurements such as students' online contribution rates, observation of their online activities, and analyses of students' sharing practices (Niu, 2017), which have been used in this thesis. The methodological contributions of this thesis address the gap in knowledge left by studies that have focused on self-reported data and examined students' satisfaction levels and perceptions of social media use for learning purposes, rather than on the actual practices of learning and teaching and on how learners and teachers participate in these online environments and interact with each other. In this thesis, analysis of online data along with interviews were used as a way to capture patterns of participation in Facebook and WhatsApp respectively. These patterns are discussed in the following section.

6.2 Participation in Facebook and WhatsApp

One of the aims of this thesis was to explore how students participate in the online environments when used for language learning purposes. To examine this, the CoI framework (see Section 3.4.2) and the framework for the analysis of sharing practices in social media (see Section 3.4.3) were used. Interview data were scrutinised through the lens of these analytical frameworks to provide more insight into the results derived from the online data and to identify the reasons why learners demonstrated specific participation patterns in the online environment (see Section 3.4.4). This section offers a

synthesis of the main findings and critically examines the differences and commonalities across the two case studies of this thesis.

6.2.1 Students' limited contributions

The evidence presented in both case studies suggests a pattern of participation that was reactive in nature and was characterised by a low contribution rate. Most of students' contributions were either replies to previous conversations or responses to the activities posted by the teachers. Learners from both groups rarely took the initiative to contribute to the online environment by starting a new topic, sharing learning resources and/or interacting with their peers. Students' low participation rate has also been reported in other studies related to Facebook use for language learning (see Kasuma, 2017; Leier, 2017; Naghdipour & Eldridge, 2016; Sampurna, 2019). For example, Naghdipour and Eldridge's (2016) research showed that students' participation was limited to completing their assignments, while in Kasuma's (2017) study fewer than half of the students participated visibly in the online environment.

The role of the teacher in the online environments was identified as a key factor affecting students' participation. Adult learners in both groups perceived that only the teacher had the authority to initiate conversation in the Facebook and WhatsApp groups. This echoes perceptions of the role of the teacher in the face-to-face classroom setting and highlights the different dynamics of participating in social media for language learning as compared to Facebook and WhatsApp use for informal everyday communication.

Other than the role of the teacher, reported lack of confidence in posting messages using the target language has emerged from some responses in the interviews as another reason that might explain students' limited contributions online. Time was another factor that according to students (especially in the Facebook group) affected their participation in and contribution to the group.

Related to this, the evidence presented in this thesis points to a variety in the levels of individual online contributions in both groups which, their testimony suggests, is related to language proficiency and consequent lack of confidence. In both case studies two students (i.e. Louis and Emma) had high levels of online contributions, while other students (e.g. Matthieu, Petra and Klaus) shared only a few posts throughout the group's activity. The observed disparity in students' contributions is not surprising. However, Louis and Emma seemed confident in sharing voluble posts using French and German respectively, and their overall participation was notably high. It is reasonable to assume that in online

environments, as in any physical classroom, students' participation varies. Similar observations were reported in Sampurna's (2019) study which revealed students' unequal participation and contribution and also examined the ways that active learners' reacted to their inactive peers. In this study (Sampurna, 2019), some active learners were frustrated by their peers' inactivity, while others encouraged their less active peers to contribute by asking for their input. In the studies presented in this thesis, a phenomenon that I call "the dominant participant" was evident in both case studies, and particularly in Case study 2 (see section 5.5.2), students' active participation resulted in some tensions between the WhatsApp group members. This is discussed further in the next section.

6.2.2 The dominant participant phenomenon

The online data analysis pointed to the presence of a dominant learner in each of the two groups. In the Facebook group, one student, Louis, was the most active learner posting almost a third of all the replies (n=24, 32.4%) to the French teacher's initial posts. Similarly, Emma shared the highest number of messages (n=52, 21.4%) in the WhatsApp group. The presence of a dominant student led to some visible tensions in Case study 2 as discussed in the next paragraph, but it did not create any noticeable issues among the members of the Facebook group.

In the WhatsApp group the dominant participation of a particular student was negatively perceived by the other learners (see Section 5.5.2). Based on these observed tensions and on concerns expressed by other students in the interviews, it is evident that students' motivation and confidence in contributing to the online environment is affected when confronted with more confident, voluble, and advanced learners. Moreover, the presence of a dominant participant in the WhatsApp group seemed to inhibit other students' participation, hinder open communication within the group and potentially weaken group cohesion.

Teachers in both groups noticed the presence of these dominant learners and made efforts to maintain a balance by following different strategies as a way to moderate students' participation. Chapter 4 showed that the French teacher frequently added comments to her initial posts and used the "tag" feature (linking a user's profile to a post) to encourage less active learners to participate in the discussion. In some instances, she also replied directly to less active learners' comments aiming to open-up the discussion and explicitly prompted them to share their contributions. The German teacher on the other hand, as shown in Chapter 5, did not explicitly encourage less active learners to participate

in the online environment. Instead, he attempted to moderate the length of the dominant student's contributions by setting a limit on the length of replies (e.g. only two sentences) when sharing the task instructions. The analysis showed that neither of the above strategies ensured balanced participation amongst learners in either group, nor were they successful in moderating the dominant students' lengthy contributions.

The discussion above suggests that dealing with dominance was a challenge that afflicted both social media environments in this study. Further research is needed to establish whether the presence of dominant participants in social media platforms is a particular problem and whether it inhibits the participation of other students or provokes tensions between group members.

6.2.3   Teacher authority

Key aspects related to the teachers' roles and participation were found to be similar in both case studies. The analysis of teachers' online contributions using the CoI framework, revealed a strong teaching presence in both groups. Contributions related to all three categories of teaching presence (i.e. instructional design and organisation, facilitating discourse and direct instruction) were evident in the Facebook (n=116, 38.2%) and the WhatsApp (n=138, 25.6%) group (see Sections 4.3 and 5.3). Along similar lines, the analysis of participants' sharing practices (see Sections 4.4 and 5.4) showed that both teachers had a central role in initiating, coordinating, and participating in the online group and they were the most frequent instigators of interaction and the most active participants with regard to the number of posts, chat entries and comments they shared. The centrality of their roles was noticeable from the early stages of the project, and participation by students relied heavily on their efforts to initiate conversation. Learners' perceptions that only the teacher had the authority to initiate conversation and their resultant passivity (see Section 6.2.1), further emphasise teachers' dominant roles in both online environments. These perceptions seem to be grounded in students' face-to-face educational experiences. In other words, as Thorne (2003, p. 58) argued, *"most forms of internet-mediated educational activity are embedded in and functionally dissassociable from other habituated and everyday communicative contexts".* Consequently, students' beliefs are related to the power dynamics within a non-virtual educational setting (i.e. a classroom), where in some cases the teacher leads the learning process.

Nonetheless, other studies have highlighted the need for a high level of teacher support when using social media platforms for language learning (see Kasuma, 2017; Leier,

2017; Lin et al., 2016; Naghdipour & Eldridge, 2016; Sampurna, 2019). In particular, Naghdipour and Eldridge's (2016) study revealed students' inclination to respond to the teacher's rather than their peers' posts, while interaction amongst the students was limited. In Sampurna's (2019) research, learners' inactivity resulted in an increased level of support and intervention by the teacher. Similarly, Kasuma's (2017) study highlighted the preference of students for teacher-led activities and the importance of the teacher's presence as an authority figure who facilitated learning and kept the online group lively.

In both groups, the teachers used a variety of learning activities (see Sections 4.5 and 5.5) prompting their learners to participate in the discussion and share their contributions using the target language. The next section discusses the activities uploaded by the two teachers and explores how the students participated and interacted in these activities in the online environments provided by Facebook and WhatsApp.

6.3   Learning activities and students' engagement

To examine how learners and their teachers participate in Facebook and WhatsApp groups for language learning purposes, this study paid analytic attention to the learning activities uploaded by both teachers and to students' engagement with these.

Following the framework for the analysis of sharing practices in social media, the uploaded activities were analysed on three different levels, namely, *"selecting"*, *"styling"*, and *"negotiating"* (see Section 3.4.3). In terms of *selecting*, the activities uploaded by teachers in both studies revealed their preference for activities that aim to enhance students' writing competence and vocabulary acquisition. Moreover, most of the selected activities in both groups mainly focused on the decontextualised practice of language form and prompted students to share their individual contributions using the target language. Apart from these commonalities, the online data suggests a clear difference in the teachers' strategies when planning and designing the learning activities. Specifically, the French teacher used a range of externally sourced visual material (i.e. images) and digital content (i.e. YouTube videos and links) in her uploaded activities. On the contrary, the German teacher's selections consisted only of chat entries (text messages) without any multimodal material (e.g. videos, YouTube videos, audio files, images, links, office documents, etc.). Even though WhatsApp allows users to share multimodal resources, the above selections can be attributed to the fact that this instant messaging app is mainly used as a written medium.

As regards *"styling"*, both studies showed a high degree of commonality in the teachers' language choice when introducing the learning activities. There were some instances where both teachers made exclusive use of the target language when introducing the activities. However, both teachers tended to style their instructions in both English and the target language to ensure that the learners had understood the language task and what was expected from them. Whenever the German teacher shared activities with a certain degree of complexity or which required students to provide peer-feedback, he styled the instructions in English. The French teacher on the other hand when sharing multimodal material (i.e. images, YouTube videos, and links), always accompanied her activities with text (either in English or in French) as a caption of the uploaded digital content. This *"styling"* choice aimed to provide the instructions for each activity, and in some instances, to reinforce students' understanding of the uploaded material. Another difference in teachers' styling choices concerns their use of emojis. The German teacher always used a smiley face emoji (🙂) at the end of his posts when introducing an activity. This emoji was used to set a positive tone for the textual instructions and encourage students to engage with the uploaded activities. On the contrary, the French teacher only used emojis twice when introducing the language activities to the Facebook group. Notwithstanding that teachers' different use of emojis could be indications of personal preferences, another plausible explanation is that these styling choices are associated with non-identical norms of communication rooted in each platform. In other words, it is common for WhatsApp users to use emojis when communicating in everyday life, while Facebook users tend to use the "like" feature provided by the platform. This point is also discussed in relation to learners' styling choices in the following paragraph.

The analysis of students' sharing practices reveals *"styling"* differences regarding their emoji use across the two cases. Specifically, the frequency with which emojis were used in the Facebook and the WhatsApp group was dissimilar. Participants in the WhatsApp group used emojis in 65% of their chat entries, while such styling choices were not observed with the same frequency in the Facebook group (where emojis accompanied only 20.7% of posts). However, French language learners "liked" (n=47) their teacher's and their peers' posts in the Facebook group. The above difference in participants' styling choices can be attributed partly to their personal sharing practices and partly to the differences between the two platforms and the features they provide. One interpretation of participants' different use of paralinguistic features in this study relates to the non-identical nature of

the online environments and the features they provide. For instance, in Case Study 2, the nature of WhatsApp, which is a messaging application, and its users' orientation to different kinds of interpersonal functions affected participants' styling choices and resulted in frequent emoji use to accompany the content of their written contributions. In the Facebook group, the use of these paralinguistic features was less frequent. Nevertheless, participants used the "like" feature (not available on WhatsApp), which as Facebook describes it, is an "easy way to let people know that you enjoy it [the post] without leaving a comment" (Facebook, 2022). Most importantly, these different styling choices and particularly the use of the "like" button in the Facebook group seemed to inhibit learners' language production. Considering that second language learning relies on output production (Swain, 1985), this feature obviated students' need to use the target language. This "easy way" of interacting with a post on Facebook, "without leaving a comment", appears to be a limitation rather than an affordance when using the platform for language learning.

In terms of *negotiating*, in both studies emojis were used to set a positive tone that compensated for the lack of face-to-face cues (e.g. physical cues and vocal intonations). Moreover, the use of these paralinguistic features and their pragmatic functions contributed to the development of learners' social presence (see Garrison, 2011; Garrison et al., 1999, 2010; Garrison & Anderson, 2003). In other words, learners' use of "positive" emojis created a friendly atmosphere which has been argued to boost group rapport (Li & Yang, 2018) and contribute to communication development (Alshenqeeti, 2016). To the contrary, the absence of emojis (both in the WhatsApp and the Facebook group) is best conceived of as an indicator of orientation to the norms of formal and impersonal communication (see Section 5.5.2). In other words, the absence of emojis from one's message can convey a more formal tone.

In relation to students' engagement with the learning activities, findings from both studies reveal certain commonalities in the sense that students' participation was limited to responding directly to the teacher. Moreover, a number of the activities selected and introduced by both teachers focused on the decontextualised practice of language and did not generate any substantial language interactions amongst the members of both groups. In the WhatsApp group, most of the selected activities consisted of text messages and required students to compose sentences using the vocabulary provided and share their written contribution. In the Facebook group, the French teacher used externally sourced

multimodal material and prompted the learners to elaborate on the uploaded resources and share their textual contributions. However, none of the above sharing choices seemed to lead to substantial student participation.

Simple writing tasks that required students to compose sentences using the target language generated low number of responses, while peer to peer interactions were very limited with the exception of one activity (i.e. "Guess the city activity", see Section 5.5.4) in Case Study 2. This activity, which resembled a game (or a quiz), prompted students to draw on their personal knowledge, share their own interpretation of the clues and negotiate these clues with their peers. To reach the correct answer, learners required not only to share their individual responses, but also to read their peers' contributions to deciphering the clues and then provide their answers. This activity generated communicative interactions among the WhatsApp group members since learners challenged each other's guesses and suggested alternative answers to the shared description. The comparison between the activities that simply focused on abstract language production and those that allowed learners to explore, discuss and meaningfully construct relevant concepts highlights the importance of task design in these online environments with respect to learners' engagement. This comparison also reveals how the design of the uploaded activities (in terms of selecting and styling) influences the ways in which learners participate and interact in social media platforms. The analysis of students' online contributions using the CoI framework (see Sections 4.3 and 5.3) also revealed their limited cognitive presence within the Facebook and the WhatsApp group. In addition, even though the first two phases of cognitive presence (i.e. triggering event and exploration) were evident in both groups, learners' contributions rarely reached the integration phase, while no contributions related to "resolution" were identified (see Sections 4.3 and 5.3). Based on the discussion above, it seems probable that the design of tasks uploaded in both groups influenced the rate at which and the degree to which learners participate in the online environment and their cognitive presence.

Another finding related to students' engagement with the uploaded activities concerns their language use. It was evident that learners in both groups predominantly used the target language (i.e. French or German) when sharing their contributions. This practice enabled them to use the language, create outputs and be exposed to the target language by seeing others' posts. According to the output hypothesis, producing output plays a crucial role in developing the second language (Swain, 1985). Moreover, the output

hypothesis emphasises the role of comprehensible output (language production), through which the learner's interlanguage can be stretched (Swain, 1985). The uploaded activities pushed students to produce comprehensible output since they tried to express themselves in the target language and to be understood by an audience. Moreover, students' responses to the questionnaires and the interview data suggest that Facebook and WhatsApp enabled them to develop their skills in the target language (see Section 6.1). However, participants' perceptions and their produced output do not offer conclusive evidence with regards to learners' language gains.

6.4 The impact of Facebook and WhatsApp on interaction

Based on the hypothesis that social media could support the basic language development mechanisms suggested by interaction theory, this thesis examined the extent to which these online environments can facilitate (or impede) language learning interaction in adult education contexts. This section discusses the affordances of Facebook and WhatsApp and examines the opportunities these platforms can provide in terms of student-to-student and teacher-to-student interaction.

The analysis of the online data suggests that some affordances are common to both platforms. Participants in both case studies were able to use the platforms and share their contribution without any temporal and spatial constraints. Evidence from the analysis of participants' sharing practices highlight that both Facebook and WhatsApp can enable both synchronous (or near synchronous) and asynchronous communication. In Case Study 2, the archived nature of WhatsApp enabled participants to retrieve previous chat entries retrospectively and re-read as well as decipher what other users had shared at any point. Similarly, in Case Study 1, the archived nature of Facebook enabled some non-contributing learners to engage vicariously by reading other members' contributions even if they did not actively contribute to the online discussions (see Section 4.5.2). These learners expressed in the interviews a preference for receptive learning and perceived reading their peers' posts in the target language as beneficial for their language development.

With regard to student-to-student interaction, online data from both studies suggest that these communicative encounters were limited. On some occasions, learners engaged in peer-to-peer social interactions in the Facebook and the WhatsApp groups respectively. These forms of interaction are also associated with "social presence" as conceptualised in the CoI framework (Garrison, 2011). The online data analysis performed using CoI revealed that social posting (i.e. social presence) comprised a clear majority

(n=146, 48% in the Facebook group; and n=311, 57.7% in the WhatsApp group) of learners' and the teachers' online contributions (see Sections 4.3 and 5.3). In addition to the insights derived from the CoI framework, the analysis of participants' sharing practices in both studies identified all three categories of indicators (i.e. interpersonal, open and cohesive communication) (see Garrison, 2011; Garrison et al., 1999, 2010; Garrison & Anderson, 2003). Specifically, in some instances, learners' acts of sharing personal information (self-disclosure) and their use of emojis and "likes" (affective expression) contributed to the development of interpersonal communication, which created a positive climate and a sense of belonging to the group (Garrison, 2011). In fewer instances, students explicitly referred to their peers' messages and complimented them on their uploaded content. Such sharing practices are indicators of open communication within the online environments. Some students also addressed other peers by name, which is an indicator of group cohesion and constitutes the third component of social presence. Interview data from both case studies also indicate that the learners and their teachers perceived using Facebook and WhatsApp as beneficial for the development of their social relationships. However, peer-to-peer social interactions were very limited in the WhatsApp group, and even less apparent in the Facebook group.

Another form of student-to-student interaction concerned peer feedback. Some activities posted by teachers on Facebook and WhatsApp required students to provide feedback to their peers. As part of task instructions, both teachers explicitly asked their students to comment on others' contributions. The online data analysis revealed no peer-to-peer feedback interactions, nor any comments related to their peers' language use. Students in both groups demonstrated reluctance to engage with these instructions. Interview data from across the studies revealed three reasons why students did not provide feedback to their peers. First, students did not feel comfortable about the process of providing peer-feedback and stated that they were not entitled to provide peer-feedback considering their limited capabilities in the target language. The second reason is related to the German learners who perceived that only the teacher had the authority to provide feedback. The third reason concerns the "*styling*" of the instruction in these types of activities. Both teachers followed similar strategies when introducing activities that involved peer-feedback. The German teacher explicitly asked the students to *"comment on their peers' sentences and / or correct them"*. Similarly, the French teacher asked learners to *"comment on the work of others"*, *"try to correct the linguistic errors identified"*, and

"review the content of their peers' contributions". These instructions prompted students to provide feedback in an overt way, and the fact that no participant in either group responded to these overt requests suggests that they are not effective as a means of encouraging students to engage in such interactions.

Another form of interaction identified in this thesis concerns teacher-to-student feedback interactions, which appear to be another element of the interactionist approach (see Section 2.2). The two teachers followed contrasting strategies when providing feedback to their language learners. The German teacher provided explicit corrective feedback to all students who shared their contributions in the WhatsApp group by replying to each student's chat entry and used bold font to accentuate the linguistic errors identified in learners' contributions. Interview data suggest that the German teacher perceived the process of providing feedback as "part of his job" and the fact that his comments were visible on WhatsApp did not seem to affect his practice of giving feedback. On the contrary, the French teacher never corrected her learners' linguistic errors and perceived the process of providing feedback through Facebook as a challenge because everyone's comments were visible in the online environment. The French teacher revealed at interview that, in some instances, she did not provide feedback to active students because she did not want to discourage less active or less proficient learners from participating. Her feedback practice seems to have been influenced by her effort to adapt to what she saw as English practice. Specifically, according to the French teacher, in England, teachers tend to praise their students regardless of their mistakes to help them feel stronger and make progress. The above discussion shows that the teachers' predefined expectations as well as their perceptions towards providing feedback influenced the ways they used Facebook and WhatsApp to deliver feedback and resulted in contrasting teacher-to-student feedback interactions.

This chapter has discussed the main findings emerging from this PhD research and explored the differences and commonalities across the two case studies of this thesis. The following chapter provides a summary the major findings in response to the research questions of this thesis and a holistic discussion of the contributions made by this doctoral research, including the implications for practice and future work beyond this PhD.

7   Conclusion

The previous chapters have described the relevant research, methodologies, methods, and results of the research reported in this thesis. This final chapter provides conclusions in response to the research questions. First, Section 7.1 discusses the overarching aims of my doctoral research studies, followed by Section 7.2 which provides a synthesis of the main findings in response to the research questions of this thesis. A discussion of the novel contributions to knowledge is offered in Section 7.3. Then, Section 7.4 outlines the methodological contributions of this research, and Section 7.5 discusses the limitations of this thesis and suggests considerations for future research. Finally, Section 7.6 discusses implications for practitioners.

7.1   Aims of the thesis

The advent of social media platforms has influenced the ways in which people communicate in everyday life and attracted scholarly attention relating to the potential of these tools in language learning settings (Barrot, 2018; Kartal, 2019). Despite such developments, there is still a lack of strong evidence to support the claim that such online environments can be integrated into language pedagogy to facilitate students' and teachers' language learning and teaching (see Chapter 2). From a methodological standpoint, as discussed in Chapters 2 and 3, previous research relied heavily on self-reported data and focused on student satisfaction as a metric of learning rather than the actual learning process. In addition, studies that incorporated the scrutiny of online data into their research designs presented important methodological limitations, mainly due to the lack of established analytical frameworks. These gaps in existing research (discussed in Section 2.1.4) highlight the need for online observational evidence that can contribute to a more systematic understanding of how social media might be used for language learning and teaching, as well as providing concrete suggestions for developing related pedagogic practice.

Due to their interactive nature, it may be easy to assume that social media platforms can potentially support the basic language development mechanisms suggested by interaction theory (see Section 2.2). According to this commonly accepted theory, there is a robust connection between interaction and learning while Long's (1983b, 1990) interaction hypothesis suggests that the development of second language learning is achieved through communicative encounters and negotiation for meaning. With this hypothesis in mind analytic attention was focused on the opportunities that social media

(i.e. Facebook and WhatsApp) can provide in terms of student-to-student and teacher-to-student interaction (including peer-to-peer feedback interaction). Specifically, this thesis set out to investigate the use of Facebook and WhatsApp by two groups of language learners in an adult education centre in the UK. It examined students' perceptions of using these platforms for language learning purposes, and most importantly, investigated to what extent and how learners and teachers participate in these online environments, and interact with each other. This PhD thesis sought to address the following research questions (RQ):

RQ1: How do learners in the ACL context perceive the use of Facebook and WhatsApp in relation to their language learning?

RQ2: How do learners and teachers in the ACL context participate in Facebook and WhatsApp platforms for language learning purposes?

RQ3: To what extent does the use of Facebook and WhatsApp facilitate (or impede) language learning interaction in the ACL context?

To carry out this investigation, and answer the research questions, a case study research design was developed (see Chapter 3). That involved a combination of data collection and analysis methods. Pre- and post-questionnaires as well as interviews were used to examine students' perceptions and experiences of using social media for language learning purposes. Systematic online observations were used to determine how the learners and teachers participated in these online environments and to examine the interactions that took place in both the social media platforms under scrutiny. Primary attention was placed on the analysis of the online data, by combining the CoI framework as well as Androutsopoulos' (2014) empirical framework for the analysis of sharing practices in social media adapting both to the purposes of this study. Interview data were used to capture participants' views and feelings towards using social media for language learning as well as to corroborate the observations derived from the online data and identify the reasons why learners demonstrated specific participation patterns in the online environment. The methodology chapter (Chapter 3) provides a full description of how a case study methodology, employing a pragmatic mix of data collection and analysis methods, was used to address the research questions of this PhD thesis.

Overall, the findings offer an empirically grounded understanding of how Facebook and WhatsApp can be used in an adult language learning setting and lead to specific recommendations and implications for practice which will be discussed in Section 7.6. In the following sections a synthesis of the findings with a focus on how they address the research questions of this thesis and its contributions to knowledge is provided.

7.2 Synthesis of Findings

Informed by interaction theory and based on the hypothesis that social media platforms could offer opportunities for communicative interaction (see Section 2.2), this thesis set out to explore the extent to which Facebook and WhatsApp might provide favourable environments for second language learning. The following sections provide answers to three research questions.

7.2.1 How do learners in the ACL context perceive the use of Facebook and WhatsApp in relation to their language learning?

Learners expressed enjoyment and viewed their use of social media for language learning in a positive light. In addition, learners perceived that the use of Facebook and WhatsApp had a positive impact on the development of their language skills, expanded the limited class-time, enabled them to become more exposed to the target language. Based on students' testimonies, both platforms facilitated their participation and generated more engagement and interaction amongst the members of the group. Such positive perceptions are not particularly striking since similar findings have been reported in various studies that examined students' perception towards using Facebook and WhatsApp for language learning (Barrot, 2018; Kartal, 2019)(see Sections 2.1.1 and 2.1.2). However, students' positivity can be attributed to the novelty of using social media for language learning purposes and their interest in using these platforms in their everyday life (see Blattner & Lomicka, 2012). Most importantly, the perceived benefits that Facebook and WhatsApp had for students' language learning did not correspond to their actual participation in both online environments. This suggests a mismatch between the perceived potential of Facebook and WhatsApp and students' actual participation practices. This also emphasises the importance of methods (such as online observations) which capture participants' actual online activities, when investigating the potential of these tools in language learning settings and highlights one of the methodological contributions of this thesis which are further discussed in Section 7.4.

7.2.2 How do learners and teachers in the ACL context participate in Facebook and WhatsApp platforms for language learning purposes?

The analysis of the online data highlights that participation among individual students varied, but overall low contribution rates were recorded. In addition, learners' participation relied heavily on the teachers' efforts to initiate conversation. Even though the majority of the studies in the literature suggest that social media can enhance learners' participation (Aburezeq & Ishtaiwa, 2013; Barrot, 2018; Jin, 2015; Kartal, 2019; Manan et al., 2012; Omar et al., 2012; Özdemir, 2017; Peeters, 2018; I. T. Wang et al., 2017), some authors reported similar findings related to low participation (Akkara et al., 2020; Ekoç, 2014; Lantz-Andersson, 2016; M. H. Lin et al., 2013) and teachers' key role in initiating conversation (Keogh, 2017; Sampurna, 2019; Tran, 2018). One reason that could explain learners' pattern of participation is a shared perception that only the teacher had the authority to initiate conversation in the online environment. Such perceptions suggest that the dynamics of participating and sharing when using Facebook and WhatsApp for language learning, do not align with those of informal everyday use. People use social media in everyday life to get in contact with new people, keep in touch with their friends and socialise (Brandtzæg & Heim, 2009). Moreover, the vast majority of Facebook (88%) and WhatsApp (82%) users in the United States use these platforms to maintain contact with friends and family (Statista, 2021b; Tankovska, 2021). The motivational reasons that drive people to use social media in everyday life clearly differ from those behind using these online environments for language learning purposes. This mismatch between the everyday use of social media and their utilization in language learning has also been documented in recent literature (see Section 2.1). For instance, the term "digital dissonance" has been introduced to describe the tension associated with learners' adoption and use of Web 2.0 tools across educational and non-educational settings (Clark et al., 2009; Josefsson et al., 2016). Similarly, Sauro and Zourou (2019, p. 2) used the term *"digital wilds" to emphasise "the dynamic, unpredictable, erratic character of technologies, especially those not designed for learning purposes and warn[ed] against a pedagogical use in a way that overcontrols this wilderness"*. In addition, due to students' informal use of social media platforms in everyday life, they may not readily embrace formal activities in these online environments (Reinhardt, 2019; Reinhardt & Zander, 2011).

Another contributing factor to learners' limited online participation identified in this doctoral research was their lack of confidence in posting messages using the target

language. As highlighted in the WTC literature (see Section 2.3), learner-related factors such as their proficiency level in the target language and their confidence in using the L2 can influence learners' WTC (Lee & Chen Hsieh, 2019; MacIntyre et al., 1998; Nematizadeh & Cao, 2023; Pawlak et al., 2016; Zhang et al., 2018). Similarly, in this doctoral research, learners reported a lack of L2 confidence due to their proficiency level, which can explain their patterns of participation in the online environments.

Other than the finding concerning the pattern of participation across the two studies, the analysis emphasised the critical role the teachers had in initiating, coordinating, and participating in the online discussion. The teachers were the most active participants as measured by the number of posts, chat entries and comments they shared, as well as their strong teaching presence within both online environments (see Sections 4.3 and 5.3).

The analysis of the online data also pointed to different participation levels and types among the members of both groups. It also featured two dominant learners prominently and highlighted a tension in the WhatsApp group members and similar but less acute issues in the Facebook group. Learners' perceptions of their peers' participation can affect their L2 WTC (Zhang et al., 2018) and in the WhatsApp group the presence of a dominant participant seemed to impede other students' participation in the online environment (see Section 6.2.2). Consequently, dealing with dominance was a dilemma that afflicted both the social media environments used in this study. Both teachers recognised and made efforts to resolve these issues and maintain balanced participation amongst the participants. Their attempts had no discernible effect on dominant learners' sharing practices or other students' participation. Nonetheless, further research is needed to determine whether the presence of dominant participants in social media platforms is a common phenomenon and investigate its potential impact on participation by other learners.

7.2.3 To what extent does the use of Facebook and WhatsApp facilitate (or impede) language learning interaction in the ACL context?

This study revealed some affordances related to the use of Facebook and WhatsApp. Participants in both platforms were able to use the online environments without any temporal and spatial constraints. Moreover, the analysis of the online data shows that the teachers and the learners used the affordances of both platforms to interact synchronously (or near synchronously) and asynchronously. This suggests that these digital tools offered opportunities for modes of communication and interaction that are not

always possible in a traditional face-to-face environment. In addition, due to the archived nature of social media, participants had the opportunity to retrieve previous posts retrospectively, re-read what other users had shared and contribute to the online discussion at any point. Similarly, less active learners in the Facebook group were able to read the uploaded content and their peers' contributions even if they did not actually contribute to the online environment. This shows that these platforms could offer opportunities for engaging with the online discussions vicariously and emphasises the potential of indirect forms of participation within such environments that could offer opportunities to students to extend, connect and expand their learning in other chronotopes.

With regard to the uploaded activities and students' engagement, both teachers selected activities that mainly focused on the abstract practice of language form. These activities did not generate observed peer-to-peer interaction, and students' engagement was limited to providing individual responses to a post. Learners also demonstrated a reluctance to provide peer feedback which is a form of peer-to-peer interaction. However, one activity (i.e. "Guess the city activity") which resembled a game and focused on meaningful communication about learner's personal experiences, prompted them not only to share their individual responses, but also to read their peers' contributions, decipher the clues and then provide their answers. This type of activity resulted in a more meaningful engagement and provoked communicative peer-to-peer interactions.

Findings also indicate that learners' acts of sharing contributed to the development of interpersonal communication amongst the members of both groups and created a positive climate and a sense of belonging to the group. Nonetheless, learners' contributions related to interpersonal communication were mainly posted as replies to the language tasks uploaded by the teacher. The analysis of participants' sharing practices also showed that students' acts of sharing personal information (= self-disclosure) and their use of emojis and "likes" (= affective expression) contributed to their social presence. To the contrary, the use of "likes" seemed to inhibit learners' language production and peer-to-peer interactions in the target language.

Indicators of open and cohesive communication were also evident in both groups (see Garrison, 2011). Specifically, learners addressed other peers by name, explicitly referred to their peers' messages and complimented them on their uploaded content.

Nevertheless, these interactions were limited in the WhatsApp group, and altogether less apparent in the Facebook group.

Overall, the above discussion suggests that what is being shared, and how this is done influences the ways in which participants engage with the shared content. In other words, selecting and styling the activities within the Facebook and the WhatsApp groups can affect learners' participation, their social presence, and peer to peer interactions in the online environment.

7.3 Unique contributions to knowledge

A major contribution of this thesis is its focus on the use of Facebook and WhatsApp in the under-researched ACL context. Although previous research has examined the effectiveness and suitability of Facebook and WhatsApp in various educational contexts, to my knowledge, there is no published research which focuses on the use of these platforms by groups of older adults (see Chapter 2). For instance, a systematic literature review around the use of Facebook in language pedagogy showed that almost all of the studies examined (87.8%) were carried out in higher education, while no studies were identified in the context of adult education (Barrot, 2018). Similarly, another literature review (Kartal, 2019) that explored the effectiveness of WhatsApp in the field of language learning and teaching revealed that most of the studies (65%) were conducted in higher education contexts, and none of them examined the effects of WhatsApp in adult education. This thesis went beyond the traditional formal classroom and university education and explored how learning takes place in the non-conventional ACL context. ACL is a different environment from higher education in important respects. Learners are more mature (often of retirement age), and they are studying purely for personal interest, rather than to obtain formal qualifications. In addition, their learning is not assessed or graded, while they are much less exposed to the target language than they would be at university or other formal language learning contexts. Therefore, situating this research with learners in the ACL context constitutes a unique contribution of this thesis and addresses this gap in the literature. This thesis values the adult learners in non-conventional and understudied educational settings, offering an empirically grounded understanding of how Facebook and WhatsApp can be used in ACL contexts.

The second contribution of this thesis is related to learners' participation and interaction in social media. Several studies have shown that Facebook and WhatsApp can facilitate learners' participation and interaction (see Andujar, 2016; Barrot, 2018; Karal et

al., 2017; Kartal, 2019; Sirivedin et al., 2018) (see Sections 2.1.1 and 2.1.2). On the contrary, this doctoral research revealed students' reactive and limited participation, while student-to-student interactions in particular were limited. Even though this thesis provided evidence that learners were able to take part in synchronous (or near synchronous) and asynchronous communication and interaction as well as access opportunities for vicarious learning, the findings highlight the importance of task design and emphasise that the mere use of Facebook and WhatsApp cannot guarantee learners' participation and interaction. It is the effective selection and the styling of the language activities that can potentially stimulate more engagement and student-to-student interaction. In addition, the fact that Facebook and WhatsApp have particular affordances cannot either assure students' participation and interaction or guarantee that all learners will perceive and employ these affordances in the same way (see Tagg et al., 2017). On the contrary, *"affordances emerge from the process of interaction between a particular technology and a user"* (Tagg et al., 2017, p. 7). Consequently, inflated expectations that these digital platforms can generate more engagement and interaction in language settings because of their communicative use in everyday life are unwarranted and the educational value of these applications as well as their appropriateness as teaching and learning environments needs to be further investigated.

Overall, this research has offered valuable empirical evidence of learners' and teachers' participation in and contribution to Facebook and WhatsApp groups in the context of adult language learning and teaching. It also revealed some of the challenges that language learners and teachers face while using social media for language learning purposes.

7.4 Methodological contributions

In addition to contributing to current knowledge about the use of Facebook and WhatsApp for language learning, this research has also made several methodological contributions worth noting. The first methodological contribution of this thesis lies in its explicit focus on students' online participation, achieved though the use of a combination of methods, with particular emphasis on systematic online observation. Even though existing research has offered significant insights regarding the benefits and challenges of using social media for language learning, little analytic attention has been paid to students' actual online participation (see Chapter 2). The lack of qualitative research and the fact that most of the existing research concerning the use of Facebook and WhatsApp for language

learning and teaching is based on self-reported data, point to a methodological gap in the current literature (see Section 2.1.4). In addition, this doctoral research revealed a mismatch between the perceived potential of Facebook and WhatsApp and students' actual participation practices which further emphasises the importance of adopting observational methods to scrutinise the complexities of an online educational environment.

Another significant methodological contribution of this thesis is the combination of two frameworks to analyse participants' sharing practices in Facebook and WhatsApp. Specifically, the CoI framework was used to explore participants' online contributions in terms of social, cognitive, and teaching presence. This widely adopted model of effective e-learning (see Garrison, 2011, 2017) offered valuable insights into the elements and dynamics of participants' online contributions and provided a comprehensive understanding of their online activity. To explore the ways in which learners and their teacher participated in the Facebook and the WhatsApp group in more detail, Androutsopoulos' (2014) empirical framework for the analysis of sharing practices in social media was adapted and used in this study. The use of this framework offered a more in-depth, situated examination of participants' sharing practices in both online environments. Even though previous studies attempted to incorporate online data into their research designs, they presented important methodological weaknesses especially with regards to online data analysis (see Sections 2.1.1.2 and 2.1.2.2). Considering the complexity of online participation and interaction in online environments, it is essential to adopt analytical frameworks to thoroughly examine the ways in which learners and teachers participate in these environments and interact with each other. To my knowledge this is the first study to combine the above frameworks to investigate the complexities of an online educational environment at both a macro-level (i.e. the CoI framework) and a micro-level (i.e. Androutsopoulos' framework) of analysis and scrutinised participants' online participation and interaction in a holistic way.

Finally, the mixed-methods approach followed in this thesis enabled the comparison between the data derived from the pre- and post-questionnaires, systematic observation, and semi-structured interviews. Through this triangulation, stronger arguments and concrete insights were generated to support the findings of this doctoral research.

7.5 Research limitations and future directions

This doctoral research used a rigorous mixed methods approach to unpack participants' perceptions and experiences in using Facebook and WhatsApp for language learning and offered an empirically evidenced account on how they participate in these environments. However, there are several limitations to the study presented in this thesis that should be addressed in future research.

First, this research examined participants' use of Facebook and WhatsApp for language learning but was not set to examine the in-classroom learning that was taking place alongside the activities on the two digital platforms. The learners and their teachers who participated in this research were using these online platforms in parallel with their face-to-face lessons. Consequently, an investigation of their in-classroom learning would have offered a more holistic understanding of how in-classroom activities were extended online, the dynamics among students and teachers, the teachers' practices and pedagogies used. Future research should where possible collect observational data from both in-classroom and online spaces and adopt ethnographic approaches to examine whether social media have any impact on students' in-classroom learning and vice versa.

Second, this research focused on the examination of two social media platforms (i.e. Facebook and WhatsApp). Students' and teachers' experiences in other social media platforms may be different, as the affordances and the features provided by different platforms may vary. As a result, future research may investigate the efficacy of other social media platforms as spaces for language teaching and learning and contribute to the wider effort of gaining an understanding of how social media can be applied to the task of foreign language learning and teaching.

Overall, even though this thesis offered valuable insights into the challenges faced by teachers and learners using social media platforms in adult language learning contexts, the educational value of these platforms and their appropriateness as a teaching and learning environment need to be further investigated. Future research should aim to establish a clear theoretical framework for the integration of social media into the language classroom by developing transparent guidelines and pedagogical strategies which can lead to an effective use of the medium for language teaching and learning purposes.

7.6   Implications for practice

The findings outlined in this thesis have practical implications for educators who are using (or planning to use) social media to support their language teaching. Although the work presented in this thesis focussed on the use of Facebook and WhatsApp in the adult language learning context, it is recognised that many of these suggestions are applicable in other educational contexts and might concern the use of other social media platforms.

The first implication concerns teachers' development and training. This doctoral research offered limited evidence that Facebook and WhatsApp afford language interactions and effectively facilitate language learning. To realise the potential of these platforms' affordances, extensive training for educators is needed as well as extensive time investment on the part of both teachers and learners. Instead of taking for granted that social media platforms will magically boost learners' participation and interaction, it is essential for practitioners to develop professional expertise in using social media for language learning. They could also carefully consider the process of planning, designing, structuring, and implementing educational activities in social media. In addition, and with regards to feedback, this doctoral research revealed teachers' contrasting strategies when providing feedback to their language learners (see Section 6.4). Teachers using social media platforms for language learning will face a decision while trying to replicate a practice that is common in face-to-face contexts, due to the fact that feedback in these online environments remains visible to everyone in the group. In that respect, instead of providing feedback to each learner, teachers could provide overall feedback to the online group, acknowledge students' efforts, identify misconceptions or areas that need developing (e.g. grammar) and offer constructive whole-class feedback. In addition, teachers can provide individual feedback by sending private messages to the students. For instance, teachers could use Facebook Messenger, send a private message via WhatsApp (or even use emails) to provide feedback which is not visible to everyone in the online group. This individual feedback could focus on learners' language use (i.e. error correction), but also aim to acknowledge and praise students' contributions, acknowledge their efforts and encourage them to actively participate in the online environment. Nonetheless, more extensive research is required to explore the effectiveness of the above feedback strategies in social media platforms. Future research could also explore how teachers can effectively provide feedback in these online environments as well as focus on studying the effectiveness of

training, resources, and additional support that might help practitioners use these tools for language learning purposes.

The second implication is related to teachers' and students' shared expectations. The research reported in this thesis revealed learners' limited and reactive participation, which heavily relied on the teachers' efforts to initiate conversation. In addition, learners demonstrated different participation levels and contribution rates. As discussed in Section 6.2.2, dealing with dominant learners might be another dilemma that practitioners are likely to face when using social media environments. In that regard, it is essential for educators to clearly and consistently communicate their expectations for learners' participation in the online environment. Most importantly, practitioners could encourage learners to articulate their own expectations and concerns and promote open discussion and negotiation to achieve mutual agreement. In addition, educators and their learners could discuss and establish participation and behavioural (i.e. code of conduct) rules, aiming to moderate participation and minimise potential tensions amongst the members of an online community. Finally, this doctoral research revealed that learners demonstrated a reluctance to provide peer feedback (see Section 7.2.3). Educators could involve learners in the process of setting goals related to their language learning (e.g. providing peer feedback) and prepare learners for peer review by outlining the benefits of this practice. They could also teach learners how to provide constructive feedback, while being polite and respectful of their peers' efforts, and offer comprehensive examples of peer-to-peer feedback.

The third practical implication pertains to task design. Findings from this doctoral research showed that the selection and the styling of language activities can influence learners' participation and interaction (see Section 6.3) highlighting the importance of task design. For instance, activities that resemble a game (see the "Guess the city activity" in Section 5.5.4) stimulated learners' engagement and generated peer-to-peer interaction, as opposed to other activities that focused on decontextualised language practice. Educators should, thus, put emphasis on task design, taking into account their learners' needs as well as the affordances of social media. However, as discussed above, this demands extensive training for practitioners to effectively use social media platforms and design tasks that can capture learners' interest and motivation, thereby enhancing the overall learning experience.

Finally, concerning privacy, the most commonly reported issue in social media use (particularly in Facebook), this study showed that learners perceived both Facebook and WhatsApp as friendly and safe environments for sharing ideas and communicating with their classmates and the teacher due to the privacy settings adopted (i.e. closed groups). Therefore, it is important for educators to create private (or closed) groups to avoid any unwanted interventions from strangers and create a safer teaching and learning environment.

7.7 Concluding remarks

This thesis explored the use of Facebook and WhatsApp by two groups of adult language learners and their teachers and offered an empirically evidenced account of how these platforms were used as means of facilitating participants' language learning. The explicit focus on the under-researched ACL context and the combination of the two analytical frameworks (i.e. the CoI framework and the framework for the analysis of sharing practices) constitute significant contributions of this thesis. This research suggests that the mere use of Facebook and WhatsApp cannot guarantee language interaction among participants. Moreover, inflated expectations that these platforms can generate more interaction in language settings because of their communicative use in everyday life are questioned. Consequently, current pedagogical practices cannot be reformed simply by exploiting the familiarity and popularity of social media platforms. Notwithstanding that social media have the potential to facilitate language learning, without appropriate planning, design, structure, and implementation of educational activities, their potential will remain unfulfilled.

References

Aburezeq, I. M., & Ishtaiwa, F. F. (2013). The Impact of WhatsApp on Interaction in an Arabic Language Teaching Course. *International Journal of Arts & Sciences, 6*(3), 165–180.

Afsyah, S. (2019). WhatsApp Application in English Language Teaching (ELT) Context: Media to Describe People. *UTAMAX: Journal of Ultimate Research and Trends in Education*, *1*(1), 23–28. https://doi.org/10.31849/utamax.v1i1.2743

Ahmed, S. S. (2019). WhatsApp and Learn English: a Study of the Effectiveness of WhatsApp in Developing Reading and Writing Skills in English. *ELS Journal on Interdisciplinary Studies in Humanities*, *2*(2), 148–156. https://doi.org/10.34050/els-jish.v2i2.6419

Akkara, S., Anumula, V. S. S., & Mallampalli, M. S. (2020). Impact of WhatsApp Interaction on Improving L2 Speaking Skills. *International Journal of Emerging Technologies in Learning (IJET)*, *15*(3), 250–259. https://doi.org/10.3991/ijet.v15i03.11534

Akyol, Z., & Garrison, D. R. (2008). The development of a community of inquiry over time in an online course: Understanding the progression and integration of social, cognitive and teaching presence. *Journal of Asynchronous Learning Networks*, *12*(3–4), 3–22.

Akyol, Z., Garrison, D. R., & Ozden, M. Y. (2009). Online and blended communities of inquiry: Exploring the developmental and perceptional differences. *The International Review of Research in Open and Distributed Learning*, *10*(6), 65–83. https://doi.org/10.19173/irrodl.v10i6.765

Alberth, Wiramihardja, E., & Uden, L. (2020). WhatsApp with English language teaching? Some practical ideas and strategies. *International Journal of Technology Enhanced Learning*, *12*(3), 262–274.

Albogami, A., & Algethami, G. (2022). Exploring the Use of WhatsApp for Teaching Speaking to English Language Learners: A Case Study. *Arab World English Journal (AWEJ)*, *2*, 183–201. https://doi.org/10.24093/awej/covid2.12

Alghamdy, R. Z. (2019). The Impact of Mobile Language Learning (WhatsApp) on EFL Context: Outcomes and Perceptions. *International Journal of English Linguistics*, *9*(2), 128. https://doi.org/10.5539/ijel.v9n2p128

Allen, M. (2017). The SAGE Encyclopedia of Communication Research Methods. In *The SAGE Encyclopedia of Communication Research Methods*. SAGE Publications, Inc. https://doi.org/10.4135/9781483381411

Alouch, M., Ganapathy, M., & Ai Lin, D. T. (2021). Using WhatsApp to promote ESL students' writing. *AJELP: Asian Journal of English Language and Pedagogy*, *9*(2), 54–65. https://doi.org/10.37134/ajelp.vol9.2.5.2021

Alshenqeeti, H. (2016). Are Emojis Creating a New or Old Visual Language for New Generations? A Socio-semiotic Study. *Advances in Language and Literary Studies*, *7*(6), 56–69. https://doi.org/10.7575/aiac.alls.v.7n.6p.56

Alzubi, A. A., & Singh, M. K. M. (2018). The Impact of Social Strategies through Smartphones on the Saudi Learners Socio-cultural Autonomy in EFL Reading Context. *International Electronic Journal of Elementary Education*, *11*(1), 31–40. https://doi.org/10.26822/iejee.2018143958

Anderson, T. (2009). Social Networking. In S. Mishra (Ed.), *Stride handbook 8 − E-learning* (pp. 96–101). Indira Gandhi National Open University.

Anderson, T., Rourke, L., Garrison, D. R., & Archer, W. (2001). Assessing teacher presence in a computer conferencing context. *Journal of Asynchronous Learning Networks*, *5*(2), 1–17.

Androutsopoulos, J. (2008). Potentials and Limitations of Discourse-Centred online Ethnography. *Language@Internet*, *5*(8), 1–20. http://www.languageatinternet.org/articles/2008/1610

Androutsopoulos, J. (2014). Moments of sharing: Entextualization and linguistic repertoires in social networking. *Journal of Pragmatics*, *73*, 4–18. https://doi.org/10.1016/j.pragma.2014.07.013

Androutsopoulos, J. (2015). Networked multilingualism: Some language practices on Facebook and their implications. *International Journal of Bilingualism*, *19*(2), 185–205. https://doi.org/10.1177/1367006913489198

Andujar, A. (2016). Benefits of mobile instant messaging to develop ESL writing. *System*, *62*, 63–76. https://doi.org/10.1016/j.system.2016.07.004

Andujar, A., & Hussein, S. A. (2019). Mobile-mediated communication and students' listening skills: a case study. *Int. J. Mobile Learning and Organisation*, *13*(3), 309–332.

Annamalai, N. (2016). Exploring the writing approaches in the Facebook environment. *Teaching English with Technology*, *16*(1), 71–87.

Arbaugh, J. B. (2014). System, scholar or students? Which most influences online MBA course effectiveness? *Journal of Computer Assisted Learning*, *30*(4), 349–362. https://doi.org/10.1111/jcal.12048

Avci, H., & Adiguzel, T. (2017). A Case Study on Mobile-Blended Collaborative Learning in an English as a Foreign Language (EFL) Context. *The International Review of Research in Open and Distributed Learning*, *18*(7). https://doi.org/10.19173/irrodl.v18i7.3261

Aydin, S. (2012). A review of research on Facebook as an educational environment. *Educational Technology Research and Development*, *60*(6), 1093–1106. https://doi.org/10.1007/s11423-012-9260-7

Aydin, S., & Özdemir, E. (2019). A Qualitative Research on Foreign Language Learners' Perceptions of Facebook as a Learning Environment. *Language and Technology*, *1*(1), 16–29. https://dergipark.org.tr/en/pub/lantec/issue/42816/404825

Azer, S. A. (2015). The Top-Cited Articles in Medical Education. *Academic Medicine*, *90*(8), 1147–1161. https://doi.org/10.1097/ACM.0000000000000780

Baguma, R., Bagarukayo, E., Namubiru, P., Brown, C., & Mayisela, T. (2019). Using WhatsApp in Teaching to Develop Higher Order Thinking Skills: A Literature Review Using the Activity Theory Lens. *International Journal of Education and Development Using Information and Communication Technology*, *15*(2), 98–116.

Bai, H. (2009). Facilitating students' critical thinking in online discussion: An instructor's experience. *Journal of Interactive Online Learning*, *8*(2), 156–164.

Bailey, K. (2017). *Developing Library Instruction to Support Students' Research and Writing: Librarians and Professors Collaborating Together*. PRISM. https://doi.org/10.11575/PRISM/10182

Barrot, J. S. (2018). Facebook as a learning environment for language teaching and learning: A critical analysis of the literature from 2010 to 2017. *Journal of Computer Assisted Learning*, 1–13. https://doi.org/10.1111/jcal.12295

Barrot, J. S. (2021a). Social media as a language learning environment: a systematic review of the literature (2008-2019). *Computer Assisted Language Learning*, 1–29. https://doi.org/10.1080/09588221.2021.1883673

Barrot, J. S. (2021b). Scientific Mapping of Social Media in Education: A Decade of Exponential Growth. *Journal of Educational Computing Research*, *59*(4), 645–668. https://doi.org/10.1177/0735633120972010

Baxter, P., & Jack, S. (2015). Qualitative Case Study Methodology: Study Design and Implementation for Novice Researchers. *The Qualitative Report*. https://doi.org/10.46743/2160-3715/2008.1573

Bensalem, E. (2018). The Impact of WhatsApp on EFL students' Vocabulary Learning. *Arab*

World English Journal, *9*(1), 23–38. https://doi.org/10.24093/awej/vol9no1.2

Benzie, R. (2007, May 3). Facebook banned for Ontario staffers. *The Star*. http://www.thestar.com/News/article/210014

Berker, T., Hartmann, M., Punie, Y., & Ward, K. (2005). *Domestication of Media and Technology*. McGraw-Hill Education. http://ebookcentral.proquest.com/lib/open/detail.action?docID=287814

Bitchener, J., & Knoch, U. (2010). The Contribution of Written Corrective Feedback to Language Development: A Ten Month Investigation. *Applied Linguistics*, *31*(2), 193–214. https://doi.org/10.1093/applin/amp016

Blake, R. J. (2008). *Brave new digital classroom: Technology and foreign language learning*. Georgetown University Press.

Blattner, G., & Fiori, M. (2009). Facebook in the Language Classroom: Promises and Possibilities. *International Journal of Instructional Technology and Distance Learning*, *6*(1), 17–28.

Blattner, G., & Lomicka, L. (2012). Facebook-ing and the Social Generation: A New Era of Language Learning. *Alsic*, *15*(1), 1–23. https://doi.org/10.4000/alsic.2413

Bodily, R., Leary, H., & West, R. E. (2019). Research trends in instructional design and technology journals. *British Journal of Educational Technology*, *50*(1), 64–79. https://doi.org/10.1111/bjet.12712

Bosch, T. E. (2009). Using online social networking for teaching and learning: Facebook use at the University of Cape Town. *Communicatio*, *35*(2), 185–200. https://doi.org/10.1080/02500160903250648

Bouhnik, D., & Deshen, M. (2014). WhatsApp Goes to School: Mobile Instant Messaging between Teachers and Students. *Journal of Information Technology Education: Research*, *13*, 217–231. https://doi.org/10.28945/2051

Boyadjieva, P., & Ilieva-Trichkova, P. (2021). *Adult Education as Empowerment*. Springer International Publishing. https://doi.org/10.1007/978-3-030-67136-5

boyd, D. M. (2010). Social Network Sites as Networked Publics: Affordances, Dynamics, and Implications. In Z. Papacharissi (Ed.), *Networked Self: Identity, Community, and Culture on Social Network Sites* (pp. 39–58). Routledge.

boyd, D. M., & Ellison, N. B. (2008). Social Network Sites: Definition, History, and Scholarship. *Journal of Computer-Mediated Communication*, *13*(1), 210–230.

Brandtzæg, P. B., & Heim, J. (2009). Why People Use Social Networking Sites. In A. A. Ozok

& P. Zaphiris (Eds.), *Online Communities and Social Computing* (pp. 143–152). Springer Berlin Heidelberg.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2), 77–101. https://doi.org/10.1191/1478088706qp063oa

Bryman, A. (2016). *Social research methods* (5th ed.). Oxford University Press.

Bucher, T., & Helmond, A. (2018). The Affordances of Social Media Platforms. In J. Burgess, A. Marwick, & T. Poell (Eds.), *The SAGE Handbook of Social Media* (pp. 233–253). Sage Publications.

Buck, A. (2012). Examining Digital Literacy Practices on Social Network Sites. *Research in the Teaching of English*, *47*(1), 9–38. http://www.jstor.org/stable/41583603

Callaghan, G., Newton, D., Wallis, E., Winterton, J., & Winterton, R. (2001). *Adult and community learning : what? why? who? where? : a literature review on adult and community learning*. https://dera.ioe.ac.uk//4581/

Cao, Y. (2013). Exploring dynamism in willingness to communicate. *Australian Review of Applied Linguistics*, *36*(2), 160–176. https://doi.org/10.1075/aral.36.2.03cao

Cao, Y. (2014). A Sociocognitive Perspective on Second Language Classroom Willingness to Communicate. *TESOL Quarterly*, *48*(4), 789–814. https://doi.org/10.1002/tesq.155

Cao, Y., & Philp, J. (2006). Interactional context and willingness to communicate: A comparison of behavior in whole class, group and dyadic interaction. *System*, *34*, 480–493. https://doi.org/10.1016/j.system.2006.05.002

Carpenter, J. P., Morrison, S. A., Craft, M., & Lee, M. (2020). How and why are educators using Instagram? *Teaching and Teacher Education*, *96*, 103149. https://doi.org/10.1016/j.tate.2020.103149

Castillo-Montoya, M. (2016). Preparing for interview research: The interview protocol refinement framework. *The Qualitative Report*, *21*(5), 811–831.

Chen, R. H. (2022). Effects of Deliberate Practice on Blended Learning Sustainability: A Community of Inquiry Perspective. *Sustainability*, *14*(3), 1785. https://doi.org/10.3390/su14031785

Cho, H. (2017). Synchronous web-based collaborative writing: Factors mediating interaction among second-language writers. *Journal of Second Language Writing*, *36*, 37–51. https://doi.org/10.1016/j.jslw.2017.05.013

Chua, S. M., Tagg, C., Sharples, M., & Rienties, B. (2017). Discussion Analytics: Identifying Conversations and Social Learners in FutureLearn MOOCs. *Paper Presented at the 7th*

International Learning Analytics and Knowledge Conference, 36–62. http://ceur-ws.org/Vol-1967/

Chugh, R., & Ruhi, U. (2018). Social media in higher education: A literature review of Facebook. *Education and Information Technologies*, *23*(2), 605–616. https://doi.org/10.1007/s10639-017-9621-2

Church, K., & de Oliveira, R. (2013). What's up with whatsapp?: comparing mobile instant messaging behaviors with traditional SMS. *Proceedings of the 15th International Conference on Human-Computer Interaction with Mobile Devices and Services*, 352–361. https://doi.org/10.1145/2493190.2493225

Clark, W., Logan, K., Luckin, R., Mee, A., & Oliver, M. (2009). Beyond Web 2.0: mapping the technology landscapes of young learners. *Journal of Computer Assisted Learning*, *25*(1), 56–69. https://doi.org/10.1111/j.1365-2729.2008.00305.x

Coare, P., & Johnston, R. (2003). *Adult learning, citizenship and community voices: Exploring community-based practice*. Niace.

Cohen, L., Manion, L., & Morrison, K. (2017). *Research Methods in Education* (8th ed.). Routledge.

Colley, H., Hodkinson, P., & Malcolm, J. (2003). *Informality and formality in learning. A report for the Learning and Skills Research Centre*. Learning and Skills Research Centre.

Coombs, P., & Ahmed, M. (1974). *Attacking rural poverty: how nonformal education can help*. John Hopkins University Press.

Cooper, M. M. (1986). The Ecology of Writing. *College English*, *48*(4), 364. https://doi.org/10.2307/377264

Cox, R., Mckendree, J., Tobin, R., Lee, J., & Mayes, T. (1999). Vicarious learning from dialogue and discourse. *Instructional Science*, *27*(6), 431–458. https://doi.org/10.1007/BF00891973

Creswell, J. W. (2014). *Research Design: Qualitative, Quantitative and Mixed Methods Approaches* (4th ed.). Sage Publications.

Creswell, J. W., & Creswell, J. D. (2017). *Research design: qualitative, quantitative, and mixed methods approaches*. Sage Publications.

Creswell, J. W., & Plano Clark, V. L. (2011). *Designing and conducting mixed methods research* (2nd ed.). Sage Publications.

Creswell, J. W., & Poth, C. N. (2013). *Qualitative inquiry and research design: Choosing among five approaches*. Sage Publications.

Crotty, M. (1998). *The foundations of social research: Meaning and perspective in the research process*. Sage Publications.

Dede, C. (2008). A seismic shift in epistemology. *EDUCAUSE Review*, *43*(3), 80–81. https://tecfa.unige.ch/tecfa/tecfa-activities/e-culture/ERM0837.pdf

Derakhshan, A., & Hasanabbasi, S. (2015). Social Networks for Language Learning. *Theory and Practice in Language Studies*, *5*(5), 1090–1095. https://doi.org/10.17507/tpls.0505.25

Donnelly, R., & Gardner, J. (2011). Content analysis of computer conferencing transcripts. *Interactive Learning Environments*, *19*(4), 303–315. https://doi.org/10.1080/10494820903075722

Dörnyei, Z., & Taguchi, T. (2010). *Questionnaires in Second Language Research: Construction, Administration, and Processing* (2nd ed.). Routledge.

Dougherty, K. D., & Andercheck, B. (2014). Using Facebook to Engage Learners in a Large Introductory Course. *Teaching Sociology*, *42*(2), 95–104. https://doi.org/10.1177/0092055X14521022

Dresner, E., & Herring, S. C. (2010). Functions of the Nonverbal in CMC: Emoticons and Illocutionary Force. *Communication Theory*, *20*(3), 249–268. https://doi.org/10.1111/j.1468-2885.2010.01362.x

Dresner, E., & Herring, S. C. (2014). Emoticons and Illocutionary Force. In D. Riesenfeld & G. Scarafile (Eds.), *Perspectives on Theory of Controversies and the Ethics of Communication* (pp. 81–90). Springer. http://link.springer.com/10.1007/978-94-007-7131-4

Ducate, L. C., & Lomicka, L. (2008). Adventures in the blogosphere: from blog readers to blog writers. *Computer Assisted Language Learning*, *21*(1), 9–28. https://doi.org/10.1080/09588220701865474

Duffy, P. (2011). Facebook or Faceblock: Cautionary tales exploring the rise of social networking within tertiary education. In M. Lee & C. McLoughlin (Eds.), *Web 2.0-Based E-Learning: Applying Social Informatics for Tertiary Teaching* (pp. 284–300). IGI Global.

Ebadi, S., & Ebadijalal, M. (2022). The effect of Google Expeditions virtual reality on EFL learners' willingness to communicate and oral proficiency. *Computer Assisted Language Learning*, *35*(8), 1975–2000. https://doi.org/10.1080/09588221.2020.1854311

Ekoç, A. (2014). Facebook Groups As A Supporting Tool For Language Classrooms. *Turkish*

Online Journal of Distance Education, *15*(3), 18–26. https://doi.org/10.17718/tojde.13403

Elahi Shirvan, M., Khajavy, G. H., MacIntyre, P. D., & Taherian, T. (2019). A Meta-analysis of L2 Willingness to Communicate and Its Three High-Evidence Correlates. *Journal of Psycholinguistic Research*, *48*(6), 1241–1267. https://doi.org/10.1007/s10936-019-09656-9

Eren, Ö. (2012). Students' Attitudes towards Using Social Networking in Foreign Language Classes: A Facebook Example. *International Journal of Business and Social Science*, *3*(20), 288–294.

Facebook-Newsfeed. (2022). *Company Info*. https://newsroom.fb.com/company-info/

Facebook. (2022). *What does it mean to 'Like' something on Facebook?* https://www.facebook.com/help/110920455663362

Fan, M., Shi, S., & Truong, K. N. (2020). Practices and Challenges of Using Think-Aloud Protocols in Industry: An International Survey. *Journal of Usability Studies*, *15*(2), 85–102. https://uxpajournal.org/wp-content/uploads/sites/7/pdf/JUS_Fan_Feb2020.pdf

Fauzi, I., & Angkasawati, P. (2019). THE USE OF LISTENING LOGS THROUGH WHATSAPP IN IMPROVING LISTENING COMPREHENSION OF EFL STUDENTS. *JOALL (Journal of Applied Linguistics & Literature)*, *4*(1), 13–26. https://doi.org/10.33369/joall.v4i1.6773

Feilzer, M. Y. (2010). Doing mixed methods research pragmatically: Implications for the rediscovery of pragmatism as a research paradigm. *Journal of Mixed Methods Research*, *4*(1), 6–16.

Fiock, H. (2020). Designing a Community of Inquiry in Online Courses. *The International Review of Research in Open and Distributed Learning*, *21*(1), 133–153. https://doi.org/10.19173/irrodl.v20i5.3985

Fontana, A., & Frey, J. H. (2005). The Interview: From Neutral Stance to Political Involvement. In N. K. Denzin & Y. S. Lincoln (Eds.), *The Sage Handbook of Qualitative Research* (3rd ed., pp. 695–128). SAGE Publications, Inc.

Frey, B. B. (2018). *The SAGE Encyclopedia of Educational Research, Measurement, and Evaluation*. SAGE Publications, Inc. https://doi.org/10.4135/9781506326139

Frosch, D. (2007, May 15). Pentagon Blocks 13 Web Sites From Military Computers. *New York Times*. http://www.nytimes.com/2007/05/15/washington/15block.html

Fuchs, C., & Snyder, B. (2013). It's not just the tool: pedagogy for promoting collaboration

and community in social networking in CMC. In K. Zourou & M. N. Lamy (Eds.), *Social Networking for Language Education* (pp. 117–134). Palgrave Macmillan.

Garrison, D. R. (2007). Online Community of Inquiry review: Social, cognitive and teaching presence issues. *Journal of Asynchronous Learning Networks*, *11*(1), 61–72.

Garrison, D. R. (2009). The community of Inquiry in online learning. In P. Rogers, G. Berg, J. Boettcher, C. Howard, L. Justice, & K. Schenk (Eds.), *Encyclopaedia of distance learning* (pp. 352–356). IGI Global.

Garrison, D. R. (2011). *E-learning in the 21st Century : A Framework for Research and Practice* (2nd ed.). Routledge. https://doi.org/10.4324/9780203838761

Garrison, D. R. (2015). *Thinking Collaboratively Learning in a Community of Inquiry*. Routledge. https://doi.org/10.4324/9781315740751

Garrison, D. R. (2017). *E-learning in the 21st century: A community of inquiry framework for research and practice* (3rd ed.). Routledge.

Garrison, D. R., & Akyol, Z. (2013). The Community of Inquiry theoretical framework. In M. G. Moore (Ed.), *Handbook of distance education* (3rd ed., pp. 104–120). Routledge.

Garrison, D. R., & Anderson, T. (2003). *E-Learning in the 21st century: A framework for research and practice*. RoutledgeFalmer.

Garrison, D. R., Anderson, T., & Archer, W. (1999). Critical Inquiry in a Text-Based Environment: Computer Conferencing in Higher Education. *The Internet and Higher Education*, *2*(2–3), 87–105. https://doi.org/10.1016/S1096-7516(00)00016-6

Garrison, D. R., Anderson, T., & Archer, W. (2001). Critical thinking, cognitive presence, and computer conferencing in distance education. *American Journal of Distance Education*, *15*(1), 7–23. https://doi.org/10.1080/08923640109527071

Garrison, D. R., Anderson, T., & Archer, W. (2010). The first decade of the community of inquiry framework: A retrospective. *The Internet and Higher Education*, *13*(1–2), 5–9. https://doi.org/10.1016/j.iheduc.2009.10.003

Garrison, D. R., & Arbaugh, J. B. (2007). Researching the community of inquiry framework: Review, issues, and future directions. *The Internet and Higher Education*, *10*(3), 157–172. https://doi.org/10.1016/j.iheduc.2007.04.001

Garrison, D. R., & Cleveland-Innes, M. (2005). Facilitating Cognitive Presence in Online Learning: Interaction Is Not Enough. *American Journal of Distance Education*, *19*(3), 133–148. https://doi.org/10.1207/s15389286ajde1903_2

Garrison, D. R., Cleveland-Innes, M., Koole, M., & Kappelman, J. (2006). Revisiting

methodological issues in transcript analysis: Negotiated coding and reliability. *Internet and Higher Education*, *9*(1), 1–8. https://doi.org/10.1016/j.iheduc.2005.11.001

Garrison, D. R., & Vaughan, N. D. (2008). *Blended learning in higher education : framework, principles, and guidelines* (1st ed.). Jossey-Bass Publishers.

Gass, S. M., & Mackey, A. (2007). Input, interaction, and output in second language acquisition. In B. VanPatten & J. Williams (Eds.), *Theories in second language acquisition: An introduction* (pp. 175–200). Lawrence Erlbaum.

Gee, J. P. (2003). What video games have to teach us about learning and literacy. *Computers in Entertainment*, *1*(1), 1–20. https://doi.org/10.1145/950566.950595

Gibson, J. J. (1977). The theory of affordances. In R. E. Shaw & J. Bransford (Eds.), *Perceiving, acting, and knowing: Toward an ecological psychology* (pp. 67–82). Lawrence Erlbaum Associates.

Gibson, J. J. (1979). *The Ecological Approach to Visual Perception*. Houghton Mifflin.

Gillham, B. (2000). *The Research Interview*. Continuum.

Goffman, E. (1974). *Frame analysis: An essay on the organization of experience*. Northeastern University Press.

Goshtasbpour, F. (2019). *Exploring Instructor Contributions to Discussions in Massive Open Online Courses (MOOCs)* [Doctoral dissertation, University of Leeds]. http://etheses.whiterose.ac.uk/26064/

Goshtasbpour, F., Swinnerton, B., & Morris, N. P. (2020). Look who's talking: Exploring instructors' contributions to Massive Open Online Courses. *British Journal of Educational Technology*, *51*(1), 228–244. https://doi.org/10.1111/bjet.12787

Goughari, S. M. (2021). A Multifaceted Literature Review of WhatsApp: Opportunities and Challenges in Mobile-Assisted Language Learning. *The 3rd International Conference on Advanced Research in Education*, 40–52.

Greenhow, C., & Lewin, C. (2016). Social media and education: reconceptualizing the boundaries of formal and informal learning. *Learning, Media and Technology*, *41*(1), 6–30. https://doi.org/10.1080/17439884.2015.1064954

Gruzd, A., Staves, K., & Wilk, A. (2012). Connected scholars: Examining the role of social media in research practices of faculty using the UTAUT model. *Computers in Human Behavior*, *28*(6), 2340–2350. https://doi.org/10.1016/j.chb.2012.07.004

Gubrium, J., Holstein, J., Marvasti, A., & McKinney, K. (2012). *The SAGE Handbook of Interview Research: The Complexity of the Craft* (2nd ed.). SAGE Publications, Inc.

https://doi.org/10.4135/9781452218403

H.R. 5319, . (2006, May 9). Deleting Online Predators Act of 2006. H.R. 5319. *109th Congress*. https://www.govtrack.us/congress/bills/109/hr5319/text

Hallinger, P. (2020). Science mapping the knowledge base on educational leadership and management from the emerging regions of Asia, Africa and Latin America, 1965–2018. *Educational Management Administration & Leadership*, *48*(2), 209–230. https://doi.org/10.1177/1741143218822772

Hallinger, P., & Kovačević, J. (2019). A Bibliometric Review of Research on Educational Administration: Science Mapping the Literature, 1960 to 2018. *Review of Educational Research*, *89*(3), 335–369. https://doi.org/10.3102/0034654319830380

Halverson, E. R. (2011). Do social networking technologies have a place in formal learning environments? *On the Horizon*, *19*(1), 62–67. https://doi.org/10.1108/10748121111107717

Halvorsen, A. (2009). Social Networking Sites and Critical Language Learning. In M. Thomas (Ed.), *Handbook of Research on Web 2.0 and second language learning* (pp. 237–258). IGI Global.

Hammersley, M., & Atkinson, P. (2007). *Ethnography : principles in practice*. Routledge.

Haron, H., Kasuma, S. A. A., & Akhiar, A. (2021). Developing ESL Writing Content Through Online Discussions on WhatsApp. *International Journal of Virtual and Personal Learning Environments*, *11*(2), 18–35. https://doi.org/10.4018/IJVPLE.2021070102

Hattem, D., & Lomicka, L. (2016). What the Tweets say: A critical analysis of Twitter research in language learning from 2009 to 2016. *E-Learning and Digital Media*, *13*(1–2), 5–23. https://doi.org/10.1177/2042753016672350

Hazaea, A. N., & Alzubi, A. A. (2016). The Effectiveness of Using Mobile on EFL Learners' Reading Practices in Najran University. *English Language Teaching*, *9*(5), 8–21. https://doi.org/10.5539/elt.v9n5p8

Heradio, R., de la Torre, L., Galan, D., Cabrerizo, F. J., Herrera-Viedma, E., & Dormido, S. (2016). Virtual and remote labs in education: A bibliometric analysis. *Computers & Education*, *98*, 14–38. https://doi.org/10.1016/j.compedu.2016.03.010

Hine, C. (2000). *Virtual Ethnography*. Sage Publications.

Hine, C. (2015). *Ethnography for the Internet: embedded, embodied and everyday*. Bloomsbury Academic.

Hodges, C., Moore, S., Lockee, B., Trust, T., & Bond, A. (2020). *The Difference Between*

Emergency Remote Teaching and Online Learning. EDUCAUSE Review. https://er.educause.edu/articles/2020/3/the-difference-between-emergency-remote-teaching-and-online-learning

Hu, S., Torphy, K. T., Opperman, A., Jansen, K., & Lo, Y.-J. (2018). What do teachers share within Socialized Knowledge Communities: a case of Pinterest. *Journal of Professional Capital and Community*, *3*(2), 97–122. https://doi.org/10.1108/JPCC-11-2017-0025

Hunter, S. (2000). *An Introduction to the Field of Adult and Community Learning*. https://www.academia.edu/12612953/An_Introduction_to_the_Field_of_Adult_and_Community_Learning

Istifci, I., & Doğan Ucar, A. (2021). A Review of Research on the Use of Social Media in Language Teaching and Learning. *Journal of Educational Technology and Online Learning*, *4*(3), 475–488. https://doi.org/10.31681/jetol.922968

Jackson, L. C., Jackson, A. C., & Chambers, D. (2013). Establishing an online community of inquiry at the Distance Education Centre, Victoria. *Distance Education*, *34*(3), 353–367. https://doi.org/10.1080/01587919.2013.835774

Jacob, S. A., & Furgerson, S. P. (2012). Writing Interview Protocols and Conducting interviews: Tips for Students New to the Field of Qualitative Research. *The Qualitative Report*, *17*(42), 1–10.

Jeong, D. C., & Lee, J. (2017). Snap back to reality: Examining the cognitive mechanisms underlying Snapchat. *Computers in Human Behavior*, *77*, 274–281. https://doi.org/10.1016/j.chb.2017.09.008

Jin, S. (2015). Using Facebook to promote Korean EFL learners' intercultural competence. *Language Learning and Technology*, *19*(3), 38–51. http://llt.msu.edu/issues/october2015/action2.pdf

John, N. A. (2013). Sharing and Web 2.0: The emergence of a keyword. *New Media & Society*, *15*(2), 167–182. https://doi.org/10.1177/1461444812450684

Jones, R. H., Chik, A., & Hafner, C. A. (2015). Discourse analysis and digital practices. In R. H. Jones, A. Chik, & C. A. Hafner (Eds.), *Discourse and Digital Practices: Doing discourse analysis in the digital age* (pp. 1–17). Routledge. http://centaur.reading.ac.uk/66501/

Josefsson, P., Hrastinski, S., Pargman, D., & Pargman, T. C. (2016). The student, the private and the professional role: Students' social media use. *Education and Information Technologies*, *21*(6), 1583–1594. https://doi.org/10.1007/s10639-015-9403-7

Kabilan, M. K., Ahmad, N., & Abidin, M. J. Z. (2010). Facebook: An online environment for

learning of English in institutions of higher education? *The Internet and Higher Education*, *13*(4), 179–187. https://doi.org/10.1016/j.iheduc.2010.07.003

Kang, S. J. (2005). Dynamic emergence of situational willingness to communicate in a second language. *System*, *33*(2), 277–292. https://doi.org/10.1016/J.SYSTEM.2004.10.004

Kapur, R. (2017). ORGANIZATION AND ADMINISTRATION IN ADULT AND COMMUNITY EDUCATION. *International Journal of Information, Business and Management*, *9*(1), 141–148.

Kapur, R. (2019). *Introduction to adult education*. https://www.researchgate.net/publication/335422676_Introduction_to_Adult_Education

Karal, H., Kokoc, M., & Cakir, O. (2017). Impact of the educational use of Facebook group on the high school students' proper usage of language. *Education and Information Technologies*, *22*(2), 677–695. https://doi.org/10.1007/s10639-015-9428-y

Kartal, G. (2019). What's up with WhatsApp? A Critical Analysis of Mobile Instant Messaging Research in Language Learning. *International Journal of Contemporary Educational Research*, *6*(2), 352–365. https://doi.org/10.33200/ijcer.599138

Kashy-Rosenbaum, G., & Aizenkot, D. (2020). Exposure to cyberbullying in WhatsApp classmates' groups and classroom climate as predictors of students' sense of belonging: A multi-level analysis of elementary, middle and high schools. *Children and Youth Services Review*, *108*. https://doi.org/10.1016/j.childyouth.2019.104614

Kasuma, S. A. A. (2017). Four Characteristics of Facebook Activities for English Language Learning: A study of Malaysian University Students' Needs and Preferences. *Advances in Language and Literary Studies*, *8*(3), 155–171. https://doi.org/10.7575/aiac.alls.v.8n.3p.155

Keogh, C. (2017). Using WhatsApp to Create a Space of Language and Content for Students of International Relations. *Latin American Journal of Content & Language Integrated Learning*, *10*(1), 75–104. https://doi.org/10.5294/laclil.2017.10.1.4

Kim, G., & Gurvitch, R. (2020). Online Education Research Adopting the Community of Inquiry Framework: A Systematic Review. *Quest*, *72*(4), 395–409. https://doi.org/10.1080/00336297.2020.1761843

Kralj Novak, P., Smailović, J., Sluban, B., & Mozetič, I. (2015). Sentiment of Emojis. *PLOS ONE*, *10*(12). https://doi.org/10.1371/journal.pone.0144296

Krashen, S. D. (1980). The input hypothesis. In J. Alatis (Ed.), *Current issues in bilingual education* (pp. 168–180). Georgetown University Press.

Krashen, S. D. (1985). *The input hypothesis: Issues and implications*. Addison-Wesley Longman Limited.

Kukulska-Hulme, A. (2009). Will mobile learning change language learning? *ReCall*, *21*(May 2009), 157–165. http://oro.open.ac.uk/16987/

Kukulska-Hulme, A., & Shield, L. (2008). An overview of mobile assisted language learning: From content delivery to supported collaboration and interaction. *ReCALL*, *20*(3), 271–289. https://doi.org/10.1017/S0958344008000335

Kvale, Steinar. (2007). *Doing Interviews*. Sage Publications.

Kvale, Steiner. (1994). Ten Standard Objections To Qualltative Research Interviews. *Journal of Phenomenological Psychology*, *25*(2), 147–173.

Kvale, Steiner. (1996). *InterViews : An Introduction to Qualitative Research Interviewing*. Sage.

Lafraya, S. (2011). *Intercultural learning in non-formal education: theoretical frameworks and starting points*. Council of Europe.

Lai, A. (2016). Mobile immersion: an experiment using mobile instant messenger to support second-language learning. *Interactive Learning Environments*, *24*(2), 277–290. https://doi.org/10.1080/10494820.2015.1113706

Lankshear, C., & Knobel, M. (2008). *Digital literacies: Concepts, policies and practices*. Peter Lang Publishing.

Lantz-Andersson, A. (2016). Embracing social media for educational linguistic activities. *Nordic Journal of Digital Literacy*, *11*(1), 50–77.

Lantz-Andersson, A., Vigmo, S., & Bowen, R. (2013). Crossing boundaries in Facebook: Students' framing of language learning activities as extended spaces. *International Journal of Computer-Supported Collaborative Learning*, *8*(3), 293–312. https://doi.org/10.1007/s11412-013-9177-0

Lavrakas, P. (2008). *Encyclopedia of Survey Research Methods*. Sage Publications, Inc. https://doi.org/10.4135/9781412963947

Lee, J. S., & Chen Hsieh, J. (2019). Affective variables and willingness to communicate of EFL learners in in-class, out-of-class, and digital contexts. *System*, *82*, 63–73. https://doi.org/10.1016/j.system.2019.03.002

Lee, J. S., & Dressman, M. (2018). When IDLE Hands Make an English Workshop: Informal

Digital Learning of English and Language Proficiency. *TESOL Quarterly*, *52*(2), 435–445. http://www.jstor.org/stable/44986999

Lee, J. S., & Lee, K. (2020). Affective factors, virtual intercultural experiences, and L2 willingness to communicate in in-class, out-of-class, and digital settings. *Language Teaching Research*, *24*(6), 813–833. https://doi.org/10.1177/1362168819831408

Lee, K. M., Park, S., Jang, B. G., & Cho, B.-Y. (2019). Multidimensional Approaches to Examining Digital Literacies in the Contemporary Global Society. *Media and Communication*, *7*(2), 36–46. https://doi.org/10.17645/mac.v7i2.1987

Leier, V. M. (2017). Learning Language Through Facebook. *International Journal of Computer-Assisted Language Learning and Teaching*, *7*(3), 40–57. https://doi.org/10.4018/IJCALLT.2017070103

Lewis, L. (2012). The capabilities approach, adult community learning and mental health. *Community Development Journal*, *47*(4), 522–537. https://doi.org/10.1093/cdj/bss027

Li, L., & Yang, Y. (2018). Pragmatic functions of emoji in internet-based communication---a corpus-based study. *Asian-Pacific Journal of Second and Foreign Language Education*, *3*(16). https://doi.org/10.1186/s40862-018-0057-z

Lima, A. A. S. de, Moura, S. A. B. de, Fernandes, Â., Araujo, M. R. de, Machado, M. Â. N., & Soares, S. S. K. de P. (2021). Use of Facebook as a pedagogical tool for university education. *Revista Da ABENO*, *21*(1), 1525. https://doi.org/10.30979/revabeno.v21i1.1525

Lin, M. H., Groom, N., & Lin, C.-Y. (2013). Blog-Assisted Learning in the ESL Writing Classroom: A Phenomenological Analysis. *Journal of Educational Technology & Society*, *16*(3), 130–139. http://www.jstor.org/stable/jeductechsoci.16.3.130

Lin, V., Kang, Y.-C., Liu, G.-Z., & Lin, W. (2016). Participants' Experiences and Interactions on Facebook Group in an EFL Course in Taiwan. *The Asia-Pacific Education Researcher*, *25*(1), 99–109. https://doi.org/10.1007/s40299-015-0239-0

Liu, M., Abe, K., Cao, M. W., Liu, S., Ok, D. U., Park, J., & Sardegna, V. G. (2015). An analysis of social network websites for language learning : Implications for teaching and learning English as a Second Language. *CALICO Journal*, *32*(1), 113–152.

Lomicka, L., & Lord, G. (2012). A tale of tweets: Analyzing microblogging among language learners. *System*, *40*(1), 48–63.

Lomicka, L., & Lord, G. (2016). Social Networking and Language Learning. In F. Farr & L.

Murray (Eds.), *The Routledge Handbook of Language Learning and Technology*.

Long, M. H. (1983a). Native speaker/non-native speaker conversation in the second language classroom. *University of Hawai'i Working Papers in English as a Second Language*, *2*(1), 94–120. https://core.ac.uk/download/pdf/32302617.pdf

Long, M. H. (1983b). Native speaker/non-native speaker conversation and the negotiation of comprehensible input. *Applied Linguistics*, *4*(2), 126–141. https://doi.org/10.1093/applin/4.2.126

Long, M. H. (1990). The Least a Second Language Acquisition Theory Needs to Explain. *TESOL Quarterly*, *24*(4), 649–666. https://doi.org/10.2307/3587113

Long, M. H. (1996). The role of the linguistic environment in second language acquisition. In W. C. Ritchie & T. K. Bhatia (Eds.), *Handbook of second language acquisition* (pp. 413–468). Academic Press.

MacIntyre, P. D. (1994). Variables underlying willingness to communicate: A causal analysis. *Communication Research Reports*, *11*(2), 135–142. https://doi.org/10.1080/08824099409359951

MacIntyre, P. D. (2007). Willingness to Communicate in the Second Language: Understanding the Decision to Speak as a Volitional Process. *The Modern Language Journal*, *91*(4), 564–576. https://doi.org/10.1111/j.1540-4781.2007.00623.x

MacIntyre, P. D. (2020). Expanding the theoretical base for the dynamics of willingness to communicate. *Studies in Second Language Learning and Teaching*, *10*(1), 111–131. https://doi.org/10.14746/ssllt.2020.10.1.6

MacIntyre, P. D., & Charos, C. (1996). Personality, attitudes, and affect as predictors of second language communication. *Journal of Language and Social Psychology*, *15*(1), 3–26. https://doi.org/10.1177/0261927X960151001

MacIntyre, P. D., Clément, R., Dörnyei, Z., & Noels, K. A. (1998). Conceptualizing Willingness to Communicate in a L2: A Situational Model of L2 Confidence and Affiliation. *The Modern Language Journal*, *82*(4), 545–562. https://doi.org/10.1111/j.1540-4781.1998.tb05543.x

Mackey, A., Abbuhl, R., & Gass, S. M. (2012). Interactionist approach. In S. M. Gass & A. Mackey (Eds.), *The Routledge Handbook of Second Language Acquisition* (pp. 7–23). Routledge.

Mahmud, M. M., & Ching, W. S. (2012). Facebook does it really work for l2 learners. *Academic Research*, *3*(2), 357–370.

Malmqvist, J., Hellberg, K., Möllås, G., Rose, R., & Shevlin, M. (2019). Conducting the Pilot Study: A Neglected Part of the Research Process? Methodological Findings Supporting the Importance of Piloting in Qualitative Research Studies. *International Journal of Qualitative Methods*, *18*. https://doi.org/10.1177/1609406919878341

Manan, N. A. (2017). WHATSAPP MOBILE TOOL IN SECOND LANGUAGE LEARNING. *Indonesian EFL Journal*, *3*(1), 87. https://doi.org/10.25134/ieflj.v3i1.657

Manan, N. A., Alias, A. A., & Pandian, A. (2012). Utilizing a Social Networking Website as an ESL Pedagogical Tool in a Blended Learning Environment : An Exploratory Study. *International Journal of Social Science and Education*, *2*(1), 1–9.

Manca, S. (2020). Snapping, pinning, liking or texting: Investigating social media in higher education beyond Facebook. *The Internet and Higher Education*, *44*. https://doi.org/10.1016/j.iheduc.2019.100707

Manca, S., & Ranieri, M. (2013). Is it a tool suitable for learning? A critical review of the literature on Facebook as a technology-enhanced learning environment. *Journal of Computer Assisted Learning*, *29*(6), 487–504. https://doi.org/10.1111/jcal.12007

Manca, S., & Ranieri, M. (2016). Is Facebook still a suitable technology-enhanced learning environment? An updated critical review of the literature from 2012 to 2015. *Journal of Computer Assisted Learning*, *32*(6), 503–528. https://doi.org/10.1111/jcal.12154

Marwick, A. E., & boyd, D. (2014). Networked privacy: How teenagers negotiate context in social media. *New Media & Society*, *16*(7), 1051–1067. https://doi.org/10.1177/1461444814543995

Mayes, J. (2015). Still to learn from vicarious learning. *E-Learning and Digital Media*, *12*(3–4), 361–371. https://doi.org/10.1177/2042753015571839

Mazur, J. (2004). Conversation analysis for educational technologists: Theoretical and methodological issues for researching the structures, processes, and meaning of on-line talk. In D. H. Jonassen (Ed.), *Handbook of research on educational communications and technology* (pp. 1073–1098). Lawrence Erlbaum Associates.

Mazzoni, E., & Iannone, M. (2014). From high school to university: Impact of social networking sites on social capital in the transitions of emerging adults. *British Journal of Educational Technology*, *45*(2), 303–315. https://doi.org/10.1111/bjet.12026

Mbukusa, N. R. (2018). Perceptions of students' on the Use of WhatsApp in Teaching Methods of English as Second Language at the University of Namibia. *Journal of Curriculum and Teaching*, *7*(2), 112. https://doi.org/10.5430/jct.v7n2p112

McCroskey, J. C., & Baer, J. E. (1985). Willingness to communicate: The construct and its measurement. *Paper Presented at the Annual Meeting of the Speech Communication Association, Denver, CO, November*.

Menzies, R., Petrie, K., & Zarb, M. (2017). A case study of Facebook use: Outlining a multi-layer strategy for higher education. *Education and Information Technologies*, *22*(1), 39–53. https://doi.org/10.1007/s10639-015-9436-y

Miller, A. M., Morgan, W. J., & Koronkiewicz, B. (2018). Like or Tweet: Analysis of the Use of Facebook and Twitter in the Language Classroom. *TechTrends*. https://doi.org/10.1007/s11528-018-0341-2

Mills, A., Durepos, G., & Wiebe, E. (2010). *Encyclopedia of Case Study Research*. SAGE Publications, Inc. https://doi.org/10.4135/9781412957397

Minalla, A. A. (2018). The Effect of WhatsApp Chat Group in Enhancing EFL Learners' Verbal Interaction outside Classroom Contexts. *English Language Teaching*, *11*(3), 1. https://doi.org/10.5539/elt.v11n3p1

Mittelmeier, J. (2017). *Supporting intercultural collaborations in blended and online settings: a randomised control trial of internationalised academic content*. Doctoral dissertation, The Open University.

Montag, C., Becker, B., & Gan, C. (2018). The Multipurpose Application WeChat: A Review on Recent Research. *Frontiers in Psychology*, *9*. https://doi.org/10.3389/fpsyg.2018.02247

Moreno, M. A., & D'Angelo, J. (2019). Social Media Intervention Design: Applying an Affordances Framework. *Journal of Medical Internet Research*, *21*(3). https://doi.org/10.2196/11014

Morgan, D. (2007). Paradigms lost and pragmatism regained: Methodological implications of combining qualitative and quantitative methods. *Journal of Mixed Methods Research*, *1*(1), 48–76. https://doi.org/10.1177/2345678906292462

Morgan, T. (2011). Online Classroom or Community-in-the-Making? Instructor Conceptualizations and Teaching Presence in International Online Contexts. *International Journal of E-Learning and Distance Education*, *25*(1).

Mwakapina, J. W., Mhandeni, A. S., & Nyinondi, O. S. (2016). WhatsApp Mobile Tool in Second Language Learning: Opportunities, Potentials and Challenges in Higher Education Settings in Tanzania. *International Journal of English Language Education*, *4*(2), 70–90. https://doi.org/10.5296/ijele.v4i2.9711

Naghdipour, B., & Eldridge, N. H. (2016). Incorporating Social Networking Sites into Traditional Pedagogy: a Case of Facebook. *TechTrends*, *60*(6), 591–597. https://doi.org/10.1007/s11528-016-0118-4

Nematizadeh, S., & Cao, Y. (2023). Investigating willingness to communicate in synchronous group discussion tasks: one step closer towards authentic communication. *International Review of Applied Linguistics in Language Teaching*. https://doi.org/10.1515/iral-2022-0092

Niu, L. (2017). Using Facebook for Academic Purposes: Current Literature and Directions for Future Research. *Journal of Educational Computing Research*, 1–23. https://doi.org/10.1177/0735633117745161

Norqvist, L., & Leffler, E. (2017). Learning in non-formal education: Is it "youthful" for youth in action? *International Review of Education*, *63*(2), 235–256. https://doi.org/10.1007/s11159-017-9631-8

Nunan, D. (1987). Communicative language teaching: The learner's view. In K. Bikram (Ed.), *Communication and learning in the classroom community* (pp. 176–190). SEAMEO Regional Language Centre.

Obar, J. A., & Wildman, S. S. (2015). Social Media Definition and the Governance Challenge - An Introduction to the Special Issue. *SSRN Electronic Journal*, *39*(9). https://doi.org/10.2139/ssrn.2663153

Oksuz-Zerey, M. (2021). PERCEIVED BENEFITS OF WHATSAPP VOICE MESSAGING: INVESTIGATING EFL STUDENTS' EXPERIENCES. *European Journal of English Language Teaching*, *6*(3). https://doi.org/10.46827/ejel.v6i3.3635

Oliver, M. (2005). The Problem with Affordance. *E-Learning and Digital Media*, *2*(4), 402–413. https://doi.org/10.2304/elea.2005.2.4.402

Omar, H., Embi, M. A., & Yunus, M. M. (2012). ESL Learners' Interaction in an Online Discussion via Facebook. *Asian Social Science*, *8*(11), 67–74. https://doi.org/10.5539/ass.v8n11p67

Oxford, R., & Oxford, J. (2009). Introduction. In R. Oxford & J. Oxford (Eds.), *Second language teaching and learning in the Net Generation* (pp. 1–8). University of Hawai'i, National Foreign Language Resource Center.

Özdemir, E. (2017). Promoting EFL learners' intercultural communication effectiveness: a focus on Facebook. *Computer Assisted Language Learning*, *30*(6), 510–528. https://doi.org/10.1080/09588221.2017.1325907

Pavalanathan, U., & Eisenstein, J. (2016). More emojis, less :) The competition for paralinguistic function in microblog writing. *First Monday*, *21*(11). https://doi.org/10.5210/fm.v21i11.6879

Pawlak, M., & Mystkowska-Wiertelak, A. (2015). Investigating the dynamic nature of L2 willingness to communicate. *System*, *50*, 1–9. https://doi.org/10.1016/j.system.2015.02.001

Pawlak, M., Mystkowska-Wiertelak, A., & Bielak, J. (2016). Investigating the nature of classroom willingness to communicate (WTC): A micro-perspective. *Language Teaching Research*, *20*(5), 654–671. https://doi.org/10.1177/1362168815609615

Peeters, W. (2018). Applying the networking power of Web 2.0 to the foreign language classroom: a taxonomy of the online peer interaction process. *Computer Assisted Language Learning*, *31*(8), 905–931. https://doi.org/10.1080/09588221.2018.1465982

Peeters, W., & Pretorius, M. (2020). Facebook or fail-book: Exploring "community" in a virtual community of practice. *ReCALL*, *32*(3), 291–306. https://doi.org/10.1017/S0958344020000099

Peng, J.-E., & Woodrow, L. (2010). Willingness to Communicate in English: A Model in the Chinese EFL Classroom Context. *Language Learning*, *60*(4), 834–876. https://doi.org/10.1111/j.1467-9922.2010.00576.x

Pool, J., Reitsma, G., & van den Berg, D. (2017). Revised community of inquiry framework: Examining learning presence in a blended mode of delivery. *Online Learning Journal*, *21*(3). https://doi.org/10.24059/olj.v%vi%i.866

Potter, S. (2006). *Doing postgraduate research*. Sage Publications.

Purnomo, A., Agustina, I. A., Septianto, A., Liahmad, & Prasetyo, Y. E. (2020). Instagram Literature: Insights from Scientometric Application. *2020 International Conference on Information Management and Technology (ICIMTech)*, 583–587. https://doi.org/10.1109/ICIMTech50083.2020.9211115

Putra, E. P., Christian, A., & Juwitasary, H. (2021). Trend of Youtube Kids as E-Learning Media for Toddlers: Systematic Literature Review. *Review of International Geographical Education (RIGEO)*, *11*(6), 875–884.

Putri, N., & Aminatun, D. (2021). Using Facebook to Practice Writing Skill: What Do the Students Think? *Journal of English Language Teaching and Learning*, *2*(1), 45–50.

Randall, M. (2007). *Memory, Psychology and Second Language Learning*. John Benjamins

Publishing.

Rapley, T. (2004). Interviews. In C. Seale, G. Gobo, J. F. Gubrium, & D. Silverman (Eds.), *Qualitative Research Practice* (pp. 15–33). Sage Publications.

Razak, N. A., Saeed, M., & Ahmad, Z. (2013). Adopting Social Networking Sites (SNSs) as Interactive Communities among English Foreign Language (EFL) Learners in Writing: Opportunities and Challenges. *English Language Teaching*, *6*(11), 187–198. https://doi.org/10.5539/elt.v6n11p187

Reinhardt, J. (2019). Social media in second and foreign language teaching and learning: Blogs, wikis, and social networking. *Language Teaching*, *52*(1), 1–39. https://doi.org/10.1017/S0261444818000356

Reinhardt, J., & Zander, V. (2011). Social Networking in an Intensive English Program Classroom: A Language Socialization Perspective. *CALICO Journal*, *28*(2), 326–344. http://www.jstor.org/stable/calicojournal.28.2.326

Rets, I. (2020). *Linguistic accessibility of Open Educational Resources: Text simplification as an aid to non-native readers of English*. Doctoral dissertation, The Open University.

Ríos, J. A., & Campos, J. L. E. (2015). The Role of Facebook in Foreign Language Learning. *Revista de Lenguas Modernas*, *23*, 253–262. https://doi.org/10.15517/rlm.v0i23.22349

Rodliyah, R. S. (2016). 🔲Using a Facebook Closed Group To 🔲Improve EFL Students' Writing. *TEFLIN Journal*, *27*(1), 82–100. https://doi.org/10.15639/teflinjournal.v27i1/82-100

Rogers, A. (2005). *Non-formal education: flexible schooling or participatory education?* Springer Science & Business Media.

Rourke, L., & Anderson, T. (2002). Exploring Social Communication in Computer Conferencing. *Journal of Interactive Learning Research*, *13*(3), 259–275.

Rourke, L., Anderson, T., Garrison, D. R., & Archer, W. (1999). Assessing social presence in asynchronous text-based computer conferencing. *International Journal of E-Learning & Distance Education*, *14*(2), 50–71.

Rourke, L., Anderson, T., Garrison, D. R., & Archer, W. (2001). Methodological Issues in the Content Analysis of Computer Conference Transcripts. *International Journal of Artificial Intelligence in Education (IJAIED)*, *12*, 8–12.

Rubenson, K. (2019). Assessing the status of lifelong learning: Issues with composite indexes and surveys on participation. *International Review of Education*, *65*(2), 295–

317. https://doi.org/10.1007/s11159-019-09768-3

Rudenkin, D. (2019). YouTube as an Instrument of Learning in Higher Education: Opportunities and Challenges. *Proceedings of the 18th European Conference on E-Learning*, 684–686. https://doi.org/10.34190/EEL.19.039

S. 49, . (2007, January 4). *Protecting Children in the 21stCentury Act. S. 49, 110th Congress*. https://www.congress.gov/bill/110th-congress/senate-bill/49

Salkind, N. J. (2007). *Encyclopedia of Measurement and Statistics*. Sage Publications, Inc. https://doi.org/10.4135/9781412952644

Sampurna, J. (2019). *Exploring the Implementation of Online Non-Formal Project-Based Language Learning in the Indonesian Context* [The Open University]. https://doi.org/10.21954/ou.ro.00010ac9

Sancar, I. V., Duvenci, A., & Odabasi, H. F. (2021). Educational potential of Facebook use in Higher Education: Last decade research trend. *The Journal of Social Media in Society*, *10*(2), 264–288.

Sauro, S., & Zourou, K. (2019). What are the digital wilds? *Language Learning & Technology*, *23*(1), 1–7. https://doi.org/10125/44666

Schmidt, R. (1990). The role of consciousness in second language learning. *Applied Linguistics*, *11*(2), 129–158.

Schmidt, R. (1992). Awareness and second language acquisition. *Annual Review of Applied Linguistics*, *13*, 206–226.

Scholz, R., & Tietje, O. (2002). *Embedded Case Study Methods*. SAGE Publications, Inc. https://doi.org/10.4135/9781412984027

Selwyn, N., & Aagaard, J. (2021). Banning mobile phones from classrooms—An opportunity to advance understandings of technology addiction, distraction and cyberbullying. *British Journal of Educational Technology*, *52*(1), 8–19. https://doi.org/10.1111/bjet.12943

Shamsi, E., & Bozorgian, H. (2022). A review of empirical studies of social media on language learners' willingness to communicate. *Education and Information Technologies*, *27*(4), 4473–4499. https://doi.org/10.1007/s10639-021-10792-w

Siemens, G. (2005). Connectivism: A learning theory for the digital age. *International Journal of Instructional Technology and Distance Learning*, *2*(1), 1–9. http://www.itdl.org/Journal/Jan_05/article01.htm

Siemens, G., & Weller, M. (2011). Higher education and the promises and perils of social

network. *Revista de Universidad y Sociedad Del Conocimiento*, *8*(1), 164–170.

Simons, H. (2009). *Case Study Research in Practice*. Sage Publications.

Sirivedin, P., Soopunyo, W., Srisuantang, S., & Wongsothorn, A. (2018). Effects of Facebook usage on English learning behavior of Thai English teachers. *Kasetsart Journal of Social Sciences*, *39*(2), 183–189. https://doi.org/10.1016/j.kjss.2018.03.007

Smagorinsky, P. (1989). The Reliability and Validity of Protocol Analysis. *Written Communication*, *6*(4), 463–479. https://doi.org/10.1177/0741088389006004003

Stake, R. (1995). *The art of case study research*. Sage Publications.

Starfield, S. (2015). Ethnographic Research. In B. Paltridge & A. Phakiti (Eds.), *Research Methods in Applied Linguistics: A Practical Resource* (pp. 137–152). Bloomsbury Academic.

Statista. (2021a). *Forecast of the number of Whatsapp users in the United Kingdom from 2017 to 2026*. https://www-statista-com.libezproxy.open.ac.uk/forecasts/1145342/whatsapp-users-in-the-united-kingdom

Statista. (2021b). *Leading WhatsApp usage reasons according to users in the United States*. https://www.statista.com/statistics/290451/typical-weekly-mobile-activities-of-us-whatsapp-users/

Statista. (2021c). *Share of respondents who had their own social network profile in the United Kingdom (UK) from 2015 to 2020*. Statista Inc. https://www.statista.com/statistics/271879/social-network-profile-creation-in-the-uk-by-age/

Statista. (2022a). *Facebook in the United Kingdom (UK) - statistics & facts*. Statista Inc. https://www.statista.com/topics/4866/facebook-in-the-united-kingdom-uk/#topicHeader__wrapper

Statista. (2022b). *Most popular social networks worldwide as of January 2022, ranked by number of monthly active users*. Statista Inc. https://www.statista.com/statistics/272014/global-social-networks-ranked-by-number-of-users/

Statista. (2022c). *Reach of leading social networking sites used by those aged 46 to 55 in the United Kingdom (UK) as of 3rd quarter 2020*. Statista Inc. https://www.statista.com/statistics/1059483/social-media-usage-uk-age/

Statista. (2022d). *Reach of leading social networking sites used by those aged 56 and older*

in the United Kingdom (UK) as of 3rd quarter 2020. Statista Inc. https://www.statista.com/statistics/1059480/social-media-usage-uk-age-56-over/

Stenbom, S. (2018). A systematic review of the Community of Inquiry survey. *The Internet and Higher Education*, *39*, 22–32. https://doi.org/10.1016/j.iheduc.2018.06.001

Stenbom, S., Jansson, M., & Hulkko, A. (2016). Revising the Community of Inquiry Framework for the Analysis of One-To-One Online Learning Relationships. *The International Review of Research in Open and Distributed Learning*, *17*(3), 36–53. https://doi.org/10.19173/irrodl.v17i3.2068

Stockwell, G. (2007). Vocabulary on the move: Investigating an intelligent mobile phone-based vocabulary tutor. *Computer Assisted Language Learning*, *20*(4), 365–383.

Stockwell, G. (2008). Investigating learner preparedness for and usage patterns of mobile learning. *ReCALL*, *20*(3), 253–270. https://doi.org/10.1017/S0958344008000232

Swain, M. (1985). Communicative competence: Some roles of comprehensible input and comprehensible output in its development. In S. M. Gass & C. Madden (Eds.), *Input in second language acquisition* (pp. 235–253).

Swain, M. (1995). Three functions of output in second language learning. In G. Cook & B. Seidlhofer (Eds.), *Principle and practice in applied linguistics: Studies in honour of Henry G. Widdowson* (pp. 125–144). Oxford University Press.

Swain, M. (1998). Focus on form through conscious reflection. In C. Doughty & J. Williams (Eds.), *Focus on Form in Classroom Second Language Acquisition* (pp. 64–81). Cambridge University Press.

Swain, M. (2005). The output hypothesis: Theory and research. In E. Hinkel (Ed.), *Handbook of research in second language teaching and learning* (pp. 471–483). Lawrence Erlbaum Associates.

Swan, K., & Ice, P. (2010). The community of inquiry framework ten years later: Introduction to the special issue. *The Internet and Higher Education*, *13*(1–2), 1–4. https://doi.org/10.1016/j.iheduc.2009.11.003

Sweney, M. (2018, February 12). Is Facebook for old people? Over-55s flock in as the young leave. *The Guardian*. https://www.theguardian.com/technology/2018/feb/12/is-facebook-for-old-people-over-55s-flock-in-as-the-young-leave

Syed, H., Memon, S., Chachar, Z. A., Zameer, S., & Shah, T. (2022). Willingness to communicate in a second language and the promise of complex dynamic systems theory: A narrative review. *Research in Education*, *113*(1), 41–58.

https://doi.org/10.1177/00345237211031261

Tagg, C., Seargeant, P., & Brown, A. A. (2017). *Taking Offence on Social Media*. Springer International Publishing. https://doi.org/10.1007/978-3-319-56717-4

Tahounehchi, S. (2021). The Impact of Mobile Technology on Vocabulary Learning of L2 Learners : The Case of WhatsApp Application. *The Journal of AsiaTEFL*, *18*(1), 223–234. https://doi.org/10.18823/asiatefl.2021.18.1.13.223

Talmy, S. (2010). Qualitative Interviews in Applied Linguistics: From Research Instrument to Social Practice. *Annual Review of Applied Linguistics*, *30*, 128–148. https://doi.org/10.1017/S0267190510000085

Tan, C. N., & Siegel, J. T. (2018). Surveys. In B. B. Frey (Ed.), *The SAGE Encyclopedia of Educational Research, Measurement, and Evaluation*. SAGE Publications, Inc. https://doi.org/10.4135/9781506326139.n679

Tang, Y., & Hew, K. (2019). Emoticon, Emoji, and Sticker Use in Computer-Mediated Communication: A Review of Theories and Research Findings. *International Journal Of Communication*, *13*(27), 2457–2483. https://ijoc.org/index.php/ijoc/article/view/10966

Tankovska, H. (2021). *Leading Facebook usage reasons according to users in the United States*. https://www.statista.com/statistics/972892/reasons-being-on-facebook-usa/

Tess, P. A. (2013). The role of social media in higher education classes (real and virtual) – A literature review. *Computers in Human Behavior*, *29*(5), A60–A68. https://doi.org/10.1016/j.chb.2012.12.032

Thorne, S. L. (2003). Artifacts and Cultures-of-Use in Intercultural Communication. *Language Learning & Technology*, *7*(2), 38–67.

Thorne, S. L. (2016). Cultures-of-use and morphologies of communicative action. *Language Learning & Technology*, *20*(2), 185–191. https://doi.org/10125/44473

Thorne, S. L., Sauro, S., & Smith, B. (2015). Technologies, Identities, and Expressive Activity. *Annual Review of Applied Linguistics*, *35*, 215–233. https://doi.org/10.1017/S0267190514000257

Tragant, E., Pinyana, À., Mackay, J., & Andria, M. (2021). Extending language learning beyond the EFL classroom through WhatsApp. *Computer Assisted Language Learning*, 1–30. https://doi.org/10.1080/09588221.2020.1854310

Tran, P. (2018). Enhancing online language learning task engagement through social interaction. *Australian Journal of Applied Linguistics*, *1*(2), 88–101.

https://doi.org/10.29140/ajal.v1n2.78

Tunde-Awe, B. (2015). Relevance of online social networking in the teaching of English as a second language in Nigeria universities. *European Scientific Journal*, *11*(4), 252–262.

Tusting, K. R., Ivanic, R., & Wilson, A. (2000). New literacy studies at the interchange. In D. Barton, M. Hamilton, & R. Ivanic (Eds.), *Situated Literacies* (pp. 210–218). Routledge.

Twining, P., Heller, R. S., Nussbaum, M., & Tsai, C.-C. (2017). Some Quidance on Conducting and Reporting Qualitative Studies. *Computers & Education*, *106*, A1–A9. https://doi.org/10.1016/j.compedu.2016.12.002

Varnosfadrani, A. D., & Basturkmen, H. (2009). The effectiveness of implicit and explicit error correction on learners' performance. *System*, *37*(1), 82–98. https://doi.org/10.1016/j.system.2008.04.004

Vogiatzis, D. (2017). *Examining differences in perceptions and expectations for mobile language learning between young learners and their parents* [Aristotle University of Thessaloniki (AUTH)]. https://doi.org/10.26262/heal.auth.ir.289401

Vogiatzis, D., Charitonos, K., Giaxoglou, K., & Lewis, T. (2022). Can WhatsApp facilitate interaction? A case study of adult language learning. In *Open World Learning* (pp. 44–62). Routledge. https://doi.org/10.4324/9781003177098-5

Voivonta, T., & Avramidou, L. (2018). Facebook: a potentially valuable educational tool? *Educational Media International*, *55*(1), 34–48. https://doi.org/10.1080/09523987.2018.1439708

Voskou, A. (2019). The History Curriculum of Greek Supplementary Schools in England: Origins, Pedagogic Practices and Trajectories. *European Journal of Curriculum Studies*, *5*(2), 898–915.

Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes* (M. Cole, V. John-Steiner, S. Scribner, & E. Souberman (eds.)). MA: Harvard University Press.

Wagner, E. (2015). Survey Research. In B. Paltridge & A. Phakiti (Eds.), *Research Methods in Applied Linguistics: A Practical Resource* (pp. 83–99). Bloomsbury Academic.

Wang, I. T., Lin, Y. T., Tsai, I. Y., & Chuang, K. C. (2017). The Effects of Peer Interaction-Based Learning Community Through Facebook on Students' English Learning Attitude and Motivation. In T. Wu, R. Gennari, Y. Huang, H. Xie, & Y. Cao (Eds.), *Emerging Technologies for Education. SETE 2016. Lecture Notes in Computer Science* (pp. 240–256). Springer. https://doi.org/10.1007/978-3-319-52836-6_25

Wang, R., Scown, P., Urquhart, C., & Hardman, J. (2014). Tapping the educational potential of Facebook: Guidelines for use in higher education. *Education and Information Technologies*, *19*(1), 21–39. https://doi.org/10.1007/s10639-012-9206-z

Wang, S., & Vásquez, C. (2012). Web 2.0 and Second Language Learning: What Does the Research Tell Us? *CALICO Journal*, *29*(3), 412–430. https://www.jstor.org/stable/calicojournal.29.3.412

Wang, Z., Anderson, T., Chen, L., & Barbera, E. (2017). Interaction pattern analysis in cMOOCs based on the connectivist interaction and engagement framework. *British Journal of Educational Technology*, *48*(2), 683–699. https://doi.org/10.1111/bjet.12433

Warschauer, M. (2009). Foreword. In M. Thomas (Ed.), *Handbook of research on Web 2.0 and second language learning* (pp. xix–xx). IGI Global.

We Are Social. (2021). *Most popular social networks worldwide as of January 2021, ranked by number of active users*. Statista - The Statistics Portal. https://www.statista.com/statistics/272014/global-social-networks-ranked-by-number-of-users/

Wen, W. P., & Clément, R. (2003). A Chinese Conceptualisation of Willingness to Communicate in ESL. *Language, Culture and Curriculum*, *16*(1), 18–38. https://doi.org/10.1080/07908310308666654

Werquin, P. (2010). *Recognising Non-Formal and Informal Learning*. OECD. https://doi.org/10.1787/9789264063853-en

Willems, J., Adachi, C., Bussey, F., Doherty, I., & Huijser, H. (2018). Debating the use of social media in higher education in Australasia: Where are we now? *Australasian Journal of Educational Technology*, *34*(5). https://doi.org/10.14742/ajet.3843

Williams, B., Wankat, P. C., & Neto, P. (2018). Not so global: a bibliometric look at engineering education research. *European Journal of Engineering Education*, *43*(2), 190–200. https://doi.org/10.1080/03043797.2016.1153043

Wulandari, E., & Mandasari, Y. P. (2021). WhatsApp in Emergency Remote Learning (The Students' Perception). *JEES (Journal of English Educators Society)*, *6*(2), 220–227. https://doi.org/10.21070/jees.v6i2.1402

Xin, C. (2012). A critique of the Community of Inquiry framework. *International Journal of E-Learning and Distance Education*, *26*(1). http://www.ijede.ca/index.php/jde/article/download/755/1333?inline=1

Yilmazsoy, B., Kahraman, M., & Köse, U. (2020). Negative Aspects of Using Social Networks in Education: A Brief Review on WhatsApp Example. *Journal of Educational Technology and Online Learning*, *3*(1), 69–90. https://doi.org/10.31681/jetol.662746

Yin, R. K. (2014). *Case study research : design and methods* (5th ed.). Sage Publications.

Yuliantini, N. N., Paramita, I. G. A. P. D., Setyono, E. Y., & Suciani, N. K. (2021). The use of whatsapp cooperative learning in writing class. *Journal of Applied Studies in Language*, *5*(2), 245–251. http://ojs2.pnb.ac.id/index.php/JASL

Yus, F. (2014). NOT ALL EMOTICONS ARE CREATED EQUAL. *Linguagem Em (Dis)Curso*, *14*(3), 511–529. https://doi.org/10.1590/1982-4017-140304-0414

Zhang, J., Beckmann, N., & Beckmann, J. F. (2018). To talk or not to talk: A review of situational antecedents of willingness to communicate in the second language classroom. *System*, *72*, 226–239. https://doi.org/10.1016/j.system.2018.01.003

Zhao, H., & Sullivan, K. P. H. (2017). Teaching presence in computer conferencing learning environments: Effects on interaction, cognition and learning uptake. *British Journal of Educational Technology*, *48*(2), 538–551. https://doi.org/10.1111/bjet.12383

Zhou, R., Hentschel, J., & Kumar, N. (2017). Goodbye Text, Hello Emoji: Mobile Communication on WeChat in China. *Proceedings of the 2017 CHI Conference on Human Factors in Computing Systems - CHI '17*, 748–759. https://doi.org/10.1145/3025453.3025800

Zourou, K. (2020). A Critical Review of Social Networks for Language Learning Beyond the Classroom. In M. Dressman & R. W. Sadler (Eds.), *The Handbook of Informal Language Learning* (pp. 369–383). John Wiley & Sons.

Zourou, K., Potolia, A., & Zourou, F. (2017). Informal Social Networking Sites for Language Learning: Insights into Autonomy Stances. In M. Cappellini, T. Lewis, & A. R. Mompean (Eds.), *Learner Autonomy and Web 2.0* (pp. 141–167). Equinox.

Zulkanain, N. A., Miskon, S., Abdullah, N. S., Ali, N. M., Bahari, M., & Ahmad, N. (2019). *Social Network Sites (SNS) Issues in Learning Landscape – Systematic Literature Review* (pp. 592–600). https://doi.org/10.1007/978-3-030-34032-2_52

Appendices

Appendix 1: The coding scheme (CoI)

Category	Indicator	Definition	Example
Interpersonal Communication	Affective expression	Conventional or unconventional expressions of emotions and feelings; includes repetitious punctuation, conspicuous capitalisation and emoticons	Am I the only survivor? 😟
Interpersonal Communication	Self-disclosure	Presenting details or disclosure about life outside the course (current events in their lives/educational or family background/ hobbies/ expressions of likes, dislikes and preferences) Or expressing vulnerability	Our new grandson, [name], was born a week ago. 😊
Interpersonal Communication	Use of humour	Use of humour, teasing, cajoling, irony, sarcasm, understatement	You can teach your grandson German, right? 😉
Open Communication	Continuing a thread	Using the reply feature of the software, rather than starting a new thread	Software dependent
Open Communication	Quoting from others' messages	Using software features to quote others' entire messages, or cutting and pasting selections of others' messages	No example available
Open Communication	Referring explicitly to others' messages	Direct references to contents of others' posts	Thank you very much [name of the teacher], everything is clear
Open Communication	Asking Questions	Learners pose questions to their peer or to their teacher	I have a question - what is correct?
Open Communication	Complimenting, expressing appreciation	Complimenting, expressing appreciation, offering praise and encouragement.	Thank you. It's a good video to revise and easy to understand.
Open Communication	Expressing agreement	Expressing agreement with others or content of others' messages	You are right and I hope so too!
Cohesive Communication	Vocatives	Addressing or referring to learners/teachers by name	Peter mentioned Bremen, and Nicole guessed correctly.
Cohesive Communication	Group reference	Refereeing to the groups as "we", "us", "our", "group"	This is my first message in our WhatsApp group
Cohesive Communication	Phatics / Salutations	Salutations, greetings, closure / communication that serves purely social function	Hello all. I hope you are well!

Coding scheme for social presence

(Based on: Garrison, 2017; Garrison & Anderson, 2003; Goshtasbpour, 2019; Goshtasbpour et al., 2020)

Coding scheme for teaching presence

Category	Indicator	Definition	Example
Instructional Design & Organization	Setting curriculum	Introducing important course information (e.g. course goals, activities, topics, expectations, etc.) and providing information about how the course operates	The time has come for our Easter activity […]
	Designing methods	Providing clear instructions and guidelines on how to participate in course	I'd like others in the group to comment on your sentences and / or correct them.
	Establishing time parameters	Introducing clear time frames for the course and learning activities	A fun activity for the next two weeks …
	Utilizing medium effectively	Assisting learners to use the online environment effectively (e.g. using platform features)	Finally, share your text by replying to this message and comment on the work of others!
	Establishing netiquette	Establishing rules that encourage appropriate and courteous online behaviour	Two sentences only please. 🙂
	Making macro-level comments	Providing rationale for topics, tasks and activities	When you don't go to [name of the educational centre] to have French lessons, you can always do revisions …
Facilitating Discourse	Identifying areas of agreement/disagreement	Identifying areas of agreement and disagreement on course topics and in the online discussions	No example available
	Seeking to reach consensus/understanding	Guiding learners toward understanding course topics and reaching agreement	But for this assignment I meant two short sentences because it is not possible to correct that much. I should have emphasized that! 🙂
	Encouraging, acknowledging learners' contributions	Acknowledging learners' participation in the course, e.g., replies in a positive encouraging manner to learners' contributions	Yes, that's right! Very nice 😊
	Setting climate for learning	Encouraging learners to explore concepts in the course, e.g., promotes the exploration of new ideas	Let's try to have everybody taking part. All contributions welcome! 🙂
	Drawing in participants, prompting discussion	Drawing in participation / helping keep learners engaged and participating in the online discussions	And you? Are you choosy sometimes?
	Assess the efficacy of the process	Evaluating the effectiveness of communications to keep learners on track	Very good! No mistakes! A good example of the past tense!

	Present content/questions	Introducing the course content / Posing and directing questions to learners	What's the meaning when using this word alone?
Direct Instruction	Focus the discussion on specific issues	Assisting learners to focus the discussion on relevant issues / keeping participants on topic	No example available
	Summarise the discussion	Revisiting, reviewing and summarising learners' contributions to highlight key concepts that emerge from the discussion	Last night we tried to explain "emballer " with several meanings
	Confirm understanding through assessment & feedback	Explicitly assessing discussion / providing feedback	Nice example! But 'bewältigen' is transitive verb, so you don't need 'mit'
	Inject knowledge from diverse sources	Sharing useful information from a variety of sources, e.g., articles, textbooks, videos, or links to external web sites	https://learningapps.org/547464 / easy exercise to recap...
	Responding to technical concerns	Helping learners overcome any technical issues that might arise	No example available

(Based on: Garrison, 2017; Garrison & Anderson, 2003; Goshtasbpour, 2019; Goshtasbpour et al., 2020)

Coding scheme for cognitive presence

Category	Indicator	Definition	Example
Triggering event	Recognize problem	Presenting background information that can lead to a question or the identification of a problem / issue	I write a little French, I can also read a little more French. But I find speaking French very difficult! I can't remember the words fast enough.
Triggering event	Puzzlement	Expressing puzzlement by asking task or content-related questions	Is it something like - to overcomplicate things? Or to use modern piece of psychobabble - to catastrophise?
Exploration	Divergence	Presenting different ideas and/or themes and supporting or contradicting previous ideas	But, what is really incredible is that such a right-wing 'Brexiteer' can speak German so well.
Exploration	Information exchange	Exchanging information (e.g. views, beliefs, facts, external resources etc.)	Here's another website that was recommended in today's newspaper. https://www.iwillteachyoualanguage.com/learn/german/courses
Exploration	Suggestions	Exploring a topic or a task by making suggestions	Quite a lot of guidance on transitive and intransitive verbs, although not always clear... this might be the best from a short review of Google suggestions
Exploration	Brainstorming	Generating task or content-related ideas and drawing links between which can potentially lead to solutions/suggestions	During the Brexit referendum, the achievements of Putin's hacker were totally destructive for the British people 😳
Exploration	Intuitive leaps	Understanding and drawing conclusions based to feelings/assumptions rather than facts	I find the French speak very quickly and they do not use easy words when they speak with people from other countries. When you are English, you have to make an effort every day between and understand the English of foreigners.
Integration	Convergence	Referencing to previous ideas, building on, adding to others' ideas, and providing justified and developed hypothesis	This city could either be Hamburg or Bremen. I believe that Bremen does not have a large airport. Therefore I choose Hamburg 🤔
Integration	Synthesis	Connecting ideas and integrating information from different sources (e.g. external resources, personal experiences, others' contributions)	I think that Hamburg and Bremen are federal states, so is it one of those cities?
Integration	Solutions	Explicitly characterising a post or a comment as a solution	Saint Boniface was from Devon, a local saint, well, well. So, the city has to be Fulda.
Resolution	Apply	Providing examples of how a proposed solution solves a specific problem	No example available
Resolution	Test	Assessing the viability of a proposed solution (perhaps through vicarious implementation or though experiment)	No example available
Resolution	Defend	Defending the proposed solution and explaining why a problem was solved in a specific manner	No example available

Appendix 2: Course Overview (Pilot study)

During the eight weeks of the course, you will have the opportunity to learn some of the vocabulary and useful phrases you need to help you interact with people at a basic level.

You will start to develop the four language skills of reading, listening, writing and speaking through a range of resources (videos, pictures, pdf files, etc.) and activities.

Most of the activities in this course require language learners to collaborate and work in groups. Therefore, it is important that you help each other by asking for and providing feedback.

You will also learn some essential Greek grammar (Present/Past/ Future tense), including some basic verbs. Keep in mind that if you are a beginner, you don't need to go through all the grammatical phenomenon and characteristic which will be presented in this course.

The course is divided in eight weeks and a different topic will be presented each week. You will be supported by relevant material (videos, pictures, pdf files, etc.) that you need to comprehend each topic. Moreover, each week you will need to work in groups with your fellow students, provide answers to some activities and share your work on the Facebook group.

Topics

Week 1: "Greeting and introducing oneself"
It will introduce you to the basic language, so that you are able to:
- ✓ Introduce yourself
- ✓ Greet people
- ✓ Talk about your everyday life

Task: Introduce yourselves in Greek by posting a comment to the Facebook group.

Week 2: "English words which come from Greek"
It will introduce you to the basic language, so that you are able to:
- ✓ Expand your vocabulary knowledge
- ✓ Link new vocabulary with your former knowledge and experiences

Task: Read the uploaded advertisements and try to identify words which come from Greek.

Week 3: "Ordering drinks and food"
It will introduce you to the basic language, so that you are able to:
- ✓ Order food and drinks
- ✓ Compose dialogues in Greek

Group Activity: Compose a dialogue acting as waiters and customers. Then share your work with the other teams and provide feedback to others' work.

Week 4: "Sharing culture-rich files and photographs"
It will introduce you to the basic language that you need to:
- ✓ Describe a destination
- ✓ Familiarize yourselves with the present and future tense
- ✓ Identify the differences between present and future tense

Group Activity: Share an image (or a video) which presents your favourite destination in Greece (or a place that you would like to visit in the future) and write a description of your selected destination.

269

<h2 style="text-align:center">Week 5: "Greek traditions and celebrations"</h2>

It will introduce you to the basic language, so that you are able to:

✓ Present and describe a place
✓ Familiarize yourselves with Greek customs and traditions

Group Activity: Retrieve information about a specific location in Greece and write a description about the traditions that it represents. Then present your work to the other teams (including images or videos).

<h2 style="text-align:center">Week 6: "Travelling around Greece"</h2>

It will introduce you to the basic language, so that you are able to:

✓ Talk about where places are
✓ Ask for directions
✓ Describe a geographical location
✓ Ask for facilities and services

Group Activity: Choose a specific location in Greece and provide information about how to travel from Athens to your selected location. Explain which means of transportation you will employ and provide information about the geographical location. Then share your work with the other teams, while the other teams will need to guess your destination.

<h2 style="text-align:center">Week 7: "Greek history and mythology"</h2>

It will introduce you to the basic language, so that you are able to:

✓ Talk about an action/event that occurred in the past
✓ Identify the main differences between present and past tense
✓ Familiarize yourselves with Greek history and mythology

Group Activity: Watch a video about a specific topic and fill in an activity sheet.

<h2 style="text-align:center">Week 8: "Writing an Email"</h2>

It will introduce you to the basic language, so that you are able to:

✓ Write an Email (or letter) in Greek
✓ Express your feelings
✓ Identify the key differences between formal and informal speech

Group Activity: Choose a hypothetical recipient (e.g. pen pal, landlord, host, etc.) and compose a joint Email (e.g. thanking someone or complaining about something) and then share your work with your peers.

Appendix 3: Pre-Questionnaire

The following survey has been designed in order to determine how adult language learners use Social Media in their everyday lives and examine how learners perceive their use for language learning purposes.

Please note that this survey and any information included in it will be used solely for research purposes, and no information linking you and your responses will be released. The survey forms will be destroyed on completion of the study.

Please try to answer each of the questions below.

What day of the month is your birthday? _____

What are the first three letters of your mother's first name? _____

1. What is your age? _____
2. What is your gender?
   ☐ Male   ☐ Female

3. Which of the following social media do you use? (check all that apply)
   ☐ Facebook   ☐ Twitter   ☐ WhatsApp

   ☐ YouTube   ☐ Instagram   ☐ Snapchat

   ☐ Pinterest   ☐ LinkedIn   ☐ Other: _____

4. Which devices do you normally use for accessing Social Media? (check all that apply)
   ☐ Desktop Computers   ☐ Mobile Phones

   ☐ Tablet Computers   ☐ Laptop Computers

5. How much time do you daily spend on Social Media?
   ☐ Less than 30 minutes   ☐ 1-2 hours

   ☐ 30 minutes to 1 hour   ☐ More than 2 hours

6. If you use WhatsApp, how long have you had an account?
   ☐ Less than a year   ☐ 3-4 years

   ☐ 1-2 years   ☐ More than 5 years

7. If you have an account in WhatsApp, how often do you access it?
   ☐ Never   ☐ 5-6 times per week

   ☐ Less than once a week   ☐ Once a day

   ☐ 1-2 times per week   ☐ More than twice per day

   ☐ 3-4 times per week

8. If you use WhatsApp, how much time do you daily spend on it?
   ☐ Less than 30 minutes   ☐ 1-2 hours

   ☐ 30 minutes to 1 hour   ☐ More than 2 hours

9. How confident do you fell using WhatsApp? (Pease rate your confidence on a scale of 1 to 5, 1= "Not confident at all" and 5=" Very confident")

Not confident at all		Somewhat confident		Very confident
1	2	3	4	5

10. How frequently do you use WhatsApp for the following purposes?

	Never	Very Rarely	Rarely	Occasionally	Very Frequently	Always
1. Sending messages	☐	☐	☐	☐	☐	☐
2. Viewing pictures	☐	☐	☐	☐	☐	☐
3. Posting pictures	☐	☐	☐	☐	☐	☐
4. Sharing links	☐	☐	☐	☐	☐	☐
5. Participating in individual conversations	☐	☐	☐	☐	☐	☐
6. Participating in group Chats	☐	☐	☐	☐	☐	☐

11. Apart from English and German, have you learnt any other languages?

☐ Yes ☐ No

If you answered "Yes" to question 11, what other language(s) have you learnt?

_____

12. What are the main challenges that you face with respect to your language learning? Please give details:

_____

_____

13. How do you think WhatsApp can deal with these challenges? Please give details:

_____

_____

14. What do you think the challenges of using WhatsApp for language learning will be? Please give details:

_____

_____

15. Have you ever used Social Media for any educational purpose?

☐ Yes ☐No

If you answered "Yes", what Social Media have you used?

_____

16. Have you ever used Social Media for language learning purposes?

☐ Yes ☐No

If you answered "Yes", what Social Media have you used?

_____

17. Would you like to use WhatsApp for language learning?

☐ Yes ☐ No

18. Have you ever joined a group in WhatsApp to communicate with your peers about courses you were studying?

☐ Yes ☐ No

19. For each of the questions below, circle the response that best characterizes how you feel about the statement. 1=Strongly Disagree, 2=Disagree, 3= Slightly Disagree, 4= Slightly Agree, 5= Agree and 6= Strongly Agree

I would like to use WhatsApp in order to enhance my…

		Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
I.	Listening skills	1	2	3	4	5	6
II.	Reading skills	1	2	3	4	5	6
III.	Speaking skills	1	2	3	4	5	6
IV.	Writing skills	1	2	3	4	5	6
V.	Vocabulary knowledge	1	2	3	4	5	6
VI.	Grammar /Syntax	1	2	3	4	5	6
VII.	Cultural Awareness	1	2	3	4	5	6

Thank you for your cooperation!

Appendix 4: Post-Questionnaire

The following survey has been designed in order to identify the students' attitudes and perspectives towards the use of Social Media for language learning purposes.

Please note that this survey and any information included in it will be used solely for research purposes, and no information linking you and your responses will be released. The survey forms will be destroyed on completion of the study.

Please try to answer each of the questions below.

What day of the month is your birthday? _____

What are the first three letters of your mother's first name? _____

1. What is your age? _____

2. What is your gender?
   ☐ Male   ☐ Female

3. Which device did you use the most for accessing the group on WhatsApp?
   ☐ Desktop Computer   ☐ Mobile Phone
   ☐ Tablet Computer   ☐ Laptop Computer

4. How often did you access the group?
   ☐ Never   ☐ 5-6 times per week
   ☐ Less than once a week   ☐ Once a day
   ☐ 1-2 times per week   ☐ More than two times per day
   ☐ 3-4 times per week

5. How much time did you spend on the group each week?
   ☐ Less than 30 minutes   ☐ 1-2 hours
   ☐ 30 minutes to 1 hour   ☐ More than 2 hours

6. Did you enjoy using WhatsApp for language learning?
   ☐ Yes   ☐ No

7. For each of the questions below, circle the response that best characterizes how you feel about the statement. 1=Strongly Disagree, 2=Disagree, 3= Slightly Disagree, 4= Slightly Agree, 5= Agree and 6= Strongly Agree.

	Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
1. The group enabled me to have online discussions with my peers.	1	2	3	4	5	6
2. The learning activities were well organized.	1	2	3	4	5	6
3. Overall the project was beneficial to me.	1	2	3	4	5	6
4. The project took up too much time.	1	2	3	4	5	6
5. I met some technological problems.	1	2	3	4	5	6
6. I could easily download/upload resources.	1	2	3	4	5	6
7. I could easily find any information/material.	1	2	3	4	5	6
8. I could easily join the group and the weekly sessions.	1	2	3	4	5	6
9. I felt comfortable posting to the group.	1	2	3	4	5	6
10. The group provided a friendly and safe environment for sharing ideas and communicating with my classmates and teachers.	1	2	3	4	5	6

8. Would you like to use Social Media in other language classes in the future?
☐ Yes ☐ No

9. Are you planning to continue using WhatsApp to communicate with your classmates after the end of the project?
☐ Yes ☐ No

10. For each of the questions below, circle the response that best characterizes how you feel about the statement. 1=Strongly Disagree, 2=Disagree, 3= Slightly Disagree, 4= Slightly Agree, 5= Agree and 6= Strongly Agree.

The following features were helpful to me in learning German…

		Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
I.	Posting Activities/ Resources	1	2	3	4	5	6
II.	Giving feedback to other classmates	1	2	3	4	5	6
III.	Getting feedback	1	2	3	4	5	6
IV.	Sharing learning contents	1	2	3	4	5	6
V.	Reading corrections/comments on other students' posts	1	2	3	4	5	6
VI.	Collaborating with other peers	1	2	3	4	5	6
VII.	Using Chat to communicate with my peers	1	2	3	4	5	6

11. What means of communication did you employ, while working together with your peers? (Check all that apply)

☐ Personal messages (online chat)   ☐ Voice calls

☐ Group chat   ☐ Face to face meetings

☐ Video chat   ☐ Other: _____

12. For each of the questions below, circle the response that best characterizes how you feel about the statement. 1=Strongly Disagree, 2=Disagree, 3= Slightly Disagree, 4= Slightly Agree, 5= Agree and 6= Strongly Agree

The group on WhatsApp helped me enhance my…

		Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
VIII.	Listening skills	1	2	3	4	5	6
IX.	Reading skills	1	2	3	4	5	6
X.	Speaking skills	1	2	3	4	5	6
XI.	Writing skills	1	2	3	4	5	6
XII.	Vocabulary knowledge	1	2	3	4	5	6
XIII.	Grammar /Syntax	1	2	3	4	5	6
XIV.	Cultural Awareness	1	2	3	4	5	6

13. What part of the project did you enjoy the most? (Please give details)
_____
_____

14. What part of the project did you enjoy the least? (Please give details)
_____
_____

15. Please, list 5 items you learned during the project:
   a. _____   d. _____
   b. _____   e. _____
   c. _____

Thank you for your cooperation!

Dimitrios Vogiatzis
Postgraduate research student at the Open University
Faculty of Wellbeing Education and Language Studies
Email: dimitrios.vogiatzis@open.ac.uk
Tel: 07599671691

Further information (Q&A) about:
"Examining learners' use of Social Media for language learning purposes."

What is the aim of this research?

The purpose of this study is to explore your use of Social Media for language learning purposes. This study will aim to identify how you draw on the affordances of Social Media for language learning purposes. Your perception of the use of Social Media for promoting your skills in the target language will also be examined. The study will also investigate the extent to which collaboration among learners and feedback by fellow learners can be facilitated through the use of Social Media.

Who is conducting the research and who is it for?

Dimitrios Vogiatzis is a postgraduate research student at the Open University (Faculty of Wellbeing Education and Language Studies) and this study is part of his research.

Why am I being invited to participate in this research?

You are language learners and you are interested in enhancing your skills in the target language. For this reason I would like to invite you to participate in my research.

If I take part in this research, what will be involved?

I will be conducting a project concerning the use of Social Media for language learning purposes. The project will take about 6 to 8 weeks, in which you will be invited to join a group in Social Media to help develop your skills in the target language. This will be a friendly online environment which can facilitate student-student and teacher-student interactions. You will be asked to answer two questionnaires, which will take approximately 10 minutes to fill in. You may be asked to participate in an interview which will take approximately 30 minutes and would be conducted in a place of your own choice, and at a date and time convenient to you. Interviews may be carried out via Skype or face to face depending on your availability and preferences. To ensure your safety, all our researchers carry photographic identification.

What will the research be like?

At the start of the project you will be asked to complete a survey and afterwards you will be asked to join a group in Social Media which will aim to supplement your language learning. The privacy settings for our group will be "secret", which means that only those of you who consent to take part in the study will be able to join the group to avoid any unwanted interventions from strangers. You will also receive guidance on how to use Social Media and how to choose your privacy settings. During the project, relevant material and topics will be uploaded on Social Media by your language teacher to help you work in specific language skills with respect to collaboration and peer feedback. During this period the researcher will observe your participation and keep notes which will be used solely for research purposes. None of the data collected will reveal your personal details. After the project you will be asked to fill in another questionnaire about your experiences. Some of you will be also asked to take part in an interview conducted by the researcher.

What will we be talking about?

During the project you will be asked to participate in a group in which you can find material and activities related to your language learning. Specific topics supported by relevant resources, activities and learning objectives will be presented each week and you will have the chance to discuss the uploaded material, engage with the activities and work together with your peers. Our group in Social Media will aim to supplement your language learning by extending the limited classtime.

Is it confidential?

Your participation will be treated in **strict confidence** in accordance with the Data Protection Act. No personal information will be passed to anyone outside the research team. We will write a report of the findings from this study, but no individual will be identifiable in published results of the research.

What happens now?

Over the next few weeks, I may contact you by telephone (or email) to ask if you would like to take part. All of the students who will volunteer will be able to take part in the project. If you would prefer not to be contacted about this research, please use the phone number (or Email address) below to let us know and we will not contact you again. Your participation is entirely voluntary

What if I have other questions?

If you have any other questions about the study, we would be very happy to answer them. Please contact Dimitrios Vogiatzis 07599671691 or by email to dimitrios.vogiatzis@open.ac.uk.

Consent form (Main study)

Faculty of Wellbeing, Education and Language Studies

Consent form for persons participating in the research project

"Examining learners' use of Social Media for language learning purposes."

Name of participant:

Name of principal investigator(s): Dimitrios Vogiatzis

1.   I consent to participate in this project, the details of which have been explained to me, and I have been provided with a written statement in plain language to keep.

2.   I understand that my participation will involve the administration of two questionnaires and systematic observation of my activity in Social Media, and I agree that the researcher may use the results as described in the plain language statement.

3.   I acknowledge that:

   a.   the possible effects of participating in this research have been explained to my satisfaction

   b.   I have been informed that I am free to withdraw from the project without explanation or prejudice and to request the destruction of any data that have been gathered from me until it is anonymized at the point of transcription on 31st May 2019. After this point data will have been processed and it will not be possible to withdraw any unprocessed data I have provided

   c.   the project is for the purpose of research

   d.   I have been informed that the confidentiality of the information I provide will be safeguarded subject to any legal requirements

   e.   I have been informed that with my consent the data generated will be securely stored in the Open University's research data archive, Open Research Data Online (ORDO) and will be destroyed after 5 years

   f.   I have been informed that anonymized research data may be made available to other members of the research community for a period of 5 years

   g.   If necessary any data from me will be referred to by a pseudonym in any publications arising from the research

   h.   I have been given contact details for a person whom I can contact if I have any concerns about the way in which this research project is being conducted

   i.   I have been informed that a summary copy of the research findings will be forwarded to me, should I request this.

I wish to receive a copy of the summary project report on research findings   □ **yes**   □ **no**

(please tick)

Email or postal address to which a summary should be sent:

Participant signature: Date:

Contact details for the Principal Investigator (PI) and Research organisation and Faculty:

Dimitrios Vogiatzis
Postgraduate research student at the Open University
Faculty of Wellbeing Education and Language Studies
Email: dimitrios.vogiatzis@open.ac.uk
Tel: 07599671691

Contact details for an alternative contact if you have any concerns about the way the research project is being conducted:

Dr Timothy Lewis
Senior Lecturer in Languages
Faculty of Wellbeing Education and Language Studies
Email: timothy.lewis@open.ac.uk

This research has been reviewed by, and received a favourable opinion, from the OU Human Research Ethics Committee - HREC reference number: HREC/2772/Vogiatzis (http://www.open.ac.uk/research/ethics/).

"Examining learners' attitudes and perceptions towards the use of Social Media for language learning purposes."
QUALITATIVE RESEARCH CONSENT FORM:

participant serial number:	

Consent to be interviewed by Dimitrios Vogiatzis:
Please initial boxes below

I confirm that I have read / had read to me the leaflet, about this research project and I understand the content. ☐

I understand that my participation is voluntary and that I am free to withdraw at any time, without giving a reason. ☐

I understand that the interview will be recorded and written out word-for-word later. The recording will be securely stored in accordance with the Data Protection Act. ☐

I understand that anything I say will be treated confidentially and only used for research purposes, in accordance with the Data Protection Act. ☐

I agree to take part in the "Examining learners' attitudes and perceptions towards the use of Social Media for language learning purposes" research study ☐

Name of participant	Date	Signature
Dimitrios Vogiatzis		
Name of researcher	Date	Signature

Appendix 7: Email invitation to participate in interviews

Hello [name],

I hope you are well!

I am Dimitris and as you may know I am carrying out a research to examine the learners' attitudes and perceptions towards the use of Social Media for language learning purposes. As part of my research, I am conducting some interviews to increase my understanding of how WhatsApp can be used for language learning.

The interview takes around 30 minutes, is very informal and would be conducted at your preferred location, at a date and time that is convenient to you. Your responses to the questions will be kept confidential, any information derived from this interview will be used solely for research purposes, and no information linking you and your responses will be released. You are also free to withdraw from the research by 31st of August 2019, without giving any reason.

Could you please suggest a day and time that suits you? I'll do my best to be available. If you have any questions please do not hesitate to ask.

Upon completion of the interview you will receive a £15 Amazon voucher to compensate you for your time.

I look forward to hearing from you.

Best wishes,

Dimitrios Vogiatzis

dimitrios.vogiatzis@open.ac.uk

Interview Protocol

Ethics

First of all, I would like to thank you for taking the time to participate in that interview. I would also like to remind you that our informal conversation will be recorded for research purposes.

The reason why I am carrying out this interview is to find out more about your experience concerning the use of Facebook/WhatsApp for language learning purposes. Please note that any information derived from this interview will be used solely for research purposes, and no information linking you and your responses will be released. All your personal data will be anonymised and kept in a password encrypted folder for the duration of the study and will be destroyed within two years after its completion.

Collect consent (see Consent form for interviews)

Interview Questions

General / Icebreaker Questions

Can you please tell me a bit about your French/German language learning?

How do you use Facebook/WhatsApp in your everyday life?

Key Questions	Follow-up probes	Research Questions / Reason for asking
What was your reaction when you first heard from your teacher that you would use Facebook/WhatsApp in your lessons?	How did you expect to use Facebook/WhatsApp?	Students' perceptions towards the use of Facebook/WhatsApp for language learning.
Can you please take me through an example/situation/lesson where you used Facebook/WhatsApp in your language learning?	How did this differ from what you usually did in your lessons in the past?	RQ1
What, if any, were the difficulties for you in using Facebook/WhatsApp in your language learning?	Can you give me an example? Can you please describe those difficulties?	RQ1
In what ways did Facebook/WhatsApp enable you to interact with other students and the teacher?	How easy or difficult was it to interact? What made it easy or /difficult?	RQ3
What opportunities (if any) did Facebook/WhatsApp offer you for sharing material or other information on the group page?	To what extent did you use them? How did this kind of sharing work for you? How did you use the "like" and "comment" functions (if you did so)?	RQ2
What, if anything, did Facebook/WhatsApp enable you to do that you couldn't do before?	Can you please explain this to me in more detail? What makes you say this?	RQ1,2&3
Did the use of Facebook/WhatsApp help you enhance any language skills?	Which skill(s)? Please tell me about how you developed your skill(s)?	RQ1

	How did you find the learning material and activities? Did these affect your language learning? How?	
In what ways has the use of Facebook/WhatsApp in your French/German lessons impacted on your learning?	Can you please explain this to me in more detail? What makes you say this?	RQ1
How was Facebook/WhatsApp used in activities that required collaboration?	Can you give me an example where collaboration worked well? In what ways did Facebook/WhatsApp hinder / facilitate collaboration?	Literature-driven
Can you please explain what feedback is?	What do you think about the place of feedback in language learning? Can you give me an example of feedback?	RQ3
In some activities you were asked to provide feedback to your peers. How did that go?	How did you react to this? How useful did you find FB for activities involving feedback?	RQ3
How do you react when you receive feedback from the teacher (or your fellow students)?	What do you think about the process of receiving feedback?	RQ3
Can you think of any differences between the feedback you get during in-classroom learning and feedback received in Facebook?	What makes you say this? Can you give me an example?	RQ3
In general, do you have any concerns about Facebook/WhatsApp?	We all know that Facebook/WhatsApp has received criticism about privacy issues over these last few months. Do you share any of these concerns about privacy in this environment?	Literature-driven
In what ways has Facebook/WhatsApp affected or changed your relationships with peers and tutors, if any?	What makes you say this? Why did that happen?	Literature-driven

Concluding the interview

What, if anything, stood out for you in this project, with respect to your language learning?
Could you suggest any improvements concerning the project?
Do you have any other thoughts about the project?
Thank the interviewee and ask if he/she has any questions.

Appendix 9: Timeline of initiative posts in the Facebook group

Date	Initiative post author	Features Used	Total Comments	Post details
11.02.2019	Researcher	YouTube video	0	Facebook Privacy Settings
11.02.2019	Researcher	Pdf file	0	How to enable French language on mobile devices
11.02.2019	Researcher	Link	0	How to enable French language on your computer
11.02.2019	Researcher	Image	5	Cover photo of the Facebook group
11.02.2019	Teacher	Image	5	Vocabulary – Medical ailments & symptoms
14.02.2019	Teacher	FB video	4	Valentine's day related video
16.02.2019	Teacher	Image	2	Vocabulary – Expression of the week
20.02.2019	Teacher	Text entry	4	Writing – Skiing (describe a holiday at a mountain)
20.02.2019	Teacher	Text entry	9	Culture – French traditions ("Chandeleur")
21.02.2019	Teacher	YouTube video	3	Grammar Revision (The past tense)
23.02.2019	Teacher	Image	4	Vocabulary – Expression of the week
27.02.2019	Teacher	YouTube video	3	Listening – declaration of love to France (Listening comprehension)
27.02.2019	Teacher	Link	5	Humour – Annoying things about France
02.03.2019	Teacher	Text entry	1	Vocabulary – Expression of the week
03.03.2019	Teacher	YouTube video	0	Humour – Global warming
06.03.2019	Teacher	Link	3	Culture – Carnival in France
09.03.2019	Teacher	Text entry	3	Vocabulary – Expression of the week
11.03.2019	Teacher	Link	6	Culture – "Excuse my French" expression
14.03.2019	Teacher	YouTube video	0	French movie
16.03.2019	Teacher	Image	2	Vocabulary – Expression of the week
18.03.2019	Teacher	YouTube video	1	Pronunciation – Practice your pronunciation in French language
20.03.2019	Teacher	Link	0	Grammar – 20 common verbs in French language

22.03.2019	Amélie	Image	1	Humour – Difficult expressions in English language
23.03.2019	Teacher	Image	2	Vocabulary – Expression of the week
27.03.2019	Teacher	YouTube video	0	Culture – Studying in French universities
31.03.2019	Teacher	Text entry	1	Vocabulary – Expression of the week
01.04.2019	Teacher	Image	1	Culture – April fools' day in France
03.04.2019	Teacher	YouTube video	0	Culture – Stereotypes in France
06.04.2019	Teacher	Image	0	Vocabulary – Expression of the week (Humour)
08.04.2019	Teacher	Text entry	5	Writing - Going to the doctor activity
12.04.2019	Teacher	Text entry	0	Vocabulary – Expression of the week
17.04.2019	Teacher	Image	1	Image of the cathedral of Notre-Dame in flames
20.04.2019	Teacher	Image	3	Vocabulary – Expressions related to fruits in French
27.04.2019	Teacher	Image	1	Vocabulary – Expression of the week
05.05.2019	Louis	Text entry	1	Vocabulary – Asking for the definition of an expression
05.05.2019	Teacher	YouTube video	0	Vocabulary – Every day and slang language in France

Appendix 10: Activities Posted by the teacher in the WhatsApp group

Activities Posted by the teacher	Number of learners' Replies	Number of learners participated
1. Wort des Tages: die Errungenschaft(en) = achievement. Kann jemand einen Satz bilden? 😊 (Word of the day: die Errungenschaft(en) = achievement. Can someone make a sentence?)	10	2
2. Heute ein trennbares Verb: 'anerkennen' = to recognise / acknowledge. Viel Spass! 🙂 (Today a separable verb: 'anerkennen' = to recognize / acknowledge. Have fun!)	9	2
3. Weiter so! 👍 Für heute ein Vokabelntest von mir... wie heißt auf deutsch 'schwinden' und 'bewältigen'..? 🙂 (Keep it up! For today a vocabulary test from me ... What is the German word 'schwinden' und 'bewältigen'?)	4	2
4. Kann jemand das trennbare Verb 'zutreffen auf' in einem Satz benutzen? (Can someone use the separable verb 'zutreffen auf"= 'apply to' in a sentence?)	3	3
5. Hallo alle. Heute eine Frage.. Hat jemand etwas Besonderes am Wochenende gemacht? Kannst du das in zwei Sätzen beschreiben? 😁 (Did someone do something special on the weekend? Can you describe that in two sentences?)	5	4
6. Heute eine klieine Herausforderung... wie viele Verben könnt ihr nennen, die mit 'be' anfangen? 😊 (Today a little challenge ... How many verbs can you name that start with 'be'?)	5	5
7. Als Wiederholung von diesem Trimester... wieviele Vokabeln könnt ihr geben zu den Themen 'Unwelt' und 'Medien'. Jedes Wort zählt! 😊 (As a revision of this semester ... How many vocabulary words can you give on the topics 'environment' and 'media'? Every word counts!)	1	1
8. A fun activity for the next two weeks...Imagine you are going to Germany as a group and you have to plan the trip. Discuss where to go, what to do, what to see, when to go and for how long. All in German please. Let's try to have everybody taking part. All contributions welcome! 🙂	1	1
9. Another group activity this week... In two sentences say what you did over the Easter weekend in German. Then others in the group can comment on your sentences and / or correct them. Then I'll give feedback too. Two sentences only please. 🙂	16	6

10. Another group activity this week... In three short sentences say what you did over the Bank Holiday weekend in German. I'd like others in the group to comment on your sentences and / or correct them. Then I'll give feedback too. It'll be nice to have a contribution from each person if possible. 🙂	8	6
11. A new activity this week... Choose a destination in Germany or Austria but don't tell the rest of the group. Imagine you're going to travel there. Write to the group describing its geographical location, how you will travel, what is special about this place and why you suggested it. The rest have to guess where it is.	36	7
12. Another fun group task here... Compose a short dialogue in German in a restaurant or shop. Aim for three to five exchanges each. Make it amusing if you can! Can you also comment on other's sentences and / or correct them?	2	2