

# Programa de Doctorado en Lenguas Aplicadas, Literatura y Traducción

Escuela de Doctorado de la Universitat Jaume I

# The Empowerment of Perceptual Learning Styles with the Use of Social Media in the University Foreign Language Classroom

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Memoria presentada por Noelia Gargallo Camarillas para optar al grado de doctor/a por la Universitat Jaume I

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#### 1. INTRODUCTION

This chapter aims to provide a general overview of the present dissertation by introducing the main ideas and concepts. Firstly, this work's motivation and purpose are explained to contextualise the theoretical background and the experiment. Secondly, the research questions and the research design are described so as to know the objectives of the study and the characteristics of its implementation. Finally, this chapter concludes with a summary of the doctoral dissertation.

#### 1.1. Motivation and Purpose

One of the major concerns of the Spanish educational system over the last decades has been teaching English as a Foreign Language (EFL). This growing interest in the language field is reflected in the national curriculum with the implementation in 1996 of the bilingual programme by the Spanish Ministry of Education, Culture and Sport, and the British Council (Ministerio de Educación y Formación Profesional, 2015). Moreover, it was also in the 20th century when research in Applied Linguistics focused on individual variables, such as learning styles (Ellis, 2006). Therefore, this recent interest has brought some studies related to learning styles but there is a limited number of research focused on perceptual learning styles in the 21st century. One of the most relevant factors that has created an impact in the educational field has been the introduction of new media technologies and, in this line, different authors (Sharples, 2000; Pudichery, 2003; White, 2007; Tynjälä, 2008) point out the Internet as the main source of information and communication among learners in the current international and globalised world.

Due to the increasing interest in learning foreign languages and in the face of the bad results in the Spanish educational system regarding the students' EFL proficiency level (EF English Proficiency Index, 2020), this work underlines three main fields of analysis and, therefore, provides new evidence which may contribute to the ground for improvement in the current situation: (1) EFL teaching and learning, (2) perceptual learning styles, and (3) digital education and training. These fields are examined in the theoretical background, which is more specifically based upon (1) the most relevant humanistic foreign language learning approaches that have been developed up to the 21st century, (2) perceptual learning styles among the new generation of learners in multimodal contexts, and (3) the digital literacy and its literacies present in the learning and digital teaching context.

On account of the current educational evolution towards the Communicative Approach, the present doctoral dissertation intends to examine the effects of the increasing social use of technological applications on students' perceptual learning styles in the EFL classroom. In particular, the purpose of this study is to evince the possible empowerment of students' perceptual learning styles as a consequence of the use of Social Media applications such as *WhatsApp* or *Instagram*. Therefore, the emergence of multiple perceptual categories (e.g., bimodal or multimodal) in interaction and information exchange may be relevant for students and teachers in the language classroom. The present study proposes the implementation of Social Media in communicative activities at the university in order to meet students' needs and characteristics regarding their learning styles and strategies. Furthermore, the adoption of Social Media as a pedagogical tool also aims to provide positive results regarding students' attitudes (e.g., confidence and motivation) for future implementations.

This doctoral dissertation focuses on the social construction of language knowledge and communication with the use of Social Media in a multimodal and digital learning context. The present work supports the view of considering Social Media as a tool to follow communicative and socio-constructivist approaches, which enable learners to experience learning in real-life contexts. Consequently, some of the features that would break the current limitations of the Spanish educational context in EFL learning to result in effective learning would be experiential learning, meaningful learning, authenticity, collaborative and active roles, learning autonomy, or lifelong learning. It is important to highlight that this work does not aim to compare the effectiveness of different Social Media applications but to provide some evidence of their common characteristics, which are necessary to overcome the limitations of traditional learning.

#### 1.2. Research Questions and Research Design

The present doctoral dissertation focuses on perceptual learning styles and the use of Social Media in the EFL classroom at the university. In particular, it aims to examine the effects of the new technological exposure on students' perceptual learning styles by focusing on the effectiveness of using Social Media as a pedagogical tool among students regarding their (1) communicative competence, (2) perceptual learning styles, and (3) digital literacy.

The present study suggests Social Media, and more specifically *WhatsApp* and *Instagram*, as a pedagogical application in the EFL classroom at university. In particular, the purpose of this study is to analyse a new learning profile that teachers may find in the EFL classroom regarding the multiple perceptual modes that each student may present, as well as the possible emergence of the multimodal learning style in the EFL classroom. Furthermore, it

intends to show evidence that Social Media have been a revolution in learners' communicative preferences and should be regarded as a pedagogical application in the classroom setting because of the multiple benefits explained in the last theoretical chapter of this dissertation. In this respect, Social Media should be considered by teachers as a pedagogical tool that promotes (1) the Socio-constructivist Approach, (2) experiential learning, (3) Communicative Language Teaching, (4) learning autonomy, (5) lifelong learning, and (6) all the perceptual learning styles (i.e., it supports the appearance of the multimodal learning style).

The objectives of the present study are the following:

- (1) To analyse the Communicative Language Teaching Approach from a digital perspective.
- (2) To identify university students' perceptual learning styles.
- (3) To determine students' attitudes towards the future implementation of authentic materials (e.g., Social Media) in the EFL learning environment.

In order to attain these objectives, this study attempts to provide an answer to the following Research Questions (RQs):

- (RQ1) To what extent do Social Media applications support the enhancement of students' communicative competence in EFL?
- (RQ2) Does the use of multimodal online applications in the classroom exert an influence on the emergence of multiple perceptual learning modes among Generation

**Z**?

(RQ3) Can the use of Social Media in the EFL classroom improve students' confidence and motivation?

In order to answer the research questions, quantitative and qualitative methods are used, following an Action Research Approach.

The quantitative methodology of this study, on the one hand, relies on numbers in the collection of data (Bryman, 2001). Besides, using numbers or statistical data reduces the time invested in analysing the results obtained and allows for the use of experimental and control groups. For example, the researcher can split the participants into two groups with different teaching methodologies and consider the research objectives. On the other hand, the qualitative method contributes to shaping the research. The obtained data is not numerical and is collected from words. Furthermore, this method tries to understand human behaviours such as interaction or reasoning (Johnson and Christensen, 2012). Therefore, factual and descriptive information is provided, such as participants' perceptions of their performance in the task or participants' attitudes (e.g., motivation and confidence) after its implementation.

Concerning the approach chosen to carry out this research, Action Research or Participatory Action Research refers to:

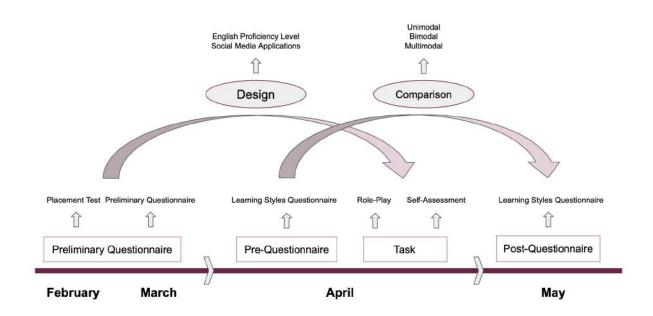
A wide variety of evaluative, investigative, and analytical research methods designed to diagnose problems or weaknesses—whether organisational, academic, or instructional—and help educators develop practical solutions to address them quickly

and efficiently. [...] The general goal is to create a simple, practical, repeatable process of iterative learning, evaluation, and improvement that leads to increasingly better results for schools, teachers, or programs. (The Glossary of Education Reform, 2015)

This research approach can be used to improve educational characteristics. For that purpose, different steps are followed. Firstly, it is necessary to identify and analyse a problem. After, a plan has to be formulated to be carried out. With the implementation of the plan, results are obtained and can be evaluated to improve further actions. Therefore, Action Research (Burns, 2005) can be conducted by teachers to gain knowledge of the educational context and consequently improve their teaching strategies and promote effective learning. Considering that the present study aims to introduce some improvements in the educational system, this approach has been chosen to generate proposals leading to improving learning conditions and teaching practice. Moreover, Action Research seems to be an appropriate approach to get results that improve learning and teaching conditions by empowering students and teachers with the implementation of Social Media activities. In particular, the introduction of Social Media in the language classroom intends to enable learners to be communicatively competent using EFL in real-like contexts, enhance students' perceptual learning modes and consequently improve their performance and attitudes in the learning process. Furthermore, with the adoption of this research approach, this study attempts to contribute to effective learning environments by supporting the Style-Matching Hypothesis (Pashler et al., 2009), which refers to the idea of matching students' learning styles with instructional methods to improve learning outcomes.

Taking into account the previous assumptions, a research plan (see Figure 1) was developed in order to obtain data (see Chapter 6) and answer the research questions (see Chapter 7).

**Figure 1** *Research Timeline* 



The implementation of the experiment began with a preliminary questionnaire, which was conducted in February and March of 2021. Firstly, it included a placement test which was completed by the participants of this study in order to know their English proficiency level. Secondly, students were asked to fulfil a preliminary questionnaire to identify their preferences regarding Social Media applications. Therefore, the results obtained in this preliminary questionnaire were considered in the design of the task, which was a role-play. In the next step, a pre-questionnaire was carried out to determine the students' perceptual learning modes (e.g., auditory <sup>1</sup>, kinaesthetic <sup>2</sup>, and visual <sup>3</sup>) and learning categories (i.e.,

<sup>&</sup>lt;sup>1</sup> Mode in which individuals learn most effectively through hearing.

<sup>&</sup>lt;sup>2</sup> Mode in which individuals learn most effectively through physical activities and real experiences.

<sup>&</sup>lt;sup>3</sup> Mode in which individuals learn most effectively through sight.

unimodal <sup>4</sup>, bimodal <sup>5</sup>, and multimodal <sup>6</sup>). Furthermore, a comparison between these results and those obtained in the post-questionnaire was made. Therefore, possible changes before and after the implementation of the treatment (i.e., role-play) could be detected. Regarding the proposed task, participants of both the experimental and control groups interpreted a role-play with different applications or tools (e.g., Social Media or voice recorder) according to the objectives of the present study. After, participants were asked to fill up a self-assessment questionnaire which included questions about their performance and attitudes towards the task. Then, data could be collected in order to know the participants' opinion about their performance of the task, confidence in taking part in communicative activities and motivation to participate in further role-plays to improve their language skills.

#### 1.3. Summary of this doctoral dissertation

This dissertation consists of eight chapters.

Chapter 2 shows how the foreign language learning environment has changed during the last decades. This chapter deals with the Constructivist Theory and, more specifically, with the concepts of social constructivism and experiential learning. Moreover, the main characteristics of some relevant humanistic foreign language learning approaches are explained with the focus on communicative competence, the authenticity of classroom materials, and the students' active role. This chapter concludes with the description of two remarkable features of the Communicative Approach: autonomy and lifelong learning.

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<sup>&</sup>lt;sup>4</sup> Category assigned to individuals that obtain, at least, 50% in only one of the perceptual modes (i.e., auditory, kinaesthetic, or visual).

<sup>&</sup>lt;sup>5</sup> Category assigned to individuals that obtain, at least, 50% in two of the perceptual modes (i.e., auditory, kinaesthetic, or visual).

<sup>&</sup>lt;sup>6</sup> Category assigned to individuals that obtain, at least, 50% in the three perceptual modes (i.e., auditory, kinaesthetic, or visual).

The third chapter describes the new generation of learners, who present new unprecedented characteristics, which should be considered by the educational system. More specifically, this chapter introduces the changes that students have been developing for the last decades with a special focus on the possible variations of their perceptual learning styles in the EFL classroom. In view of the multimodality <sup>7</sup> of the social and learning environments, the conclusion of the chapter explains the most relevant features of Generation Z, also known as the Net Generation.

In Chapter 4, the digital EFL context is described regarding the concept of literacy. More specifically, it deals with the evolution of Information and Communication Technologies (ICTs) in the learning context and with the development of the concept of literacy into multiliteracies. In addition, this chapter aims to describe the students' most recent needs and preferences. Particularly, the affordability of using Social Media in the EFL classroom is explained in order to enhance students' communicative skills, perceptual modes, and multiliteracies in multimodal contexts.

The fifth chapter deals with the methodology conducted in the study. In particular, it describes the variables that are analysed, the context in which the study took place, the characteristics of the participants, the procedures followed to collect the data, and the instruments used. First of all, this study considered four variables: (1) the use of Social Media and traditional materials to perform a role-play, (2) the enhancement of communicative competence, (3) the emergence of multiple learning modes, and (4) the improvement of

<sup>&</sup>lt;sup>7</sup> Representation of multiple modes (e.g., images, videos, or written/spoken words) that help comprehend the traits of the new medium (i.e., the Internet).

students' confidence and motivation. In order to carry out the experiment, a total of 34 students from English for Tourism at Universitat Jaume I were selected as the participants of this experiment. With the objective of obtaining results that may answer the Research Questions (RQs) of the present study, the procedure of the study is divided into four stages: (1) preliminary questionnaire, (2) pre-questionnaire, (3) task, and (4) post-questionnaire. Moreover, the aforementioned four stages are followed in the experimental and control groups. Firstly, the preliminary study involves the implementation of a preliminary questionnaire, which includes questions related to personal information, language background and Social Media. Furthermore, it also asks students about their results obtained in a placement test. The objective of this preliminary study is to obtain a general understanding of the characteristics of the participants in order to facilitate the design of the task. Secondly, a perceptual learning styles' questionnaire has been designed as the pre-questionnaire and post-questionnaire of the study, with the purpose of providing some evidence of the possible change of the students' perceptual learning styles towards multiple modes (i.e., bimodal and multimodal) and the possible variations after the implementation of the task. In addition, according to the specific goals of this work, a role-play has been designed and implemented with the introduction of Social Media (i.e., realia) as the treatment of this experiment. After, a self-assessment questionnaire has been implemented in order to get qualitative results which may provide some evidence regarding the students' perceptions of their performance and attitudes towards using English in informal real conversations or role-plays in the EFL classroom. Moreover, the characteristics of both the role-play and the self-assessment questionnaire are the same for both groups of participants with the exception of those aspects related to Social Media in the experimental group.

Chapter 6 shows the results obtained from applying the four stages included in the present study (i.e., preliminary questionnaire, pre-questionnaire, task, and post-questionnaire). Moreover, this chapter describes the results obtained in the experimental and control groups.

The final two chapters focus on the analysis of the variables and discussion of the results obtained, the general conclusions drawn from this research and the limitations of this investigation. In particular, Chapter 7 aims to provide an answer to the three Research Questions (RQs) proposed in this study: (RQ1) To what extent do Social Media applications support the enhancement of students' communicative competence in EFL?; (RQ2) Does the use of multimodal online applications in the classroom exert an influence on the emergence of multiple perceptual learning modes among Generation Z?; (RQ3) Can the use of Social Media in the EFL classroom improve students' confidence and motivation? Finally, Chapter 8 summarises the main aspects of the present work and offers suggestions for further research.

# 2. TOWARDS THE 21st CENTURY FOREIGN LANGUAGE LEARNING ENVIRONMENT

#### 2.1. Introduction

The purpose of the present chapter is to describe the evolution that the foreign language learning and teaching field has been experiencing for the last decades towards a communicative teaching approach. The description of the aforementioned development is explained from the socio-constructivist point of view, which supports the active role of the students in the construction of knowledge within the current communicative digital learning setting. To do so, this section describes the Constructivist Theory and provides a general overview of some of the humanistic teaching approaches in the language education field. Moreover, it explains some of the most remarkable changes in the language learning area, which are related to the teachers' and students' roles, and classroom materials. Furthermore, the development of such changes together with the emergence of digital tools in the learning environment have enabled learners to use the target language in different real-life contexts. Accordingly, experiential learning, learning autonomy, and lifelong learning are three characteristics that teachers must consider in order to facilitate effective language learning. Finally, before dealing with this chapter, it is important to differentiate the terms 'acquisition' and 'learning'. The difference between these two terms resides in two points: awareness and context. Whereas acquisition refers to the subconscious process in which the speaker is unaware of the rules s/he is exposed to in the street or in other 'natural' contexts, learning is the result of a direct process of instruction in the rules of language in an 'artificial' context (e.g., classroom) (Littlewood, 1984). Therefore, although the two terms may appear in the

present chapter, this chapter focuses on analysing the evolution of the learning field in the language classroom towards a communicative learning environment.

#### 2.2. Social Constructivism and Experiential Learning

Language is a system of communication that may be acquired or learnt due to the interactive connection with the environment. Similarly, Constructivist Theory is based on the idea that knowledge is constructed through the interaction with environmental experiences (Fenwick, 2001). In other words, students are considered as the 'constructors' of their own language knowledge, which is generated according to their social interaction with the external surrounding elements. As a consequence, it is important that teachers know what the real interests of their students are so as to incorporate relevant learning activities in the classroom (Mattar, 2018). In this way, learners may be motivated to take what they have learnt in class and feel confident to put it into practice in a real social context, where knowledge can also be constructed. Moreover, if the teachers know the preferences of their students, learning experiences will be also likely to occur in other contexts rather than in the educational one. Some of the most relevant contributions to Constructivist Theory research have been made by Piaget (1966) and Vygotsky (1978), who respectively offered two different perspectives of Constructivist Theory: cognitive constructivism and social constructivism.

Firstly, the traditional view of Constructivist Theory (i.e., cognitive constructivism) was provided by Piaget (1966), whose main focus was on learners' interactions with content knowledge in the environment. In this line, Piaget's theory on Constructivism draws attention to the learner and his/her peer relations. Namely, he affirmed that learners create knowledge through the interaction of experiences and ideas. The mechanism used in order to explain the

creation of complex understandings is a triadic process based on evolutionary biology: (1) assimilation, (2) accommodation, and (3) equilibration (Schrader, 2015; Zhiqing, 2015; Babaee Bormanaki & Khoshhal, 2017). Firstly, assimilation refers to the incorporation of any perceived stimulus into the existing schema (i.e., how the world is perceived and interpreted). Secondly, accommodation deals with the process by which the subject builds a new schema on the basis of the old schema. Finally, equilibration is the active and dynamic balance between the two previous experiences (e.g., assimilation and accommodation). In particular, it refers to the psychological equilibrium between the cognitive structures of the subject and the objects.

In contrast, Vygotsky (1978) offered a more cultural and social perspective (i.e., social constructivism), and affirmed that meaning is constructed according to cultural and social characteristics that influence humans' psychology. Especially, both the surrounding culture and social environment determine what and how to think. Hence, Vygotsky's theory on constructivism does not embrace the individual genetic epistemological framework (Schrader, 2015) as it is not based on the Piagetian triadic process but on the actions provided by cultural and social interactions. Therefore, the learning process is seen as a social construction and it focuses on the heart of the educational process: learning and learners (Adams, 2006). For instance, collaboration, social interaction and critical thinking could be incorporated into the classroom following a socio-constructivist view (Powell & Kalina, 2009). Finally, a key concept in order to understand Vygotsky's theory is the Zone of Proximal Development (ZPD) (Vygotsky, 1962). This concept refers to a zone where learning occurs when the student receives help in learning. For instance, if a language learner is writing an introduction to an essay with the help of the teacher, his/her ZPD grows when the

objective is achieved. Along the same lines, Vygotsky (1962) also included another key concept in his theory: Scaffolding. This concept supports the ZPD to get to the next level of understanding and occurs when the student completes a task after performing it with assistance.

Both the cognitive constructivist and the socio-constructivist perspectives regard students' motivation for learning as intrinsic and inherent within human psychology (Schrader, 2015). Therefore, the two perspectives contemplate motivation as an individual and internal variable that must be enhanced by the students' language construction and interaction. To do so, teachers must know their learners' characteristics (Mattar, 2018). Furthermore, both perspectives study knowledge as the creation and recreation resulting from the active role of learners in discovering new knowledge (Pritchard & Woollard, 2010). The two standpoints support the idea that learning is an active process in which the learner is the main focus and language is a key element in the learning process. Consequently, learners actively discover and construct language from the interaction of different meanings according to their cognitive characteristics. Therefore, learning is not based on memorisation but on the association between previous knowledge and the new piece of knowledge. This is known as meaningful learning (Ausubel, 2002). Particularly, learning becomes meaningful, comprehensive, and lasting throughout the student's life when it is connected to personal experiences. For this reason, learners can construct meaningful learning if the process is experiential.

Experiential learning may be defined as the process through which students experience, reflect, think and act in order to respond to the learning situation and its input (Kolb, 1984). Kolb (1984) affirmed that:

In experiential learning, immediate personal experience is seen as the focal point for learning, giving life, texture and subjective personal meaning to abstract concepts and at the same time providing a concrete, public shared reference point for testing the implications and validity of ideas created during the learning process. (p. 21)

The learning process should not take place without considering personal experience and personal meaning. These two important characteristics must be contemplated by teachers in order to design relevant and meaningful activities for the learners. For this reason, experiential learning supports the idea of including contextualised and realistic situations in the activities so as to link students' experience with EFL learning. In this respect, the relation between experiential learning and Constructivist Theory is that experiential learning regards prior knowledge and experiences as the learning basis to transfer to new situations and, therefore, to 'construct' knowledge and meaning. During the last few years, the emergence of technological tools has facilitated the design of activities considering the aforementioned characteristics so as to create new ways of communication and interaction, which allow learners to construct knowledge in the modern social context.

With the introduction of digital tools in the learning environment, experiential learning can be accomplished. The implementation of new technological devices in the language classroom implies not only new ways of social interaction, but also the possibility of using any foreign language in real communicative situations (Gulbani & Joshi, 2012). Some of these new tools are blogs, podcasts, or Social Media (e.g., *WhatsApp*, *Facebook*, *Instagram*, *Youtube* or *Twitter*). As a consequence, new ways of interaction and information access have created

powerful learning environments with the aim of improving learning experiences and creating student-centred classrooms at universities through the use of technology (Ashton-Hay, 2006). This constructive process of knowledge is more effective and productive throughout the collaborative, interactive, and active role of the students (Buchberger, 2001). In this respect, technology can be regarded as a bridge between the language classroom and the real world. For instance, learners can use language with other speakers from other parts of the world in order to talk about their interests or future prospects. Then, from the socio-constructivist point of view, language can be effectively constructed if students take an active role in the classroom with collaborative activities that promote interaction, consider real situations, and enhance students' interests through experiential learning. The present study also aims to demonstrate the affordability of using Social Media as a pedagogical tool to promote effective learning within the socio-constructivist approach.

In conclusion, Constructivist Theory, and more specifically social constructivism, together with experiential learning entail "decentralising the classroom as a learning context and preparing the students for autonomous, lifelong learning, as well as incorporating competences in curricula to promote knowledge transfer in a professional environment" (Iglesias, 2013, p. 2). The connection between the learning environment and the external social context allows students to construct knowledge in a meaningful way. Therefore, one of the recent purposes of the educational system is to simulate real situations in the learning environment in order to create meaningful learning. In this respect, the emergence of digital tools has been a turning point in the promotion of communicative competence (Hymes, 1967) in the EFL classroom because most of the digital tools are clearly 'promoters' of communication and interaction in the social atmosphere. However, throughout the last

decades, the learning context has experienced complex changes, ranging from traditional perspectives to the new communicative approaches. Therefore, the pedagogical use of digital tools is still a challenge for the educational system, which is trying to promote communicative competence together with digital competence.

#### 2.3. Humanistic Foreign Language Learning Approaches

Across the ages, different Foreign Language Learning Approaches have arisen. All of them have been applied according to their different perspectives on language learning-teaching. Particularly, Grammatical Approaches (i.e., The Grammar Translation Method, the Direct Method, and Structuralism/Audiolingualism) differ from Humanistic Learning Approaches in relation to "the increased importance of the learner's role opposite to the teacher's role supremacy existing until that moment and consequently the emergence of the learning dimension at the expense of the teaching dimension" (Ruíz-Madrid, 2005, p. 17). Whereas Grammatical Approaches focus on the teacher's authority and on the teaching characteristics (Alcón, 2002), Humanistic Learning Approaches switch the focus towards the students' role and the learning aspects. For the purpose of the present study, this section focuses on three Humanistic Foreign Language Learning Approaches: Cognitive Approach, Functional-Notional Approach, and especially, Communicative Approach.

Firstly, the Cognitive Approach is a psychological view that explains human behaviour regarding the mental processes that are built in their memory to learn. In other words, cognitivists focus on the internal processes (e.g., sensory processes) that the students' mind follows in order to understand the input. Furthermore, the Cognitive Approach considers language as a cognitive action that transforms the received information through the senses

into output in order to be transmitted to others (Fulcher, 2003). This cognitive action is based on the learner's experience of the world and the way it is perceived (Ungerer & Schmid, 2001). Hence, language is the vehicle that learners use in order to have access to cognitive content.

One of the most remarkable studies of the Cognitivist Approach was carried out by Piaget (1968), whose theories about cognition led to the later Communicative Approach. According to Piaget, experience allows learners to organise knowledge regarding the existing cognitive structures in learners' minds. Two of the concepts that were developed in his cognitivist theory were assimilation and accommodation (see Section 2.2), which refer to the processes of the interpretation of the input and the transformation of cognitive structures in order to understand the information that surrounds learners. Therefore, learners adapt to the surrounding context in terms of assimilation and accommodation. More specifically, assimilation and accommodation make reference to the interaction between the subject and the object. Whereas assimilation refers to the incorporation of the perceived stimulus to prior knowledge, accommodation refers to the transformation of the subject under the influence of the object. A third concept that originated in Piaget's cognitive theory was that of equilibration, which is the cognitive condition of the subject. Accordingly, if a person loses the equilibration, assimilation and accommodation do not take place unless the person changes the behaviour and reestablishes the equilibration. In conclusion, it may be affirmed that Piaget's view of the Cognitive Approach is clearly constructivist since new input needs to be processed together with the existing cognitive structures and the surrounding information.

The Cognitive Approach implies new views on language teaching methods. Like all the Humanistic Learning Approaches, the Cognitive Approach focuses on the learner and more specifically on the cognitive sphere. The cognitive perspective on learning is summarised in Table 1 with the most relevant aspects to consider:

**Table 1** *The Cognitive Learning Perspective* 

#### **Learning Important Aspects within the Cognitive Approach**

Introduction of comprehension activities, which were considered as a specific area with specific goals, procedures and techniques.

Introduction of an estimated period of silence that allows learners to elaborate their intake before going ahead to the expression phase.

Introduction of conceptualisation activities.

Introduction of the development of learners' metalanguage.

Introduction of the development of learning strategies.

Ruiz-Madrid (2005, p. 39)

The features described in Table 1 introduce some of the aspects that focus on learners, such as their goals or characteristics, the design of the activities, their metalanguage or the learning strategies they use. This growing interest in the learner caused a new dimension in the learning syllabus from a functional-notional perspective. In fact, one of the first syllabuses based on this new view (i.e., communicative teaching) was described as notional syllabus (Richards & Rodgers, 2001), which evidences the communicative revolution that happened in the 1970s (Hedge, 2000), when educators started to consider the learners' communicative ability.

The functional-notional syllabus reflects the growing concern for the learner initiated by the Cognitive Approach, which began to include features such as learning strategies, learning autonomy or learners' interaction. Moreover, it also reflects the aim of language teaching: communication. As its name indicates, the functional-notional syllabus is based on two elements: the functional and the notional aspects. Whereas the functional refers to the ultimate purpose of the language (i.e., communication), the notional makes reference to concepts related to the surrounding context such as time, space, cause and effect (White, 1988). Therefore, Functional-Notional Approach creates communication from the interaction with the external environment (i.e., experiential learning) and from the consideration of the learners' characteristics. In addition, the acknowledgement of the importance of communicative purposes in the language learning process links the Functional-Notional Approach to the communicative movement in language teaching (Wilkins, 1981).

Finally, the introduction of the new concept of communicative competence was an indicator of the further evolution towards the Communicative Approach. The term communicative competence substituted the notion of linguistic competence, which was regarded as one of the competences encompassed by communicative competence (Hymes, 1967). Accordingly, the linguistic field included the description of speech acts so the functions of language and all the components of meaning became the focus of the linguistic field (Halliday, 1970). In this respect, it was necessary to develop a new view of language learning: the Communicative Approach.

# 2.4. The Emergence of the Communicative Language Teaching Approach

The introduction of the term communicative competence (Hymes, 1972; Wilkins, 1972) indicated that the Communicative Approach considers language as the combination and addition of different competences (hereinafter referred to as sub-competences): linguistic competence, sociolinguistic competence, or strategic competence, among others. Richards & Schmidt (1992) defined communicative competence in the Longman Dictionary of Applied Linguistics and Language Teaching as:

The ability not only to apply the grammatical rules of a language in order to form grammatically correct sentences but also to know when and where to use these sentences and to whom. Communicative competence includes: knowledge of the rules of speaking; knowing how to use and respond to different types of speech acts, such as requests, apologies, thanks, and invitations; and knowing how to use language appropriately. (p. 29)

In this vein, the main goal of the Communicative Language Teaching Approach is to develop the communicative competence, and therefore all its sub-competences. So, the main difference between the Grammatical Approach and the Communicative Approach is their focus. Whereas the Grammatical Approach focuses on linguistic forms, and more specifically on grammar, the Communicative Approach is organised on the basis of communicative functions (i.e., Speech Acts).

The concept of speech act was introduced by the philosopher John Austin (1962), who

affirmed that the circumstances that surround the speakers need to be considered when

producing utterances. A speech act takes place when a speaker produces an utterance with a

specific purpose. Searle (1980) defined speech act as:

The performance of certain kinds of acts, such as making statements, asking

questions, giving orders, describing, explaining, apologising, thanking,

congratulating, etc. Characteristically, a speaker performs one or more of these acts by

uttering a sentence or sentences; but the act itself is not to be confused with a sentence

or other expression uttered in its performance. (p. 7)

In order to analyse speech acts, Hymes (1972) proposed a method known as SPEAKING:

Situation: context.

Participants: interactants.

Ends: purposes.

Acts: sequences of the speech (e.g., beginning, turn-taking, interrupting).

Key: tone or manner.

Instrumentality: channels and code.

Norms: rules for interaction and norms of interpretation.

Genre: category of communication.

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Apart from the constitutive components of speech acts and the method to analyse them, Hymes (1972, p. 281) suggested four abilities for the students in order to be linguistically competent:

- Whether (and to what degree) something is formally possible.
- Whether (and to what degree) something is feasible in virtue of the means of implementation available.
- Whether (and to what degree) something is appropriate (adequate, happy, successful) in relation to a context in which it is used and evaluated.
- Whether (and to what degree) something is in fact done, actually performed, and what its doing entails.

Accordingly, in order to be linguistically competent, the language user needs to develop the previous four abilities, which are respectively related to the four systems of competence: grammatical, psycholinguistic, socio-cultural, and probabilistic. The development of the aforementioned competences evinces regard of English as a social tool in the 1960s. In this regard, two of the characteristics that have governed the social development of the Communicative Approach are the gradual opening of discourse and texts as units of communication in socio-cultural contexts and a learner-centred teaching approach (Villanueva, 2007; Girón-García; 2013). Later, throughout the 1970s and the 1980s, after the spread of the Cognitive and the Functional-Notional Approaches and the emergence of the Communicative Approach, the Council of Europe's Living Languages Project Committee elaborated the Threshold Levels for European Languages<sup>8</sup>. This project involved a

<sup>&</sup>lt;sup>8</sup> Available at: <a href="https://www.ealta.eu.org/documents/resources/Threshold-Level\_CUP.pdf">https://www.ealta.eu.org/documents/resources/Threshold-Level\_CUP.pdf</a> (Accessed 4 October 2021)

communicative synthesis of the Functional-Notional Approach and the limitation of speech acts to lists (Girón-García, 2013). Consequently, Holec (1982) proposed to approach communication as a process in which speakers interact and develop strategies instead of being participants with predefined characteristics. Therefore, students are regarded as active participants who do not share the same characteristics. Instead, each student learns in a different way (i.e., learning style) and employs different learning strategies in the communicative process according to his/her learning styles.

In the mid-to-late 20th century, EFL teaching focused on social and communicative purposes (Roberts, 2004). Since then, and with the advent of globalisation, there has been an increasing tendency to include English as the dominant foreign language in the school curriculum:

The ever-growing need for good communication skills in English has created a huge demand for English teaching around the world, as millions of people today want to improve their command of English or ensure that their children achieve a good command of English... The worldwide demand for English has created an enormous demand for quality language teaching and language teaching materials and resources. (Richards, 2006, p. 5)

Therefore, the Communicative Approach must respond to the students' communication needs and include opportunities for them to take part in meaningful situations, where participants interact with competent speakers in order to achieve specific purposes in realistic situations. Accordingly, it is important to take into consideration both the Cognitive and Functional-Notional Approaches within the Communicative Approach because this last term

includes (1) the organisation of previous knowledge together with the new one in the students' mind, (2) the communicative purposes according to the language users' needs, and (3) the surrounding communicative context. In addition, this new approach comes to light with the concept of effective learning (Girón-García, 2013), which takes place if students are the main element in the learning process and therefore adopt an active role in the language classroom. As a consequence, learners need to construct language competence throughout the exchange of knowledge in the learning environment.

Finally, the emergence of the Communicative Approach in the language classroom has created an impact on the classroom materials and, consequently, has changed the teachers' and students' roles in the learning environment. These two important consequences are developed in the following sections.

## 2.4.1. Authenticity in the Design and Implementation of Classroom Materials

The new model, comprising five interrelated communicative components (i.e., linguistic, pragmalinguistic, sociopragmatic, strategic and discourse competences), is reflected in the language school curricula, which aims to produce written and spoken pieces of discourse effectively, as well as to be competent in the four language skills (i.e., listening, reading, speaking and writing) (Usó-Juan & Martínez-Flor, 2008). Moreover, this new functionally Communicative Approach has more positive consequences for the students' learning process than a grammatically based Communicative Approach, whose units are organised regarding grammatical forms and views language as a process of mechanical habit formation based on the mastery of the grammatical competence (Gilmore, 2011). In comparison to the Communicative Approach, the grammatically based Communicative Approach tends "to

cause incessant repetition of certain grammatical constructions, certain elements of the vocabulary, certain combinations of words to the almost total exclusion of others which are equally, or perhaps even more, essential" (Sweet, 1899, p. 177). For this reason, the present study does not consider a grammatically based Communicative Approach, which concentrates on the passive role of direct instruction and on the memorisation of rules. Instead, this work considers a functionally based Communicative Approach (i.e., Communicative Language Teaching), which focuses on the students' characteristics and on their active role in order to achieve communication.

Globalisation has changed the status of English regarding global communication in the last 30 years. As a consequence, English has been progressively introduced into language learning environments around the world. Communicative Language Teaching is partly a response to this revolution (Richards, 2006). Whereas earlier language learning approaches were merely grammatical, Communicative Language Teaching has communication as the ultimate goal to be achieved. To do so, it is necessary to consider some of the main principles of Communicative Language Teaching (Richards, 2006; Gómez-Rodríguez, 2010):

- Contextualisation is a basic need to develop communicative competence.
- Social communicative functions are the main focus of the contents of a language course.
- Collaborative work is essential in order to negotiate meaning.
- Making mistakes is part of the learning process.
- Purposeful interaction is part of the communicative learning process.
- Classroom materials need to reflect typical real-life situations.

According to the aforementioned characteristics, it is essential that students put theory into practice in order to develop their communicative skills appropriately in different real-life these circumstances, communicative activities involve contexts. In "comprehending, manipulating, producing, and interacting in the target language while their attention is principally focused on meaning rather than form" (Nunan, 2001, p. 10). In other words, language knowledge is constructed through the interaction of the students with experiences that lead to meaningful learning. Therefore, language learning materials need to include current situations that make the learning environment look like a natural context in order to link content to real experiences. For this reason, materials are of key importance since they can facilitate learning both inside and outside the language classroom (Castillo, Alirio & Jaime, 2017) and, therefore, promote lifelong learning. Accordingly, the term authenticity is paramount in the language learning process because it implies that students improve their four language skills, become aware of how to apply them in real-world situations, and feel they can use real-life language (Kilickaya, 2004). In this respect, authentic discourse was defined in 1977 by Morrow (1977, p. 13) as "a stretch of real language, produced by a real speaker or writer for a real audience and designed to convey a real message". Therefore, it is important to involve learners in authentic communication by emulating natural language contexts. However, there are some linguists (Guariento & Morley, 2001) who criticise the use of authentic materials at lower levels because learners may find activities difficult and this could lead to frustration or demotivation. To overcome possible bad attitudes towards the activities proposed, Mishan (2005) stated that authentic language activities need to:

- Have a clear communicative purpose.

- Be appropriate to the text on which they are based.
- Elicit engagement with the text.
- Simulate real-life communication.
- Make students reflect upon the target language and culture.

The material that has been designed for this study includes authentic discourse in order to reproduce real communicative situations or experiences. Therefore, the present study also considers the aforementioned characteristics because the exposure to authentic materials develops useful strategies at all the educational stages, which allows students to deal with future more complex activities (Miller, 2005). Moreover, authentic materials must be chosen according to the suitability of content, exploitability, and readability (Berardo, 2006). With Communicative Language Teaching, communication is achieved through the practice of different controlled activities such as group work activities, role plays or project work (Richards, 2006). More specifically, with collaborative work and monitored activities, students can become autonomous and apply their knowledge in other contexts (i.e., lifelong learning). An example of an activity is the use of genuine menus from restaurants, which can place students in different real situations such as ordering food. Another example is a flight information display, which can be used in order to ask for information about flights or complain if there is any flight delay. From these examples, among others, learners can move to more advanced resources, such as newspaper articles or fiction texts (Dammacco, 2010). The positive results of the implementation of authentic materials in the EFL classroom, at all the levels, are supported by Canale and Swain (1980), who claimed that:

Communication activities must be as meaningful as possible and be characterised (at increasing levels of difficulty) by aspects of genuine communication such as its basis in social interaction, the relative creativity and unpredictability of utterances, its purposefulness and goal-orientation, and its authenticity. (p. 33)

As it has been previously explained, there are a lot of examples of authentic activities that involve communication. However, not all authentic activities require oral communication. According to Richards (2006), textbooks should contain a balanced number of activities pertaining to the three language practice categories:

- Mechanical practice: controlled activities that involve repetition or substitution, which are designed to practise grammar.
- Meaningful practice: controlled activities in which students are required to make meaningful choices.
- Communicative practice: activities that include unpredictable language. They require spontaneous and authentic language production.

Therefore, there is an imperative need to implement authentic activities that enable learners to meaningfully and purposefully use English. The design and implementation of such activities rest on the involvement of teachers, whereas the learning goals depend on learners' needs (Savignon, 2018). The following section describes the teachers' and students' roles in the current language learning environments.

#### 2.4.2. Teachers and Students' Roles in the Foreign Language Classroom

Under the influence of humanistic and communicative theories, the recent approaches consider knowledge and learning as social constructs based on communication, following the principles of social constructivism and experiential learning. Therefore, teaching focuses on the students' experiences and learners become the centre of the learning process (Kern & Warschauer, 2000; Breen & Candlin, 2001; Harmer, 2007). However, although Communicative Language Teaching sees learners as the central point of the process, teachers play a revolutionary role in the language classroom because they can manage both the teaching and learning processes in the EFL classroom (Facer, Sutherland & Furlong, 2003).

Firstly, teachers used to be regarded as an authority of knowledge. Nowadays, teachers are facilitators of knowledge and they are also involved in the learning process, which makes them become participants in the teaching and learning processes. In this sense, both teachers and students manage performance as both of them are managers of learning. Moreover, this teachers' implication makes learners feel secure and unthreatened, which may increase learners' active participation (Allwright, 1984). For this reason, teachers must monitor the activities in class, assuring the effectiveness of the learning goals (Richards & Rodgers, 2001). Besides, teachers need to create real situations and use English as a vehicle for communication (Farooq, 2015). This communicative context requires teachers with exceptional linguistic, teaching and social skills. They must know the real settings and how to perform effectively according to the language level and the social circumstances. For most students, the classroom is the only place where they are exposed to a foreign language. For this reason, it is essential that the foreign language becomes the main vehicle for

communication between the teacher and the students, and also among the students. In order to create an effective communicative EFL context, it would be helpful for teachers to (Juan & García, 2013):

- Consider the linguistic requirements students need to achieve according to their linguistic level.
- Reinforce the explanations with different types of resources available in the classroom.
- Teach basic linguistic patterns to improve students' communicative abilities.
- Promote strategies that facilitate the comprehension of the most common expressions.
- Have knowledge of the current research of EFL learning and teaching.
- Use different types of materials and various teaching procedures.
- Consider diversity and students' motivation.
- Create cooperative learning and decision-making activities.
- Show students the different strategies they can employ during the language learning process.
- Motivate students to use the foreign language outside the learning environment.

The present study considers the characteristics aforementioned in order to create an effective communicative context in contrast to the traditional learning environment. Therefore, the teacher must know the students' learning characteristics (e.g., learning preferences), use multimodal materials and promote the active role in the classroom in order to guarantee the effective use of the foreign language. Accordingly, the active role of the teacher reflects the

multiple roles to be adopted in the classroom (Mey, 1998). For instance, Harmer (2007) suggested to classify teachers in the following way:

- Controller: the teacher is in charge of the activities that students are doing on their own.
- Organiser: the teacher organises the students throughout different specific steps in the correct order and controls the time.
- Assessor: the teacher needs to offer feedback in various ways and explain what the learning objectives are as well as check if they are being achieved.
- Prompter: the teacher lets students work things out for themselves.
- Participant: the teacher joins in activities as another participant.
- Resource: the teacher is the resource for those students that lose control of their performance.
- Tutor: the teacher monitors students towards correct directions, especially when working on longer projects.
- Observer: the teacher observes what the students do in order to provide feedback appropriately.

Teachers should not adopt only one of the previous roles. Instead, they need to switch between the roles aforementioned according to the learning requirements (i.e., learning objectives) and circumstances (e.g., students' learning effectiveness or characteristics). In this way, learners can take an active role and meet all their learning needs with ease. Therefore, this study considers all the aforementioned teacher's roles and they will be adopted according to the situations faced during its implementation. Apart from considering learners as the

central point and adopting the appropriate role according to the learning objectives, teachers are also responsible for creating an appropriate atmosphere according to the students' emotional factors. This consideration is the first step to make students adopt an active role in a more authentic context, feel responsible for their learning and engage in their learning activities (Lantolf, 1994; Harmer, 2007; Tabbers and de Koeijer, 2010). Therefore, if students can manage real communicative situations after leaving school, learning autonomy and lifelong learning will be guaranteed.

### 2.5. Learning Autonomy and Lifelong Learning

Over the past decades, the shift towards the Communicative Approach has created a new learning environment that considers learners as the focus of the learning process. Therefore, the learner-centred characteristic has brought considerable changes into the language classroom (Girón-García, 2013), such as in the design of materials or in the role of teachers. One of the main purposes of the emphasis on learners is to make them feel responsible for their own learning (see Section 2.4). In other words, students need to be autonomous to make appropriate use of the materials and understand the teacher's role effectively. Learning autonomy, therefore, became quite widespread among language educators from the 1990s onwards (Little, 1990; Wenden, 1991).

Some of the terms that have been associated with learning autonomy are self-instruction, self-direction, self-directed learning, and individualisation (Ruiz-Madrid, 2005). However, they should not be used as synonyms of the current understanding of learning autonomy (Girón-García, 2013). The current notion of learning autonomy emphasises the role of the teacher, who monitors the activities in order to provide students with the necessary

experience to deal with different learning aspects. Two of the most frequently cited definitions of learning autonomy are provided by Holec (1981) and Little (1991). These two authors emphasise the importance of the experience acquired in class in order to be autonomous in learning situations. According to Holec (1981), one of the earliest authors to define the concept of learning autonomy is:

The ability to take charge of one's own learning [..], to have and to hold the responsibility for all the decisions concerning all aspects of this learning: 'determining' the objectives, 'defining' the contents and progressions, 'selecting' methods and techniques to be used, 'monitoring' the procedure of acquisition properly speaking (rhythm, time, place), and 'evaluating' what has been acquired. (p. 3)

Moreover, Little (1991, p. 94) defined learning autonomy as "essentially the matter of the learners' psychological relation to the process and content of learning, a capacity for detachment, critical reflection, decision-making and independent action". Considering the two definitions of Holec (1981) and Little (1991), it can be observed that Little (1991) introduced the concept of critical reflection (i.e., critical thinking), which refers to the ability to make the right choice in complex situations. Other authors (Candy, 1991; Littlewood, 1996; Benson, 2001; Derrick, 2001) also defined learning autonomy as the ability that allows learners to be independent and make choices according to their educational experiences and interventions. Furthermore, they also made a distinction between autonomy and learning autonomy. Whereas autonomy refers to the management people do in their lives, learning autonomy is related to the control that people do in relation to their learning processes, both inside and outside the classroom. Therefore, in the process of autonomous learning, students

intentionally assume to be responsible to set objectives, plan their learning process and act properly in the different learning situations. For this reason, autonomy may be defined as the capacity that people have in order to carry out actions independently in their daily routines. Moreover, learning autonomy refers to the abilities that students acquire in their educational experiences that enable them to feel responsible and make decisions about their learning process in any context.

The development of learning autonomy in the 21st century is a synonym of being independent in different contexts due to the unprecedented technological opportunities that can arise in the language classroom (Zhong, 2008). For instance, the Internet has broken the barriers that traditionally existed regarding space and time in the language classroom. In this sense, the current language classroom can consider the globalised context students live in and therefore bridge the distance and break the time between language users around the world. As a consequence, students would keep learning after finishing their formal studies. In the 1970s, this situation was named by UNESCO as lifelong learning. Later, in the 1990s, UNESCO changed its focus due to the emergence of the Communicative Approach. Lifelong learning is the term that defines the necessary competences required to continue one's self-education after concluding the formal studies (Candy, 1991). Accordingly, in order to help students have the learning competences and, therefore, become autonomous in the EFL learning process; teachers need to adapt materials to the current communicative digital situation, as well as consider the variety of backgrounds and diverse characteristics of their students (Francom, 2010). In this vein, it is important for teachers to provide learners with the necessary strategies to develop their learning autonomy in other contexts rather than the

educational environment. Thus, once they finish their bachelor's degrees, students would be able to keep on learning in the current changeable world.

#### 2.6. Conclusion

In conclusion, the adoption of the socio-constructivist view, together with the transition from the traditional to the contemporary Communicative Approach and the emergence of technology, have brought many educational changes that are still taking place in our schools and universities. This revolutionary context may frustrate students, who are uncertain of their roles and duties (Hung, Bailey & Jonassen, 2003). In order to avoid this situation and facilitate students' experience in their learning process, teachers must provide learners with authentic materials that enable them to communicate with other speakers around the world in real-life situations. Therefore, this experience would allow them to construct meaningful knowledge, and become communicatively competent and autonomous in and outside the language instruction setting. Moreover, apart from the new language students' needs, teachers must also consider their preferences and characteristics (Gargallo-Camarillas & Girón-García, 2016; Gargallo-Camarillas, 2018) because, among other beneficial aspects for students, "the number of learning styles with which individuals are comfortable is essential information in estimating the extent to which they are likely to function as relatively autonomous learners" (Foen & Confessore, 2007, p. 1).

# 3. THE NEW GENERATION BRINGS NEW PERCEPTUAL LEARNING STYLES

#### 3.1. Introduction

The present chapter aims to analyse students' learning and social characteristics, which have been shaped for the last decades by the development of learning procedures and environments and also by social changes regarding communication and technology. More specifically, this chapter describes students' learning preferences and personal characteristics and it intends to show the importance of considering both the pedagogical and social features of students in the language learning environment. First of all, the following sections provide a general overview of two key concepts necessary to understand the students' learning performance: learning styles and learning strategies. In particular, the focus of this section is on perceptual learning styles, which refers to the students' sensory or physiological inclinations in the learning environment. Moreover, this thesis analyses the possible effects of the exposure to digital applications such as Social Media in students' perceptions. As a result, multisensory preferences may have recently emerged in the learning environment. For this reason, the present study also aims to describe the introduction of the multimodal learning style, which encompasses multiple senses in one student rather than just one sensory mode (Dunn and Dunn, 1999). Finally, after dealing with this recent perceptual learning preference, this chapter concludes with the description of the most relevant characteristics of the newest generation of learners, known as Generation Z (Fernández-Cruz & Fernández-Díaz, 2016) concerning the digital learning environment.

# 3.2. Learning Styles and Learning Strategies

Learning constitutes a complex process of knowledge construction in which many variables are involved, such as learning styles, motivation or curricular characteristics. On this account, there is not one right way to learn because learners do not present fixed behavioural schemes in the learning process. In this respect, "we should not award a particular learning style label to each student" (Girón-García, 2013, p. 86). On the contrary, each student uses learning strategies that may belong to the same or different learning styles. Therefore, the more or less frequent use of specific learning strategies indicates what the students' learning styles are, without categorising the learning process as 'good' or 'bad'. Instead, the extent to which some strategies are frequently used indicates a possible correlation between learning styles and learning strategies that shows how learners experience the learning process regarding their learning styles.

Learning styles and learning strategies are two factors that determine the students' language learning process. On the one hand, learning styles are the internal characteristics that determine the decisions or actions that learners make when doing any learning activity. These actions, which depend on different internal and external variables, determine the learning behaviour of each student (Cornett, 1983). Moreover, learning styles are not dichotomous (Ehrman, 1996) but integrated, which means that they operate at different levels so that students show different degrees of preferences towards alternative learning actions. Learning styles can be classified according to different dimensions: personality types, desired degree of generality, biological differences, and sensory preferences (Ehrman & Oxford, 1990). On the other hand, learning strategies are the actions that students take according to different factors,

including that of learning styles. Learning strategies become useful when they are consciously chosen according to the learning styles or preferences (Oxford, 2003). Regarding language learning strategies, the most inclusive taxonomy was provided by Oxford (1990), which distinguishes two main categories: indirect and direct language strategies. Finally, the harmony between learning styles and learning strategies, together with the appropriate teaching approach, contributes to the creation of an effective learning environment.

The concept of learning styles has steadily gained influence in recent years (Jaleel & Thomas, 2019). One of the most popular definitions of learning styles was stated by Dunn and Griggs (1988), who referred to this term as "the biologically and developmentally imposed set of characteristics that make the same teaching method wonderful for some and terrible for others" (p. 3). Moreover, Dunn and Dunn (1993) stated that learning styles also refer to the students' concentration, processing, absorption or retention of information. Furthermore, Reid (1995) defined learning styles as "an individual's natural, habitual, and preferred way(s) of absorbing, processing, and retaining new information and skills" (p. 34). Some years later, Clark (2004, p. 2) stated that "a learning style is a student's consistent way of responding to and using stimuli in the context of learning". From these definitions, we can remark that this concept encompasses different dimensions. Four of the most relevant learning styles' dimensions are: personality types, desired degree of generality, biological differences, and sensory preferences (Ehrman & Oxford, 1990). Table 2 shows the itemisation of each of the four dimensions aforementioned:

 Table 2

 Learning Styles' Dimensions

Learning Styles' Dimension	Itemisation
Personality types	<ul> <li>Extroverted vs. introverted</li> <li>Intuitive-random vs. sensing-sequential</li> <li>Thinking vs. feeling/emotional</li> <li>Closure-oriented/judging vs. open/perceiving</li> </ul>
Desired degree of generality	- Global/holistic - Analytic
Biological differences	<ul><li>Biorhythms</li><li>Sustenance</li><li>Location</li></ul>
Sensory modes	<ul> <li>Visual</li> <li>Auditory</li> <li>Kinaesthetic (movement-oriented)</li> <li>Tactile (touch-oriented)</li> </ul>

Adapted from Ehrman and Oxford (1990)

Accordingly, learning may be divided into four different dimensions:

1. Personality types. 'Extroverted' learners like to interact with the external world, whereas 'introverted' ones look for solitude and have more difficulties communicating with others. Furthermore, 'intuitive-random' learners think abstractly and usually create new possibilities or theories. In contrast, 'sensing-sequential' learners prefer to know specific facts and get teaching guidance. In addition, 'thinking' learners seek the truth, even if it hurts, and sometimes seem to be emotionally unconcerned. However, 'feeling' learners express their empathy and value concerning other people's actions and behaviours. Moreover, whereas 'closure-oriented/judging' students are hardworking and want to reach

- task-completion quickly, 'open/perceiving' learners take tasks less seriously and see tasks as enjoyable games that do not need to be completed.
- Desired degree of generality. 'Global/holistic' students like to communicate in general
  terms, without analysing the minor details whereas 'analytic' learners concentrate on
  details and look for precision or accuracy.
- 3. Biological differences. Three biological factors determine learning styles: biorhythms, sustenance, and location. Namely, the times of day (e.g., morning or afternoon), the need for food or drink, and the nature of the environment (e.g., temperature or sound) affect students' learning preferences.
- 4. Sensory modes. This concept refers to the perceptual learning channels (e.g., 'visual', 'auditory', 'kinaesthetic', 'tactile') with which the student is most comfortable. This dimension is discussed in detail in the following section.

Learning Styles are characterised by the frequent use of specific learning strategies. However, research has shown that one student may apply different Learning Strategies, which may be attributed to different learning styles (Villanueva & Navarro, 1997). Research carried out by Gargallo-Camarillas and Girón-García (2016) suggested that the increasing exposure of learners towards digital devices influences learning styles and, therefore, the choice of learning strategies. Particularly, students from the same generation (i.e., Generation Z) that had multiple perceptual learning styles (i.e., multimodal learners) used to apply the same kind of learning strategies pertaining to various perceptual learning styles. Therefore, identifying students' social-communicative characteristics and perceptual learning styles is beneficial for the application of the correct learning strategies (Doncel, 2015). Considering that learning styles regard students' learning preferences, students need to know their own learning modes

in order to apply the most effective learning strategies as well as to become autonomous and lifelong learners (Allwright, 1990; Little, 1991). Especially, the correlation between learning styles and learning strategies can determine language achievement. Accordingly, "strategies must permeate students' styles and bring the best out of them, enriching EFL practices" (Doncel, 2015, p. 56). Therefore, the term learning strategies can be defined as "the often-conscious steps of behaviors used by language learners to enhance the acquisition, storage, retention, recall, and use of new information" (Oxford, 1989, p. 4). In addition, Cohen (1998) defined learning strategies as:

Processes which are consciously selected by learners and which may result in action taken to enhance the learning or use of a second or foreign language, through the storage, retention, recall, and application of information about that language. (p. 4)

In other words, learning strategies are the techniques and actions that students consciously employ in order to learn, for example, a foreign language. For this reason, teachers should be regarded as 'learning engineers' that explicitly teach learning strategies as an indispensable element in language teaching (Oxford, 1990; Carton, 1993). In addition, learning strategies contribute to achieving communicative competence (Oxford, 2003) and make learning "easier, faster, more enjoyable, more self-directed, more effective, and more transferable to new situations" (Oxford, 1990, p. 8). In this line, good language learners are not those who employ specific learning strategies but those who can use them appropriately (Girón-García, 2013). Table 3 summarises the three conditions that a strategy needs to include in order to be useful:

Table 3

Three Conditions of Useful Learning Strategies

**Condition 1**: To relate well to the task regarding its learning goals.

Condition 2: To enable learners to employ it with other relevant strategies.

**Condition 3**: To fit the students' learning styles.

Adapted from Oxford (1990, 2003)

First of all, a strategy needs to be related to the characteristics of tasks. This assertion means that if the objective of a task is to learn phrasal verbs, the strategy needs to include some steps that facilitate its achievement. Furthermore, some tasks require more than one learning strategy, so learners need to employ the primary strategy together with others. Finally, students could know and consider their own learning style in order to employ the adequate learning strategy.

Apart from considering the essential characteristics of the diverse learning strategies, it would be helpful for students to become familiarised with the typology of learning strategies. Table 4 offers a general overview of their classification in the last decades:

 Table 4

 Learning Strategies in the Last Decades

Author(s) and year	Classification					
Stern, 1975	Planning strategy	Active st	rategy	Empathic strategy	Formal strategy	Experimental strategy
	Semantic strategy	Practice s	trategy	Communication strategy	Internali	sation strategy
Naiman et al., 1978	Active Task Approach	Realisat languag syste	e as a	Realisation of language as a means of communication	Management of affective demands	Self-monitoring
Rubin, 1987	Direct strategies		Indirect strategies			
	Learni	rning strategies		Communication strategies		
	Cognitive strategies	Metacog strateg		Social strategies		
O'Malley and Chamot, 1990	Cognitive strategies		Metacognitive strategies	Social strategies	Affective strategies	
Oxford,	Indirect strategies		Direct strategies			
1990	Metacognitive	Affective	Social	Memory	Cognitive	Compensation
Wenden, 1991	Cognitive strategies			S	Self-manag	gement strategies

Shi (2017, p. 29)

Among the previous types of learning strategies, the classification provided by Oxford in 1990 is still used by many researchers. This classification distinguished two main types of strategies: indirect and direct strategies. On the one hand, indirect strategies allow learners to seek opportunities to avoid anxiety. Indirect strategies are divided into three categories: metacognitive, affective, and social. Firstly, 'metacognitive strategies' enable learners to control their own cognition. Secondly, 'affective strategies' refer to learners' emotions,

motivation, and attitudes towards learning. Thirdly, 'social strategies' concern students' interaction with the learning environment. Table 5 shows the subdivision of the Indirect language learning strategies.

 Table 5

 Indirect Language Learning Strategies in Oxford's Taxonomy

Indirect Language Learning Strategies		
Metacognitive	<ul> <li>To centre the learning process.</li> <li>To arrange and plan the learning process.</li> <li>To evaluate the learning process.</li> </ul>	
Affective	<ul> <li>To lower anxiety.</li> <li>To encourage yourself.</li> <li>To take the emotional temperature.</li> </ul>	
Social	<ul><li>To ask questions.</li><li>To cooperate with others.</li><li>To empathise with others.</li></ul>	

Oxford (1990, p. 7)

On the other hand, direct strategies involve the new language directly and are divided into three categories: memory, cognitive, and compensatory strategies. Firstly, 'memory strategies' refer to the mental processes to store new information in the memory. Secondly, 'cognitive strategies' entail conscious ways of handling the target language. Thirdly, 'compensatory strategies' allow learners to use the language either in speaking or writing despite knowledge gaps. Table 6 shows the subdivision of the direct language learning Strategies:

**Table 6**Direct Language Learning Strategies in Oxford's Taxonomy

Direct Language Learning Strategies		
Memory	<ul> <li>To create mental linkages.</li> <li>To apply images and sounds.</li> <li>To review well.</li> <li>To employ action.</li> </ul>	
Cognitive	<ul> <li>To practise or rehearse.</li> <li>To send and receive messages.</li> <li>To analyse and reason.</li> <li>To create structure for input and output.</li> </ul>	
Compensatory	<ul><li>To guess intelligently.</li><li>To overcome limitations in speaking and writing.</li></ul>	

Adapted from Oxford (1990)

Finally, learning strategies are reflected by the actions that students perform according to their learning preferences. Therefore, each student gives a different meaning to the learning process. In this respect, learning styles may be defined as the individual preferences that students have according to their internal characteristics and other external factors in the learning process. This dissertation does not consider learning styles as fixed behaviour schemes that predetermine students' conduct and the use of specific learning strategies. Instead, it considers learning styles as theoretical models that allow correlating students' behaviour to different learning strategies. In addition, learning styles' awareness helps learners become effective and facilitate the active role that characterises the recent teaching approaches (Vijaylakshmi, Kothari & Choudhary, 2016). Accordingly, all the students should

know what their learning styles are in order to choose the most appropriate strategies. Furthermore, teachers should be aware of their students' learning modes and guide them to find the best way to learn. Pashler et al. (2009) defined this hypothesis as the Style-Matching Hypothesis:

If learning styles are an effective strategy for improving learning outcomes then we should see evidence that matching learners to instructional methods tailored to their learning style improves learning outcomes compared to learners instructed in methods contrary to their preferred style. (p. 2)

In conclusion, learning styles can be categorised into four different dimensions and this doctoral dissertation deals with one of them: sensory modes. More specifically, the following section explains in detail the four perceptual learning styles that learners may have. Furthermore, due to the increasing exposure of the new generation of learners to digital tools and more specifically to communicative applications (e.g., Social Media), the following section concludes with a subsection devoted to the most recent perceptual learning modes of the new generation of learners (i.e., Generation Z).

3.3. Perceptual Learning Styles in the English as a Foreign Language (EFL) Classroom

During the last decades, many linguists have provided different definitions of learning styles.

All these experts affirm that learning styles are based upon students' internal characteristics, which are not easy to perceive. They also affirm that learning styles determine both the intake

of new information and the quality of their learning strategies. Table 7 summarises some definitions from 1976 to 1998:

**Table 7** *Learning Styles' Models and Definitions* 

Author(s) and year	Definition
Reinert, 1976	The learning style of an individual is the style s/he aims at learning actively, it is the style which the individual uses and develops ways to take in, retain the new information, and put it for later use.
Keefe, 1979	Learning styles are cognitive, affective and psychological characteristics that learners use as constant determinants to some extent in their perception, interaction, and reaction styles.
Entwistle, 1981	Learning style is the tendency to absorb a special strategy.
Schmeck, 1983	Learning style is a student's own tendency to absorb a special learning strategy independent from the environment.
Kolb, 1984	Learning styles are measured by a self-announced scale, known as LSI. Differences in learning ways are based on the four kinds of learning processes in relation to each other.
Keefe, 1987	Learning style is all of the cognitive, affective, and psychological characteristics, which reflect the individual's perceptions on his/her environment.
Felder and Silverman, 1988	Learning style is the characteristic difficulties and preferences in the process of an individual acquiring knowledge, holding, and processing it.
Dunn and Dunn, 1993	Learning style is a way of getting and processing the knowledge starting with the learners' dealing with new and difficult information.
Legendre, 1998	Learning style is the person's style in learning, solving a problem, thinking, and the style s/he likes reacting within an educational situation.

Kazu (2009, p. 86)

During the last years, apart from the definitions included in Table 7, there were different theories on how to approach learning styles (Jaleel & Thomas, 2019). Firstly, the Herrmann's Brain Dominance Model in 1972 affirmed that the brain dominance (left or right brain) and the brain quadrants (e.g., A, B, C and D) determine learning styles. Two years later, in 1974, Grasha and Reichmann stated that learning styles could be identified according to emotions and attitudes and categorised learning styles as: avoidant, participative, competitive, collaborative, dependent, or independent. In 1980, the National Association of Secondary School Principals (NASSP) from the United States categorised learning styles in cognitive, affective, or physiological and stated that they could be identified by observing students' behaviour. In 1982, Honey and Mumford identified four learning styles: activist, theorist, pragmatist, and reflector; according to processing and perception continuums. One year later, Howard Gardner (1983) proposed the Theory of Multiple Intelligences and affirmed that students possess autonomous intelligences: linguistic, logical-mathematical, spatial, musical, bodily-kinaesthetic, naturalistic, interpersonal, and intrapersonal. This theory was published in Howard Gardner's book, Frames of Mind. Finally, in 1984, Kolb (1984) emphasised the idea that experiences create knowledge. He distinguished four main quadrants, which determine how students prefer to learn. Table 8 shows Kolb's four quadrants: active/doing, concrete/feeling, reflective/watching, and abstract/thinking.

**Table 8** *Kolb's Four Quadrants* 

Concrete Experience (feeling)		
Active Experimentation (doing)	<b>↑</b> <b>~</b>	Reflective Observation (watching)
Abstract Conceptualisation (Thinking)		

Adapted from THE PEAK PERFORMANCE CENTER (2021)

Accordingly, Kolb differentiates four different learning styles: the converger, the diverger, the assimilator, and the accommodator. Converger learners are skilled in the practical application of concepts, divergers tend to be creative, assimilator students enjoy being involved in research, and accommodator learners normally use trial and error in order to solve problems. That same year, Gregorc introduced his Mind Styles Model, which is a modified version of Kolb's learning dimensions, and it identifies learners as concrete, abstract, or sequential. Finally, in 1987, McCarthy affirmed that students perceive reality through their perception or intuition and that they process the information by watching or doing. Table 9 summarises the general overview of the eight aforementioned theories:

**Table 9**Learning Styles' Theories

Author(s) and year	Main Characteristics	
Herrmann, 1972	Learning styles are determined by: - Brain dominance Brain quadrants.	
Grasha and Reichmann, 1974	Students can be:  - Avoidant, participative, competitive, collaborative, dependent or independent.	
The National Association of Secondary School Principals (NASSP), 1980	Learning styles can be categorised in: - Cognitive, affective or physiological.	
Honey and Mumford, 1982	Students can be: - Activist, theorist, pragmatist or reflector.	
Howard Gardner, 1983	Students have multiple intelligences:  - Linguistic, logical-mathematical, spatial, musical, bodily-kinaesthetic, naturalistic, interpersonal and intrapersonal.	
Kolb, 1984	Learning styles are determined by four different quadrants: - Doing, feeling, watching and thinking.	
Gregorc, 1984	Learners are identified as: - Concrete, abstract or sequential.	
McCarthy, 1987	Students perceive reality and process the information throughout: - Perception or intuition Watching or doing.	

Adapted from Jaleel and Thomas (2019)

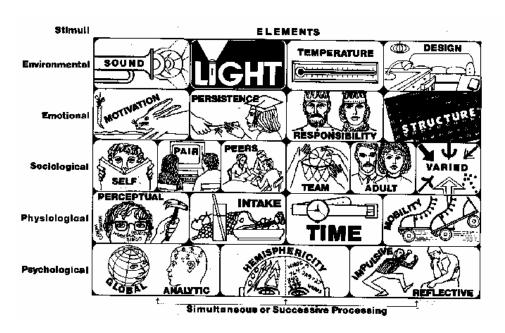
Furthermore, Villanueva and Navarro (1997) developed the idea that the frequent use of some cognitive and pragmatic strategies characterise learning styles. They also emphasise that one

student may have different learning styles according to the task faced. In this line, although some learning strategies may belong to specific learning styles, the same learner may perform strategies belonging to different learning styles.

Among the theories described in Table 9, there is one that requires special attention in this dissertation. In 1978, Dunn and Dunn offered one of the most widely used approaches to learning styles, which has received international awards and citations due to its quality (Arbuthnott & Krätzig, 2015). Dunn and Dunn's model is based on the biological imposed characteristics that measure students' learning styles (Dunn & Dunn, 1992). It examines five variables: environmental, emotional, sociological, physical, and psychological. Firstly, the 'environmental variable' refers to the individual's preferences for the elements of sound, light, temperature or design. Moreover, the 'emotional variable' examines the students' levels of motivation, persistence, responsibility, or structure. Furthermore, the 'sociological variable' refers to the learners' predilection for learning alone, or in groups. Besides, the 'physical' or 'physiological' variable analyses the students' perceptual strengths or the time when they prefer to study, for instance. Finally, the psychological variable examines the cerebral preference, among other aspects. The following Figure (see Figure 2) exemplifies the aforementioned variables:

Figure 2

Dunn and Dunn's Learning Styles' Model



Dunn & Griggs (1995, p. 356)

Regarding the study carried out in this doctoral dissertation, the focus of Dunn and Dunn's model is on the physical or physiological stimulus and more specifically on the perceptual stimuli. Moreover, it is important to highlight that the perceptual category is also studied by Neil Fleming and Colleen Mills, who developed the VARK theory in 1992 (VARK, 2021). Regarding this physiological variable, four perceptual learning styles are distinguished: (1) Visual, (2) Auditory, (3) Reading-writing / tactile and (4) Kinaesthetic. They refer to the perceptual learning channels that students use in order to feel more comfortable in the learning process (Gargallo-Camarillas & Girón-García, 2016). According to the use of sensorial channels, students show their predominant perceptual learning styles and, therefore, the best way(s) they would like to learn.

Firstly, the 'visual' value indicates a preference towards the use of the visual channel. Dunn and Missere (2007) showed evidence that visual learners tend to read books, use graphics, maps, flashcards, or create power points. Moreover, Gargallo-Camarillas and Girón-García (2016) suggested that learners organise knowledge in terms of spatial interrelationships. Apart from that, Montemayor, Aplaten, Mendoza and Perey (2019), and Moo and Eamoraphan (2018) provide evidence suggesting that when visual students are listening to their teacher, they usually take notes and look at the teacher's body language or facial expressions. Furthermore, these learners usually imagine what they are reading. If they do so, they are called 'visual-nonverbal learners'. On the other hand, Davis (2007) suggested that 'visual-verbal learners' are those who enjoy printed materials and are sometimes called 'bookwormers'.

Secondly, 'auditory' learners prefer to learn by listening and taking in messages through the ears, usually by working in groups. In this sense, unlike visual learners, they enjoy taking part in discussions or listening to lectures (Moharrer, 2012; Gargallo-Camarillas & Girón-García, 2016). Besides, they are likely to request additional information orally or ask for repetition or rephrasing (Zapalska & Brozik, 2006). In terms of interpretation, they interrelate the concepts by means of pitch or speed (Montemayor, Aplaten, Mendoza, & Perey, 2009; Pourhossein, 2012). In other words, they remember information well through oral explanation or audio materials (Moo & Eamoraphan, 2018). Moreover, auditory learners can also be divided into two groups: auditory-nonverbal and auditory-verbal. Whereas auditory-nonverbal students usually think back on the words of others, auditory-verbal students need to talk it out in order to recall information (Nilson, 2003). Specifically, the main difference between these two

groups of auditory learners is that auditory-nonverbal students like to listen to others, whereas auditory-verbal students prefer to listen to themselves.

Thirdly, the 'reading-writing' or 'tactile' preference is characterised by the use of physical contact with the hands (Gargallo-Camarillas & Girón-García, 2016). Therefore, tactile students enjoy working with computers, writing down ideas, doing artwork, or tracing pictures (Moharrer, 2012; Davis, 2007). Moreover, tactile students are also called 'haptic' (Rhouma, 2016) because they interact manually with the learning environment. This perceptual modality is sometimes mixed with the 'kinaesthetic' one. The main difference between these two modalities is on the physical effort required. Although both perceptual learning styles involve 'learning by doing', tactile learners only involve touch and kinaesthetic students involve the whole body. Besides, kinaesthetic students learn best when reality is considered so they easily remember case studies or real examples (Zhang, 2002; Gargallo-Camarillas, 2018).

Considering that the kinaesthetic mode involves most of the characteristics of tactile learners, the present work considers three physiological learning modes:  $\underline{V}$ isual,  $\underline{A}$ uditory and  $\underline{K}$ inaesthetic (i.e., VAK).

Taking into account the previous assumptions, the following subsection intends to further develop both Dunn and Dunn and VAK's theories. This expansion to the aforesaid learning theories is necessary according to the social and pedagogical changes, which have been emerging in our society and in the foreign language classrooms with the introduction of new technological tools.

# 3.4. Multimodality and Generation Z in the Communicative Process

Globalisation has led to multimodal communication (Christie, 2005). In this vein, the entering and upcoming students are not only facing changes inside the language classroom with the introduction of communicative approaches, but also outside the classroom with the use of digital tools. For instance, instead of writing and sending letters, they send *WhatsApp* messages that include pictures, videos, voice recordings, or emojis. Hence, the question arises to what extent should the EFL environment recreate the social context that students live in when they are outside their schools or universities, and also the personal and labour realities they will live in once they conclude their studies. This multimodal learning context would enhance autonomy and lifelong learning, promoting the use of different strategies among the students (Benito, Bonsón, Enguita & Icarán, 2005).

In view of the fact that technology has revolutionised everyone's lives, it would not be surprising that this technological revolution would also modify students' perceptual learning styles. According to Dunn and Dunn and VARK's models, students present multiple learning styles at different levels. For example, considering students may show a predilection of 100% for each learning style; a subject may be 30% auditory, 70% kinaesthetic, and 60% visual. Therefore, s/he would be categorised as bimodal (i.e., this student shows strong preferences - more than 50% - towards two modes: kinaesthetic and visual).

Students are currently exposed to a multimodal and multimedia reality where they perceive various stimuli. For this reason, this doctoral dissertation suggests that there may be an increasing predilection for multiple modes as a consequence of the use of digital tools. In this

sense, most of our students could be categorised as bimodal (i.e., strong preferences towards two modes), multimodal (i.e., strong preference towards the three modes) or unimodal (i.e., strong preference towards one mode). According to the VARK's theory, multimodal learners "find it necessary for them to use more than one strategy for learning and communicating" and "choose to match or align their mode to the significant others around them". Consequently, they feel more comfortable with a varied use of strategies of all perceptual modes. The following table (see Table 10) summarises the learning strategies associated with each of the perceptual learning styles that students may perform in a multimodal learning setting:

**Table 10** *Multimodality and Perceptual Learning Strategies* 

Perceptual Learning Strategies in Multimodal Learning Settings		
VISUAL	<ul> <li>Use pictures, videos, posters, slides where the emphasis is on the design.</li> <li>Use books with diagrams and pictures.</li> <li>Use maps and free-drawn plans.</li> <li>Use organisational charts and graphs.</li> <li>Use symbols, different fonts, underlining, different colours and highlighting.</li> <li>Use gestures and picturesque language.</li> </ul>	
AUDITORY	<ul> <li>Explain things by talking.</li> <li>Join discussion groups.</li> <li>Comment and repeat ideas.</li> <li>Have self-conversations.</li> <li>Use voice recorders and listen to podcasts.</li> <li>Shift any pictures into talk.</li> </ul>	

### TACTILE AND KINAESTHETIC

- Use words that have interesting meanings and backgrounds.
- Use glossaries, dictionaries or articles.
- Rewrite ideas into own words.
- Use autobiographies or documentaries.
- Prefer practice towards theory.
- Take notice of real examples.
- Use all the senses: sight, touch, taste...
- Use surveys and interviews.
- Learn by trial and error.

Adapted fromVARK (2021)

New learning profiles are part of a new generation of students, with new characteristics and needs. For instance, whereas old generations were good at single-tasking and could concentrate for long periods of time, the arrival of technology has created a new generation of curious students, who are interactive and have fierce urgency of now (World Language Classroom, 2018). The students born between 1996 and 2012 belong to this new generation, called Generation Z. Experts use 'Digital Natives' or 'Digital Immigrants' to refer to this generation (Prensky, 2001). Other similar terms are: 'Sharing Generation', 'All Technology All Time Generation', 'Born Digital', 'iGeneration', 'iMillennials', 'post-Millennials', or 'Net Generation' (Barnes & Noble, 2015). Besides, this generation presents some common characteristics: they rely on computers, tend to ask questions online, and demand instant communication (Dauksevicuite, 2016; Rothman, 2016). Within this learning context, "educators are faced with the challenge of obtaining similar educational outcomes from generations that have different characteristics and learning styles" (Popescu, Popa, & Cotet, 2019, p. 258). Therefore, these are some suggestions that the Net Generation would tell their teachers (World Language Classroom, 2018): "Challenge me, let me work with others, let's

have fun, be flexible, encourage me, make me curious, give me feedback, learn from me too, let me give you my ideas, I need to know the goal".

### 3.5. Conclusion

In conclusion, it would be useful for Generation Z to have EFL teachers that include technology in their methodology to provide better learning strategies, give students opportunities to get and give feedback, incorporate multimodal materials into the activities, and establish online communication that could allow real communication with different countries (EBC TEFL Courses, 2018). Moreover, technology also offers teachers the possibility to consider students' learning styles so teachers can meet students' learning outcomes in accordance to their learning features and preferences. Unfortunately, research is limited in relation to the learning styles of Generation Z and for this reason teachers have low knowledge about the characteristics of this generation (Correia & Bozutti 2017). Nevertheless, the Net Generation has grown up with Social Media, smartphones and one-click accessibility. Therefore, regarding learning styles, there are differences in the way information is received and processed (Popescu, Popa, & Cotet, 2019). In other words, the brains of Generation Z are structurally different from those of previous generations as a result of the change in the external environment (Rothman, 2016). Consequently, teachers should understand their students' characteristics (e.g., preferences, needs, and expectations) in order to choose the correct methodology and select the best tools. For instance, Generation Z usually follows in-time learning solutions (Popescu, Popa, & Cotet, 2019) so Social Media could be a good tool to be included in the teaching methodology.

# 4. PEDAGOGY MEETS SOCIAL MEDIA

### 4.1. Introduction

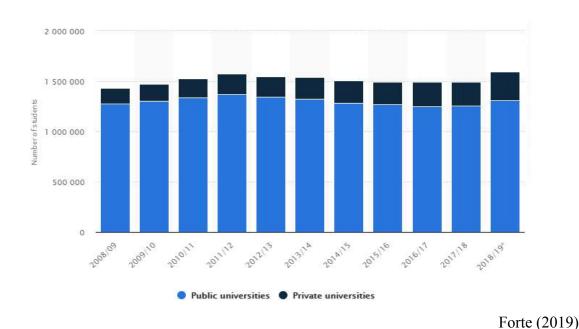
The present chapter examines the introduction of technology in the EFL classroom. In particular, it aims to support the view of bringing technology into the EFL setting in order to construct meaning and foster communicative competence. Besides, the introduction of digital devices (i.e., realia) would allow teachers to regard students' (1) active role, (2) perceptual learning characteristics, (3) new learning needs, and (4) future prospects. The following section focuses on higher education (i.e., the university). It delves into the main features of digital instruction and analyses the pedagogical evolution of the ICTs and the digitalisation of the learning context during the last decades. The second section of the present chapter describes the training that students need in order to make an appropriate use of ICTs (i.e., digital instruction). In particular, it deals with a brief analysis of the evolution of the term literacy and the focus on the students' need to learn effectively in a digital learning environment (i.e., digital literacy). Finally, considering the social and pedagogical evolution of technology and the new learners' characteristics and multiple literacies, this chapter concludes with the proposal of including Social Media as a pedagogical tool in the EFL context.

### 4.2. Digital Instruction and the Pedagogical Evolution of ICTs

The recent European reforms on higher education levels and the Bologna regulations perceive the learning process according to individual capabilities and also support the active role of the students within a constructive process (Guey et al, 2010; Nie & Lau, 2010). Furthermore, it is predicted that by 2030, automation, globalisation, and flexibility will change what we do in

almost every job (FYA, 2017). An example to show the rapid world's change is that at the end of 2016, nearly one-half of the world's population used the Internet, a threefold increase in 10 years (Broadband Commission, 2017). This technological change can be observed in economically advanced countries such as Spain, whose schools are introducing technological devices that allow new pedagogical characteristics (e.g., the use of digital boards). On the one hand, the increasing access to higher education has resulted in students' diversification regarding learning styles and needs, which are no longer considered as traditional (Lai, 2011). For instance, Figure 3 shows the number of students who enrolled at public and private universities in Spain from 2008 to 2019.

**Figure 3** *Number of Students Enrolled at the Spanish Universities* 



The figure shows that about 1.3 million students are enrolled each year, reaching its peak in 2019. In addition, the high affordability of most of the students' families together with the development of new technological devices demand new learning and teaching responses. On

the other hand, according to recent neuroscience research, technological advancements may affect brain development during adolescence (Ali & Kor, 2007; Carr, 2010). Accordingly, learning styles seem to be more spontaneous, multisensory, and driven by technology (Prensky, 2001). For this reason, educational institutions should know what the 21st century skills and competences are so as to prepare the students to learn and work in real circumstances.

Considering the aforementioned assumptions, this dissertation considers digital instruction as an effective option to keep up with the rapid social and learning changes, as well as to be able to retrain and adapt the whole EFL educational field. According to the Alliance for Excellent Education (VanderArk and Schneider, 2012), digital instruction can be defined as:

Any instructional practice that effectively uses technology to strengthen a student's learning experience. It encompasses a wide spectrum of tools and practices, including, among others, [...] online content and courses; applications of technology in the classroom and school building; [...] learning platforms; participation in professional communities of practice; and access to high-level and challenging content and instruction. (p. 11)

Therefore, it can be affirmed that digital instruction promotes an active, personalised, flexible and inclusive pedagogy (Laurilland, 2008) that regards all the learning styles and fosters the social construction of knowledge. Furthermore, the European Communities (2007) include digital competence among one of the eight skills and attitudes that students should have in order to be autonomous. Apart from the digital competence, the European Communities

consider other seven competences, which are also relevant in the learning process: communication in the mother tongue, communication in foreign languages, mathematical competence and basic competences in science and technology, learn to learn, social and civic competences, sense of initiative and entrepreneurship, cultural awareness, and expression.

As Gaballo (2009, p. 3) mentions: "Changing practices require thorough reconsideration of the nodes involved in the triangulation of pedagogy, methodology, and technology". In order to apply Digital Instruction successfully, there are some factors to be considered (ICF Consulting Services Ltd, 2015):

- The training and support to use equipment and to exploit digital tools and resources for teaching.
- The overcoming anxiety about digital teaching, the use of the technology and the use of different learner-centred approaches.
- The experimentation with technology is essential.
- The network between teachers and schools.
- The maintenance and update of the equipment to be compatible across many systems.

Focusing on the EFL context, language teachers should promote lifelong learning, following active and communicative methodologies, which allow learners to be autonomous with the use of authentic materials in a multimodal world. However, teachers still demonstrate low levels at digital instruction (Li and Walsh, 2011). For this reason, in order to reduce their resistance and increase their motivation to implement it, they need more support by their

educational institutions (ICF Consulting Services Ltd, 2015). As Samuel and Zitun (2007) affirmed:

Training in ICT skills is crucial in implementing ICT integration in the teaching and learning of English. The extent to which teachers are given time and access to pertinent training to use computers to support learning plays a major role in determining whether or not technology has a major impact on achievement. (p.10)

Teachers that follow the socio-constructivist point of view have a better understanding and motivation of the use of ICTs because they see themselves as knowledge facilitators and are concerned about thinking and reasoning (Younie & Leask, 2013; OECD, 2015). Therefore, teachers should contemplate the components of the current learning environment, which are far from the traditional learning characteristics and, consequently, focused on the learner's active role and digitalisation. In this sense, in order to effectively introduce the ICTs into the EFL classroom, teachers may consider the principles of using technological devices (see Table 11), as well as differentiate three stages (see Table 12):

**Table 11**Principles of Using Technological Devices in the Learning Context

Understanding the benefits and roles of technology.
Linking technology to learners' needs.
Integrating rather than adding technology in teaching.
Considering the role of the teacher.
Enhancing authenticity of both language and task.
11 12 16 1 17 1 17 11 2 (2012)

Adapted from Muñoz-Luna and Taillefer (2018)

Table 12

Three Stages in the Application of ICTs

### How do teachers develop ICTs in the learning context?

Teachers use digital tools and resources to support traditional methods of teaching such as whole group lectures.

Teachers gain confidence and use technology as part of more innovative instruction.

Teachers enter an inventive stage in which they experiment and change the use of technology to support active, creative, and collaborative learning.

Adapted from Plomp and Voogt (2009)

Particularly, ICTs used to be traditionally regarded as sources of information that learners used passively due to the consequences of traditional approaches and the lack of the Internet connection or mobile devices. However, ICTs are now active tools that allow learners to create, collaborate, and interact. For example, video-conferencing and face-to-face interaction are becoming popular EFL learning vehicles that promote EFL all over the world (Phillips, 2010; Zheng et al., 2009). Moreover, just using ICTs is not sufficient because teachers need to be trained in the new literacies (e.g., digital literacy), as well as implement that technology thoughtfully in order to achieve learning outcomes (Alliance for Excellent Education, 2012). According to Collier (2013, p. 3), "the training and professional development of teachers must transition to fully realise the potential of these resources". Therefore, it is important that teachers get accustomed to the use of ICTs to support the learning process. In this way, educators may feel motivated to use ICTs and, finally, create an active and collaborative learning environment.

ICTs can be used in two ways: synchronously or asynchronously. Whereas synchronous tools offer the possibility of experiencing the learning process in real time, asynchronous tools like

email or blogs also play a significant role in the EFL learning and teaching process (Terrell, 2011; Woo et al., 2011; Wang & Vásquez, 2012). For example, virtual worlds allow learners to 'live' situations and negotiate meaning as if they were in the real world and email enables both teachers and learners to communicate, attach documents or solve doubts. Apart from that, technological devices have evolved and mobile technologies have gained popularity in our society. Digital tools such as tablets or smartphones include, among all their functions, sensitive screens, simple menu systems, Wi-Fi (i.e., wireless Internet connection), QR codes (i.e., a type of barcode that can be scanned), GPS functions (i.e., location), audio and video recordings, and Social Media access. For these reasons, these tools facilitate the delivery of multimodal content and the promotion of experiential learning (Knowles et al., 2011; Motteram, 2013). In this sense, ICTs allow university students to recreate their real lives so they can easily associate these learning perceptions and experiences with their family life or their work.

Finally, although this study will not focus on the study of genre per se (Swales, 1990; 2004), it should be mentioned that with the digital era, traditional genres have evolved into digital genres or Cybergenres (Girón-García, 2013) and, therefore, new communicative practices have emerged in the new digital environments, which have facilitated the spread of new digital platforms. There are examples (among others) of online videos (e.g., *YouTube* videos) (Welbourne & Grant, 2016), webinars (Ruiz-Madrid & Fortanet-Gómez, 2017), and even social networks (e.g., *Facebook*, *Twitter*, *Instagram*, and so forth.), where already existing information in printed formats have been digitised. With all of this, a transfer of information to a digital environment has been developed, in which all information will be considered more attractive and easier to understand for a new user (Girón-García & Silvestre-López,

2019). Digital genres have changed the way we read, unlike printed genres. Above all, in the 21st century, the new generations of information users would demand a transfer of knowledge from printed to digital modes (Girón-García & Boghiu-Balaur, 2021), and this has also been transferred to the field of higher education, in our particular context.

In conclusion, probably nothing has changed more in higher education than students themselves (Bates, 2015). Technology has transformed our students and their learning preferences, which have become active, collaborative, social, immediate, and mainly digital due to the access to technological devices (i.e., mobile phones or computers) and, therefore, to resources and knowledge beyond traditional practices (Oblinger and Oblinger, 2005; Collier et al., 2013). For instance, the Spanish government, on the 20th of August 2020, aware of the growing trend of Social Media among younger generations, appealed to Generation Z and, especially, to influencers (i.e., famous people who have thousands and even millions of followers from around the world in Social Media, particularly in social networks) to take responsibility in the fight against COVID-19 and spread vital information in their accounts (Heepsy, 2020). This unexpected situation was not only a revolution in the social world but it also implied a profound process of digitalisation for many universities, which had to face new ways of teaching and interaction between students and teachers (e.g., online teaching using virtual classrooms or Google Meet). Thus, this new context also evinced the high use of Social Media and its implications among Generation Z students in their social lives as well as the necessity to know how to use online resources in their pedagogical world. For this reason, it is important to make students aware of the utility of new sources of information in the learning process so as to improve their digital competences inside the learning context. By doing so, the connection between technology and students would be empowered in our

society. In summary, university students need the skills related to digital literacy (Healey et al., 2011). Considering that "*learning and literacy are changing radically in the internet age*" (Richardson, 2012, p. 15), the following section focuses on the development of the term literacy and its pedagogical implications in respect to the current digital learning and teaching environments.

### 4.3. Multiliteracies and Digital Literacy in the New Learners Generation

Since the beginning of history, the concept of literacy has been based on the interpretation of a piece of paper as letters which formed words that conveyed meaning (Thoman & Jolls, 2003). Whereas old definitions considered only one skill such as reading or writing, the most modern definitions take into account different abilities in order to consider someone as being literate. For instance, some old definitions were provided by Blake and Hanley (1995, p. 89), who affirmed that "the attribute of literacy [...] refers to the ability to read and write to an appropriate level of fluency" and by Lawton and Gordon (1996, p. 108), who defined the concept as "the level of skill in reading and writing that any individual needs in order to cope with adult life". However, "the world of communication is not standing still" (Kress, 2003, p. 16). In the multimodal era of the screen, the term literacy has been reconsidered. Some years later, the OECD (2000) defined literacy as the ability to understand and employ information in different contexts with the aim to achieve specific objectives. Moreover, Cambridge Assessment (2013, p.9) provided a more comprehensive definition and affirmed that:

Literacy is an individual and social state that is characterised by different principles:

- Literacy is the set of actions that people use for personal and social purposes.

- Literacy is a move within a discourse practice. Like any social practice,
   literacy has to fulfil social conventions that go beyond encoding or producing texts.
- In order to become literate, different knowledge skills are needed: to plan, organise, revise; to build and negotiate meaning; to use and adapt conventions; and to figure out what new discourses expect and how to enter them.
- Literacy is a social and cognitive act that creates opportunities for strategic thinking.

Accordingly, whereas literacy has been traditionally viewed as, for example, the use of printed texts, controlled vocabulary or the use of templates for writing; the 21st century has redefined the concept of literacy as the set of actions such as acquiring, creating, associating, and providing meaning to different realities (Ministerio de Educación y Formación Profesional, 2015). Specifically, the traditional view of literacy was focused on moral or intellectual aspects but the contemporary view focuses on utilitarian or economic ones (Edwards & Potts, 2008). This rapid social and technological change has made experts consider literacy from a sociolinguistic point of view (Tyner, 2009). As a consequence, literacy cannot be studied in isolation without considering other factors, such as the social ones (i.e., educational background or people's affordability). Moreover, the New Media use a multiplicity of modes (e.g., image, music, or video) and makes multimodality 'natural'. Consequently, new generations are seen as multiliterate because they usually rely on communication technologies in order to perform multiple tasks at the same time (Oblinger & Oblinger, 2005). For instance, Limbrick and Aikman (2005) state that being literate in a multiliterate world (i.e., being multiliterate) consists in making and creating meaning through

multimodal texts. Therefore, current definitions of literacy include concepts such as digital manipulation and the abilities to interpret media, reproduce data, or evaluate and apply new knowledge gained from digital environments (Jones-Kavalier & Flannigan, 2006). In this sense, the word literacy is no longer used to mean being competent at something specific but at different tasks (Cambridge Assessment, 2013). According to Buckingham (2006):

The increasing convergence of contemporary media means that we need to be addressing the skills and competences – the multiple literacies – that are required by the whole range of contemporary forms of communication. Rather than simply adding media or digital literacy to the curriculum menu or hiving off information and communication technology into a separate school subject, we need a much broader reconceptualization of what we mean by literacy in a world that is increasingly dominated by electronic media. (p. 277)

Finally, this explosion of information presents a major challenge to the world of formal education. With the current dominance of the multimodal confluence of image, video, audio, and text, the culture of the printed word has almost disappeared among Generation Z. For example, texts do not include just written messages but in any form (verbal or visual, or verbal and visual), which are used to create and pass ideas back. For this reason, early definitions of computer-related literacies focused on the acquisition of sets of rules but by the end of the 20th century, the definition expanded considerably (Karpati, 2011). Hence, being multiliterate also encompasses these four characteristics: (1) motivation of active presence through online profiles, (2) avatars and user personalisation, (3) reliance on user-generated content, and (4) social participation (Luzón, Ruiz-Madrid & Villanueva, 2010). In order to

promote the aforementioned abilities, teaching is based on the identification of key concepts, connections between ideas or formulation of questions and responses, which promote intellectual freedom in a democratic society (Thoman & Jolls, 2003).

Current teaching approaches include analytical, creative, and interactive skills that deconstruct and construct meaning. As agreed at the at the UNESCO June 2003 Expert Meeting in Paris:

Literacy is the ability to identify, understand, interpret, create, communicate, compute and use printed and written materials associated with varying contexts. Literacy involves a continuum of learning in enabling individuals to achieve their goals, to develop their knowledge and potential, and to participate fully in their community and wider society. (UNESCO, 2004)

All in all, literacy is the multipotentiality that students are required to have in order to succeed in the current multimodal learning circumstances. For this reason, the exposure to varying contexts demands students to be multiliterate and perform with multiple skills the different tasks they face during the learning process. Within the current technological context, one of the aforementioned multiple skills is known as digital literacy, which has become more than the ability of handling computers. Instead, it deals with abilities such as the production of digital media, the processing of information or the participation in social networks (Karpati, 2011). Accordingly, digital literacy (also known as ICT literacy) may be considered as an umbrella term that encompasses different literacies:

*ICT* literacy refers to a set of user skills that enable active participation in a society where services and cultural offerings are computer-supported and distributed on the internet. Technological literacy (previously called computer literacy) entails a deeper understanding of digital technology and comprises both user and technical computing skills. Information literacy focuses on one of the key aspects of our Knowledge Society: the ability to locate, identify, retrieve, process and use digital information optimally. (Gonzalez-Vera, 2016, p. 2)

In a world where language users are interconnected, digital literacy covers different skills: "accessing, managing, evaluating, integrating, creating, and communicating information individually or collaboratively in a networked, computer-supported, and web-based environment for learning, working, or leisure" (Karpati, 2011, p. 4). Moreover, digital literacy refers to the combination of functional skills, knowledge, and understanding that is required to learn and participate safely in the digital world (Becta, 2010). This interconnectivity is recasting social communication towards democratic and empowering manners, that is why people need digital skills in everyday life (Healey et al., 2011; Selwyn, 2013). Therefore, learning and literacy are changing radically so education needs to find a place for it in order to facilitate effective teaching and learning. For instance, in 2003, 61% of the world's population had access to a mobile phone signal, rising to 90% by 2010 (Kelly & Minges, 2012) and two thirds of teenagers read technology based materials every week (The National Literacy Trust, 2012). This increasing access to technological devices and therefore to social applications (e.g., Social Media) has had effects on the way people construct and extract knowledge outside school. However, "students have ICT technical skills, but lack in

academic digital literacy" (Luzón, Ruiz-Madrid & Villanueva, 2010, p. 199). Therefore, promoting digital literacy in the EFL classroom is beneficial for students (see Table 13):

 Table 13

 Benefits of Digital Literacy in the EFL Classroom

It makes students show positive attitudes towards writing.

It enables students to become critical citizens.

It teaches students the skills to navigate safely.

It avoids dependency on the media.

It provides students with the strategies to comprehend multiple layers of image-based communication.

It helps both teachers and students understand information sources and find alternative views.

Adapted from Thoman & Jolls (2003), the National Literacy Trust (2012)

However, although their frequent employment outside schools and their positive effects regarding their implementation in the EFL classroom, their pedagogical use is rarely seen even today (Karpati, 2011). As digital tools develop, collaborative applications focus on social skills that could be considered by its users, mainly teenagers and adults. Therefore, as it is explained in the next section, it would be useful for the educational environment to consider Social Media as a pedagogical tool to acquire the literacies that the 21st century learning context requires.

# 4.4. Social Media in the English as a Foreign Language (EFL) Classroom

Social Media are web tools that began their way being general and social and have increasingly become educational (Bates, 2015). Robbins and Singer (2014, p. 387) defined

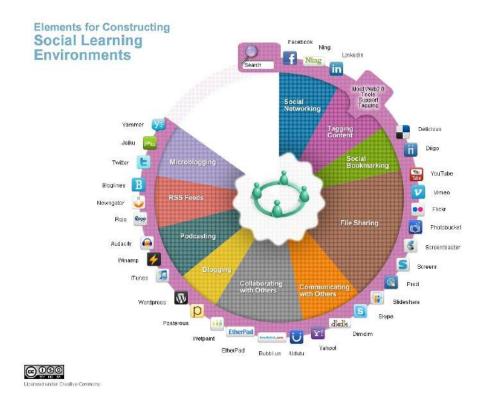
Social Media as "any technology that facilitates the dissemination and sharing of information over the Internet". Moreover, for Kaplan and Haenlein (2010, p. 61), Social Media refers to "a group of Internet-based applications that build on the ideological and technological foundations of Web 2.0, and that allow the creation and exchange of User Generated Content". Furthermore, Social Media are also defined as "Internet-based channels that allow users to opportunistically interact and selectively self-present, either in real-time or asynchronously, with both broad and narrow audiences who derive value from user-generated content and the perception of interaction with others" (Carr & Hayes, 2015, p. 50). Also, Social Media are characterised by the empowerment of users to access, create and share information in an open environment (Schwartz, 2012). Taking all the previous definitions into account, Social Media could be defined as online applications that allow users to participate, share knowledge, communicate, and keep connected to the real world.

Most of the applications that are constantly emerging are free or very low cost and they have evolved from tools like blogs and wikis into tools like Facebook or Twitter. Therefore, Social Media may refer to social networking websites or mobile apps (Stewart, 2016). Although each example of Social Media presents different characteristics, all of them enable access to rich content over the Internet at any time and anywhere. Two of their most prominent features are the 'hashtag #' and 'likes', which allow users to search for specific posts, engage other users with similar preferences, generate categorisations, give feedback, show the work everywhere and check its popularity (Greenhow & Gleason, 2012; Stornaiuolo, Higgs, & Hull, 2013; Magrino & Sorrell, 2014). Moreover, they offer opportunities to generate multimedia materials and to expand learning beyond institutional boundaries (Bates, 2015).

Some examples of Social Media are blogs, wikis, social networking, multimedia archives, virtual worlds, multiplayer games or mobile learning (see Figure 4):

Figure 4

Examples of Social Media



Bates (2015, p. 289)

Accordingly, Social Media allows users to actively communicate and make meaning through the experience acquired in globalised online spaces, where students may focus on both the obtention and creation of content and also on the language learning opportunities that commonly arise. Considering Social Media as a pedagogical tool would make students develop digital literacy; independent, self-directed, and collaborative learning; internationalisation; interpersonal skills; knowledge management; and decision making (Ajjan & Hartshorne, 2008). Moreover, "previous literature works with respect to this subject

have concluded saying social digital media has a vital role to be played in enhancing student's performance in academics" (Krishnan, 2019, p. 34). For instance, Table 14 shows how Social Media can be used as a pedagogical tool:

**Table 14**Usages of Social Media

	1. Create groups.
	2. Provide extra help with Facebook Live.
Facebook	3. Teach students digital citizenship skills.
	4. Create polls to know opinions or preferences.
	5. Provide links to important documents.
	6. Make global connections.
	Help students think critically about Social Media.
	2. Help students create digital portfolios.
	3. Organise your ideas.
Pinterest	4. Look for new and innovative teaching methods.
	5. Promote your own work or blog
	1. Keep up with trends.
	2. Communicate with students.
	3. Provide and get feedback.
	4. Show off classrooms.
Twitter	5. Get students summarising.
	6. Connect with other classes.
	7. Edit tweets.
	1. Use videos to inspire themed reflections in form time.
	2. Use short clips from documentaries to provide context to a topic.
	3. Take advantage of <i>YouTubeEdu</i> .
	4. Create playlists to help with future lesson planning and share amongst
Youtube	your department.
	5. Set an assignment that requires students to research and make their
	own videos to be later played in class.

Adapted from Lynch (2017), TeachThought (2019), Educational App Store (2020)

It is important to mention that Social Media do not pretend to replace traditional learning but to supplement it by adding new teaching and learning possibilities at its disposal (Kalasi, 2014). In this sense, apart from employing a whiteboard or a PowerPoint presentation, using Social Media could imply the creation of online forums or virtual meetings. Therefore, this multimodal learning environment would have different advantages (see Table 15):

**Table 15** *Benefits of Social Media as a Pedagogical Tool* 

Development of the skills needed in the digital age.
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Teachers are enabled to set online group work.

Students can collect data in the field.

Learners take more control over their own learning.

Teaching and learning are open to the world.

Students can express themselves, participate, collaborate, find information, reflect and learn.

Teachers and students' knowledge is shared and feedback is facilitated.

Teachers and students know each other and they can form communities.

Motivation and commitment are provided.

Learners are prepared for the contemporary digital society.

Adapted from Crook (2008), Moody (2010), Wright (2010), Reid (2011), Rinaldo et al. (2011), Yaros (2012), Bates (2015)

The main emphasis of using Social Media in the EFL classroom is on "using the web's social networking tools to teach global collaboration and communication, allowing the students to create their own networks in the process" (Kalasi, 2014, p. 25). On the other hand, there is a great concern of the high daily exposure that teenagers have to screens. For instance, in a survey of U.S. teenagers, it is stated that 92% of teens go online daily and that 71% of them

use at least two social networking sites (Lenhart, 2015). However, the great amount of time they spend surfing the net has negative effects on other areas of their development (Jukes et al., 2010). For instance, teenagers avoid physical exercise, do not appreciate nature, do not devote their free time to outdoor activities, and may get obsessive behaviour regarding addiction. Moreover, the great number of Social Media resources has created a bridge between the academic and the real world which can be "frightful because so many options and opportunities exist. More choice equals more stress" (Kalasi, 2014, p. 26). Nevertheless, Social Media have become essential in the modern world so it is important to acquire digital literacy and other literacies that enable students to make appropriate use of them. In this line, apart from the different literacies, it is important to teach students how to have balance in their lives (Jukes et al., 2010). In brief, in a teacher-supported environment, Social Media can be the solution to the problem (Bates, 2015). Accordingly, teachers are required to have a practical framework for classroom work which encompasses (1) multiliteracies that students need and (2) teaching competences, in order to match learners' needs to pedagogical affordances that learning tools can provide (Whyte, 2014). Finally, considering the current educational landscape and the new challenges that teachers may face, it is paramount to provide them with the appropriate pedagogical training so as to acquire the most useful competences. Table 16 matches different teacher competences with their correspondent training guidelines:

 Table 16

 Correspondence between Teacher Competences and Training Guidelines

Teacher Competences	Training Guidelines
Assess the potential and limits of technologies for language learning.	Share out the techno-pedagogical components throughout training rather than offering a stand-alone module.
Carry out a needs analysis to introduce technologies in a pedagogical sequence.	Anchor teacher training in a specific setting to develop understanding of institutional constraints.
Handle basic tools and applications, and solve simple technical problems.	Focus on the development of competences that can be transferred to other educational contexts.
Design appropriate tasks.	Develop basic technical skills rather than learning a bespoke application that might become obsolete.
Design for interactions within and outside the classroom.	Make sure trainees put pedagogical objectives before technological ones.
Rethink the contract with learners and colleagues.	Adopt constructivist or socio-constructivist approaches to help trainees conceptualise the use of tools.
Manage time and optimise the integration of technologies.	Develop collaboration skills among trainees.

Guichon and Hauck (2011, p. 191)

In particular, teachers should evaluate the technological tools in the learning environment, consider the pedagogical implications when introducing technology in the classroom, have basic knowledge of technology, design tasks according to the curriculum and new methodologies, contemplate the real needs of the learners, involve students in the learning process, and handle time-consuming tasks. With the purpose of achieving the aforementioned

objectives, teachers' education ought to integrate technology into the content, show specific case histories or examples, regard the multidisciplinary content, provide with teaching strategies that can be useful throughout the whole teaching process, balance technology and pedagogy, acquire a socio-constructivist perspective, and promote collaborative work.

In conclusion, although the utilisation of Social Media is frequent among students outside school (O'Hanlon, 2007), it is rarely used in the EFL classroom. Therefore, the low presence of Social Media among the current teaching methodologies evinces the obsolescence of the educational system regarding the pedagogical employment of digital tools. In other words, although the world is rapidly changing and it is becoming globalised and connected, the classroom environment seems not to change at the same rate. This point of view is shown in some extracts of the song by Prince Ea (2016) (see Appendix 1):

Here's a car from today and here's a car from 150 years ago

Big difference right?

Well get this: here's a classroom of today and here's a class we used 150 years ago

Now ain't that a shame?

In literally more than a century

nothing has changed

[...]

The world has progressed

And now we need people who think

creatively,

innovatively,

critically,

independently

with the ability to connect

### 4.5. Conclusion

A globalised world with diverse societies faces new educational challenges. The adoption of Social Media in the university setting represents the aforementioned values: 'creativity', 'innovation', 'critical thinking', 'interaction', and 'connection'. In particular, Social Media enables learners to access valuable sources of participation and communication in the world (Ajjan & Hartshorne, 2008; Junco, 2011). Hence, living in a globalised world implies facing the same challenges and presenting the same needs, so Social Media allow learners to connect their learning world to their real world. From a theoretical point of view, using Social Media in the educational context results in a strong application of socio-constructivist concepts (Seitzinger, 2006). Moreover, diversity is also present in every classroom. This means that each student is different and s/he has different ways of experiencing the learning process. In this sense, experiential learning needs to be achieved by the assessment of the students' learning styles, the knowledge about online and traditional teaching, the appropriate selection of tools and the effective implementation of the teaching plan (Kalasi, 2014). Accordingly, although students could have the same learning style(s) due to the common characteristics presented by the connection of the globalised world, the multiple educational possibilities that Social Media offer can contemplate all their different preferences. As Prince Ea (2016) sings in another extract of his song (see Appendix 1):

But if a doctor prescribed the exact same medicine to all of his patients

the results would be tragic

So many people would get sick

Yet, when it comes to school

this is exactly what happens.

This educational malpractice

where one teacher stands in front of 20 kids

each one having different strengths

different needs

different gifts

different dreams

and you teach the same thing the same way.

In other words: if a teacher offers the exact same methodology and materials to all of his/her students the results would be tragic; so many students would be unsuccessful. The amount of resources that university teachers can use in the EFL classroom are extensive, thereby it is essential that teachers bring themselves up-to-date in order to promote most of the learning characteristics that the world and therefore the educational system cry out for.

## 5. METHODOLOGY

### 5.1. Introduction

Before dealing with the context of the present study, it is significant to briefly describe the pandemic situation that constrained its implementation. In December 2019, the COVID-19 (i.e., an infectious disease caused by the SARS-CoV-2 virus) surfaced in a Chinese market and later spread to nearly every country in the world, being declared a global pandemic (The New York Times, 2021; World Health Organisation, 2021). In Spain, as Figure 5 shows, the first positive case was identified in February 2020. One month later, in March 2020, the government declared a statewide lockdown and a state of alarm. The lockdown lasted almost 100 days and the state of alarm finished eight months after its imposition, in November 2020.

Figure 5
Spanish COVID-19 Timeline



Public Flourish Studio (2020)

Some of the restrictions imposed during and after the lockdown consisted of the use of masks, social distancing, hand washing, temperature checks, travel limitations, and teleworking. As for education, during the lockdown, educational institutions were closed, so lessons took place online. After the lockdown, preschool and primary school learners could attend lessons in-person with the established conventions. This situation also took place in secondary schools, which followed the same plan but students combined online and face-to-face lessons. As for the university, formal lessons were online and laboratories or seminars took place in the faculties. In the second semester of the 2020/2021 academic year, students could attend all the lessons in the faculty by following some of the measures aforementioned. Nevertheless, restrictions were also present. For instance, students living in other countries still had some restrictions (e.g., quarantine or curfew) and students who showed symptoms could not go to class. Therefore, the conditions of the 2020/2021 academic year were also special and they affected basic aspects of teaching and learning (e.g., class attendance or teaching methodologies).

Finally, the present experimental study has been designed considering one independent variable and three dependent variables. Firstly, the independent variable that has been taken into account is the use of Social Media in the EFL classroom in contrast to the use of traditional tools (e.g., voice recorder or piece of paper) in order to perform the suggested treatment (i.e., role-play). Regarding the dependent variables, this study contemplates: (1) the enhancement of communicative competence, (2) the emergence of multimodal learning modes, and (3) the improvement of students' confidence and motivation. In other words, our study aims to analyse the effect of using Social Media in students' communicative

competence, multiple perceptual learning styles, and attitudes, such as confidence and

motivation in the EFL learning process.

5.2. Context

The implementation of the experimental study took place during the second term of the

2020/21 academic course:

February 2021: Placement test.

March 2021: Preliminary questionnaire.

April 2021: Pre-questionnaire, task performance, and self-assessment.

May 2021: Post-questionnaire.

Due to the pandemic situation described in the previous paragraph, some of these steps took

longer than expected, there were limitations regarding in-person attendance and some

instruments had to be designed for online implementation. For instance, all the sessions

during February were online, so the Placement Test was carried out in an online setting using

the Virtual Classroom (i.e., *Moodle* platform).

Regarding the onsite context, the implementation of the study took place in the Faculty of

Law and Economics at Universitat Jaume I, where classrooms had been adapted to the special

circumstances of the pandemic. Although some seats were marked with crosses in order to

keep the security distance and everyone had to wear a mask and use hand sanitiser, the

classroom facilities were appropriate to conduct the study. For instance, the classroom had a

good Internet connection, a projector, a computer for the instructor, and plugs near the

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students' tables. For this reason, the instructor could show the materials to the students, who could use their own digital devices to complete the questionnaires without any problem.

## 5.3. Participants

A total of 34 participants enrolled in the subject 'English for Tourism' in the second year of the bachelor's degree in Tourism at Universitat Jaume I (Castellón, Spain) were selected for the implementation of the present study. These subjects were selected because the researcher of this dissertation was also the coordinator of the aforementioned subject. Moreover, the subject 'English for Tourism' was constituted by two groups (i.e., Group A and Group B) and the researcher was the instructor of Group A. Therefore, the researcher already knew the content of the subject, which would be considered in the design of the treatment of the experiment. In particular, 21 participants were students enrolled in Group A and 13 in Group B. In order to conduct this experiment, two groups were taken into consideration: an experimental group and a control group. Considering that the researcher of this study was the instructor of Group A, which had a higher number of enrolled students, and given the fact that the use of Social Media could increase the study implementation complexity, Group A was assigned to be the Experimental Group and Group B was designated to be the Control Group. Furthermore, an individual identification code (e.g., Student 1, Student 2) was provided to safeguard the subjects' privacy.

To identify the individual, linguistic and learning characteristics of the participants of this study, a Preliminary Study was carried out with the implementation of a Placement Test and a Preliminary Questionnaire. Questions related to the students' personal information (e.g., age or nationality), language background (e.g., Placement Test performance), and Social Media

preferences were asked. In general, collected data revealed that most of the students were Spanish, had a B1 proficiency level in English, and were used to managing Social Media applications. These data are shown in detail in Section 6.2.

### 5.4. Instruments

The main treatment in this study has been a set of role-play procedures. Nevertheless, we have used additional instruments endorsed for data collection: placement test, preliminary questionnaire, learning styles' questionnaire, and self-assessment questionnaire. The following sections are devoted to the description of the instruments and the treatment applied.

5.4.1. Preliminary Study. Placement Test and Preliminary Questionnaire: 'Foreign Languages and Social Media: are you up-to-date?'

The use of technological devices in our daily lives has been revolutionary because new ways of communicating have been introduced. For instance, apart from handwritten notes or letters, it is possible to send voice recordings or have video-calls. The present dissertation supports the Style-Matching Hypothesis (Pashler et al., 2009), which refers to the teachers' awareness of the learning styles and strategies present in the classroom in order to match teaching methodologies to learners' preferences and future prospects. For the purpose of this study, the Preliminary Questionnaire <sup>9</sup> aims to find out the common characteristics of the participants of this study in relation to personal information, language background and Social Media preferences. In particular, data collected from the Preliminary Questionnaire were considered in order to design the Task (see Section 5.4.3.).

<sup>&</sup>lt;sup>9</sup> Available at: <a href="https://forms.gle/XsHHeyR3u6A3PBnP8">https://forms.gle/XsHHeyR3u6A3PBnP8</a>

The platform used to carry out this questionnaire was *Google Forms* <sup>10</sup> and the instructions were indicated at the beginning: "This questionnaire has been designed to identify the characteristics of your foreign language learning process and to know your degree of familiarity with Social Media applications. Remember: there are no correct or incorrect answers". Furthermore, the questionnaire was divided into three different sections: (1) personal information, (2) language background knowledge, and (3) Social Media.

Regarding the first part of the questionnaire (i.e., personal information), the students had to indicate their gender (e.g., female, male, trasgender, other), age, and country (see Figure 6), as well as their bachelor's degree and academic course (see Figure 7). Although all the participants were studying the same subject, this part of the questionnaire was intended to know whether there was any participant taking part in exchange programmes, which could show variation in the degree they were enrolled as well as their academic year. Furthermore, another purpose of this section was to know the basic learning characteristics of international students.

<sup>&</sup>lt;sup>10</sup> Free online software for creating surveys and questionnaires.

**Figure 6**Participants' Gender, Age and Country

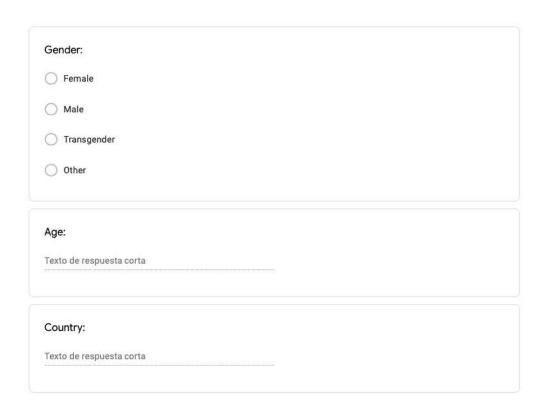


Figure 7

Participants' Bachelor's Degree and Academic Course



In relation to the second part of the questionnaire, students were asked about the language(s) spoken at home and their first foreign language (see Figure 8). As it has been previously mentioned, there could be international students or participants who may have come from different countries, which would affect the languages spoken at home as well as their first foreign language. Moreover, we live in a bilingual territory, which can also imply the use of more than one language at most homes.

Figure 8

Participants' Spoken Languages and First Foreign Language

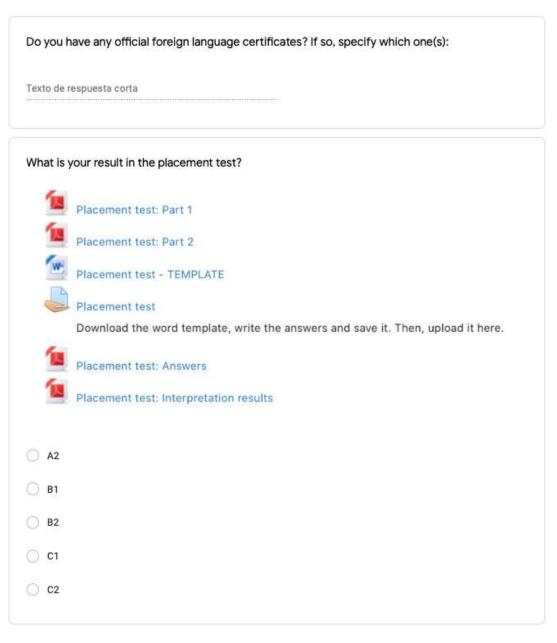
Langu	uages spoken at home:
Texto	de respuesta corta
	is your First Foreign Language? *Foreign Language: language that is not spoken in your country nat you may learn at school or in other educational institutions.
( E	nglish
○ F	rench
) It	alian
○ G	erman
O s	panish
$\cap$ 0	ther

Furthermore, students were also asked to indicate if they had any official foreign language certificates and what their English proficiency level was according to the result obtained in the Placement Test, as it is shown in Figure 9. Therefore, the data collected from the

Placement Test and the information related to language certification can determine the design of the activities of the experimental study regarding language background.

Figure 9

Participants' Language Background



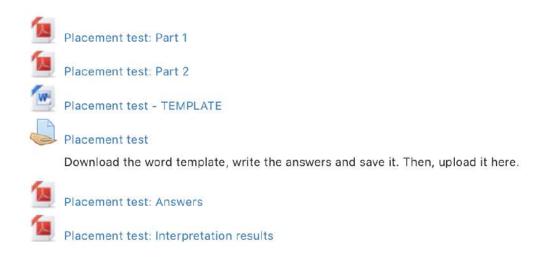
The Placement Test (UCLES, 2001) was carried out in February 2021, one month before the implementation of the Preliminary Questionnaire (i.e., March 2021). It is important to note that due to COVID-19, the sessions during February were online.

The Placement Test (see Appendix 2) is divided into two parts. The first part has forty questions in three different types of activities. In particular, some questions ask students to indicate the place where they could find some notices (e.g., a menu in a restaurant) or the word that best fits the gaps in a text and complete sentences with the most adequate word or phrase. The second part of the Placement Test has a total of three activities including twenty questions, in which students have to choose the best option to complete a text or a sentence. This questionnaire was useful in order to determine the language proficiency level of the participants and, as a consequence, the design of the task.

Including the total of 60 questions divided into two parts, the students had the questionnaire available in the Virtual Classroom of the subject 'English for Tourism'. This questionnaire was sent as homework in the first session of the course. So, students had to download a template, fill it out with their answers and submit it to the Virtual Classroom (see Figure 10):

Figure 10

Placement Test in the Virtual Classroom



In the second session of the course, the answers (see Appendix 3) were made available so that the students could check them. Then, according to the number of correct answers, students could identify their English proficiency level according to the 'interpretation results' (see Figure 11):

Figure 11
Interpretation Results of the Placement Test

# LEVEL PLACEMENT TEST

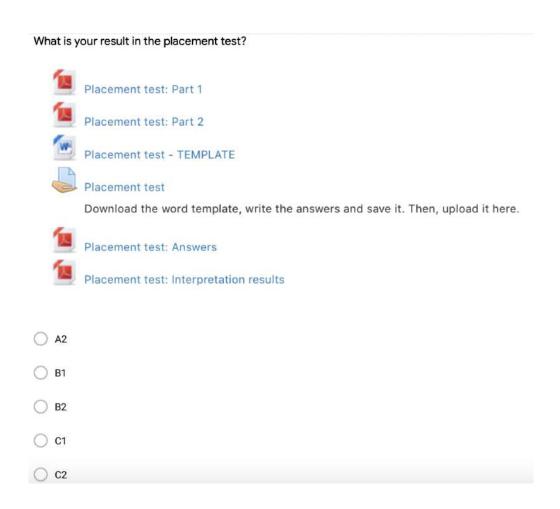
Quick Placement Test 2001. Paper and Pen Test. Oxford: Oxford University Press.

Total Score	Level	CEFR level	Cambridge
0-17	Beginner	A1	
18–29	Elementary	A2	KET
30–39	Lower intermediate	B1	PET
40–47	Upper intermediate	B2	FCE
48-54	Advanced	C1	CAE
55–60	Very Advanced	C2	CPE

Finally, the level obtained according to the results of this questionnaire had to be specified in one question of the Preliminary Questionnaire (see Figure 12):

Figure 12

Placement Test in Google Forms



Regarding the third part of the questionnaire (i.e., Social Media), two questions were included in order to know the mostly preferred Social Media applications among the students (see Figure 13). Therefore, according to the data collected, the most relevant Social Media applications used by the participants could be identified.

Figure 13
Social Media Apps among Participants

Hav	e you ever used any of the following applications? More than one option can be ticked.			
	Youtube			
	Twitter			
	Facebook			
	Instagram			
	Pinterest			
	Skype			
	Spotify			
	WhatsApp			
	Google+ (Gmail, Google Meet, Google Docs)			
	Snapchat			
	TikTok			
	nsidering the Social Media applications that you know, choose a maximum of three options ar er them from the most preferred to the least preferred.			
Text	o de respuesta larga			

In conclusion, the application of the Preliminary Questionnaire allowed us to know information about the participants in terms of personal characteristics (e.g., gender or age), language background (e.g., English proficiency level), or Social Media applications. The data collected from this questionnaire indicated that the average English proficiency level was B1 and the preferred Social Media applications were *WhatsApp* and *Instagram*. The information related to participants' English proficiency level and Social Media were taken into account in

order to design the treatment applied in the present study (i.e. role-play). Particularly, the information obtained in the Preliminary Questionnaire determined the language proficiency level of the role-play and the applications employed to perform the suggested treatment by the participants delimited the applications employed.

### 5.4.2. Pre and Post Questionnaire. Perceptual Learning Styles' Questionnaire

The Perceptual Learning Styles' Questionnaire <sup>11</sup> (see Appendix 4) was used to measure the students' physiological learning modes and identify students as unimodal, bimodal, or multimodal (see Section 3.4.). The purpose of this questionnaire was to identify the possible increasing presence of multiple learning styles (i.e., bimodal and multimodal) in comparison to the unimodal learning style as a consequence of the increasing use of digital devices in our society. Moreover, with this identification, this questionnaire also intended to contribute to the creation of an effective learning environment, in which there is consonance between students' learning styles and strategies and an appropriate teaching style.

The Perceptual Learning Styles' Questionnaire was adapted from Villanueva and Navarro (1997), Girón-García (2013), and VARK (2021). As indicated in the instructions of the questionnaire, students can choose one, two, or three answers according to their learning preferences. The objective of this questionnaire is to identify students' perceptual learning styles and, for this reason, there are not correct or incorrect answers.

The questionnaire is divided into nineteen questions related to the use of perceptual modes in the EFL learning context. The first eighteen questions in the questionnaire prompt three

<sup>&</sup>lt;sup>11</sup> Available at: <a href="https://forms.gle/iTXqwHVNdfyd4hbeA">https://forms.gle/iTXqwHVNdfyd4hbeA</a>

answer options related to the 'auditory', 'kinaesthetic', and 'visual' modes, respectively. The purpose of these answer options is to elicit the subjects' learning styles aforementioned. In addition, the nineteenth question includes six answer options; the first two answer options are related to the 'auditory' mode, the third and fourth answer options to 'kinaesthetic' characteristics, and the last two answer options to 'visual' inclinations.

In total, one participant may attribute a maximum of 20 answer options to each perceptual modality. Moreover, the content of the questionnaire was adapted to the students' language learning field (i.e., English for Tourism). In the following paragraphs, each question in the questionnaire (see Appendix 4) is explained as to how it can elicit each of the values of variable 1: degree of multimodality.

Question 1 asks students what is the best option for them to understand a video that explains how to do an online exam on the *Moodle* platform of the university. The participants in this study were familiar with online exams after the emergence of the pandemic COVID-19, which obliged universities to carry out exams online. In order to answer this question, the students need to reflect upon different options related to their online preferences. So, the auditory learning style is elicited by the first answer option, the kinaesthetic learning style is related to the second answer, and the third answer indicates a visual learning style.

Question 2 deals with the online application Kahoot! and students have to indicate what is the best way to learn how to create one according to their learning styles. In this case, Kahoot! was chosen to be included in the question because the participants in this study had already

used it in class. Auditory, kinaesthetic, and visual learning styles are elicited in the three answers.

Question 3 describes a situation related to Tourism, the field of the participants' bachelor's degree. The first answer shows the auditory characteristics, the second answer covers kinaesthetic features, and the third answer regards visual perceptual traits.

Question 4 entails the students' preferences about the reception of feedback. In particular, the feedback to online questionnaires in the Virtual Classroom, the platform that students frequently use for their university subjects. For instance, the first answer is related to the auditory learning style, the second answer describes kinaesthetic characteristics, and the third answer manifests visual features.

Question 5 asks students about learning strategies in the language learning context. To answer this question, each student has to choose one among the corresponding answer(s), related to auditory, kinaesthetic, and visual modes.

Question 6 asks students about their teaching preferences. The auditory learning style is considered by the first answer option. The kinaesthetic learning style is related to the second answer option and the third answer option refers to the visual learning style.

Question 7 deals with input reception not at school but in a different context: at hospital. Auditory, kinaesthetic, and visual learning styles are revealed in the three answer options.

Question 8 is related to learning exchange programmes (e.g., Erasmus +). The first answer option analyses the auditory features, the second answer option covers kinaesthetic traits, and the third answer option regards visual perceptual characteristics.

Question 9 entails the students' preferences towards travelling and taking pictures. The first answer option is related to the auditory learning style, the second answer option describes kinaesthetic characteristics, and the third answer option deals with visual features.

Question 10 asks students about learning strategies in a Tourism context. To answer this question, each student has to choose the corresponding answer option(s), related to auditory, kinaesthetic, and visual modes.

Question 11 asks students about their preferences regarding how to find places in new destinations. The auditory learning style is considered by the first answer option, the kinaesthetic learning style is related to the second answer option, and the third answer refers to the visual learning style.

Question 12 deals with future academic prospects. Auditory, kinaesthetic and visual learning styles are considered in the three answer options.

Question 13 is related to the field of Tourism and asks students what is the best way to learn about a new project carried out by the Tourist Information office. The first answer option analyses the auditory learning style, the second answer option covers kinaesthetic characteristics, and the third answer option regards visual perceptual features.

Question 14 entails students' learning preferences about a possible future job: tourist guide. For example, the first answer option is related to the auditory learning style, the second answer option describes kinaesthetic characteristics, and the third answer option deals with visual features.

Question 15 asks students about travelling. In particular, it deals with the options of saving money to travel around the world. To answer this question, each student has to choose the corresponding answer option(s), related to auditory, kinaesthetic, and visual modes.

Question 16 asks students about their learning preferences regarding the characteristics of monuments they may find in tourist destinations. For example, the auditory learning style is considered by the first answer option, the kinaesthetic learning style is related to the second answer option, and the third answer option refers to the visual learning style.

Question 17 deals with English grammar. Considering that students are enrolled in the subject 'English for Tourism', they are familiarised with this topic. Auditory, kinaesthetic, and visual learning styles are considered in the three answer options.

Question 18 is related to English vocabulary. The first answer option analyses the auditory traits, the second answer option covers kinaesthetic characteristics, and the third answer option regards visual perceptual features.

Question 19 requires students to indicate the statements that are true for them. In this question, students have six answer options and they have to choose from one to six of them. The first two answer options are related to auditory characteristics, the third and fourth answer options entail kinaesthetic traits, and the fifth and sixth answer options cover visual features.

In conclusion, this questionnaire was intended to identify the learning styles among the participants of the present study. The data collected from this questionnaire provides information about participants' perceptual learning styles (i.e., auditory, kinaesthetic, and visual) and categories (i.e., unimodal, bimodal, and multimodal). In particular, students can be categorised as unimodal (i.e., when only one learning style gets at least 50% of the answers), bimodal (i.e., when two learning styles get at least 50% of the answers), and multimodal (i.e., when the three learning styles get at least 50% of the answers). This questionnaire is employed as pre-questionnaire and post-questionnaire in this study. Therefore, the collected data may indicate which perceptual learning preference(s) and category can be assigned to each participant before and after the implementation of the role-play. Focusing on the objectives of the present study, the information can also provide some evidence related to the possible presence of multiple learning modes (e.g., bimodal or multimodal) in the EFL classroom, derived from the recent multimodal communicative context that surrounds Generation Z.

### 5.4.3. Task. Role-Play and Self-Assessment Questionnaire

The task chosen as the treatment to carry out the present study was a role-play activity. According to Paulston (1977, p. 32), role-plays are "exercises where the student has been

assigned a fictitious role from which he has to improvise some kind of behaviour towards the other role characters in the exercise". Then, role-plays give students the chance to use English in real-life situations and focus on communication. Furthermore, students can build confidence and put theory into practice. Therefore, role-plays promote real-life communication in a real-like environment, where students become active members in the learning process who work collaboratively to build language knowledge.

Considering that role-plays are tasks in which language is contextualised, it is noteworthy to emphasise that the design is 100% original and authentic material has been included. Namely, the role-play activity has been designed *ad hoc* to carry out the present study. The following aspects were taken into consideration in order to design an appropriate task for the purpose of this study:

- The language proficiency level of the participants according to the results obtained in the Placement Test and the syllabus of the subject in which they were enrolled: B1.2.
- The academic context in which participants were studying: bachelor's degree in Tourism at Universitat Jaume I.
- The tools the students had to complete the task: a mobile phone in the experimental group and a voice recorder in the control group.
- The most relevant Social Media applications among students according to the results obtained in the Preliminary Questionnaire: *WhatsApp* and *Instagram*. These two applications were the most relevant among all the participants of this study, without finding any differences between the two groups in this regard.

According to the points previously described, the participants in this study were students who were expected to achieve a B1.2. language proficiency level at the end of the academic term. Furthermore, all the participants shared the same academic background (i.e., they were students enrolled in a specific subject). Nevertheless, there were differences regarding the instruments used for the implementation of the task (i.e., Social Media in the Experimental Group and voice recorder in the Control Group). Moreover, the Social Media applications used to carry out the study in the Experimental Group were the mostly preferred by the participants: *WhatsApp* and *Instagram*. Accordingly, the role-play was the same for the two groups of participants and differences can only be appreciated in terms of digitalisation.

The task implementation procedure consisted of the following stages. Firstly, the topic and the key expressions that students could use in the role-play were introduced. Secondly, the role-play was implemented. In particular, the topic of the role-play was 'conducting an interview in the Tourism sector' and the key expressions that students revised were questions that could be used in that context. To carry out this introduction to the role-play, four activities included in the subject workbook, 'English for International Tourism' 12, were used (see Appendix 7). The first activity was a multiple choice question of a text titled "Mistakes to avoid when preparing for job interviews". The second activity consisted in putting words in the correct order so as to form questions to ask or to be asked in an interview. The third and fourth activities were about four listening extracts of a real interview to a tour leader with an adventure tourism company. After the completion of the four introductory activities, the role-play took place.

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<sup>&</sup>lt;sup>12</sup> Cowper, A. (2013). *English for International Tourism (Upper Intermediate Workbook)*. Essex: Pearson.

Regarding the role-play (see Appendices 5 and 6), the academic context of the participants was mainly considered in order to involve them in a meaningful task and recreate a real-like experience according to their learning interests. Therefore, its context was the same for the two groups of participants:

"Context: The United Nations World Tourism Organisation (UNWTO), the United Nations agency in charge of the promotion of responsible, sustainable, and universally accessible tourism, is looking for three students at Universitat Jaume I to participate in a project, named Photofilm the World. The project is carried out in cooperation with the World Film Society (WFS), a non-profit organisation that wants to improve world films and increase collaboration of international projects. This project aims at promoting world destinations that have previously been the setting of famous films. Particularly, the three contracted students would work as tourist guides through official accounts of Instagram."

The same two roles were created for the role-play of the experimental group (see Appendix 6) and the role-play of the control group (see Appendix 7):

- Role A: Noah Brown (UNWTO's manager / employer);
- Role B: Andrea David (Candidate / Student from Universitat Jaume I).

However, in accordance with some characteristics previously mentioned, there were little differences in each role because of the digital tools used by the Experimental Group.

Figure 14 describes Role A to be developed by the Experimental Group. These students were required to use the *Whatsapp* application to perform their role.

Figure 14

Role A in the Experimental Group

## Role A: Noah Brown (UNWTO's manager / employer)

You are responsible for contracting the three students from *Universitat Jaume I*. After receiving twenty job applications from different students, you decide to carry out a preselection of candidates before the final interview. In order to soothe the candidates' nerves and recreate a more informal and familiar context, you decide to use *WhatsApp* to know more about them.

First, you <u>introduce yourself</u> and <u>describe the objective of the preselection</u>. Second, <u>ask questions using the following information</u>; you may additionally use your own ideas:

- Candidate's personal information: name, age, degree.
- Candidate's management and use of Social Networks.
- Candidate's opinion about the attractiveness of this project.
- Candidate's perception of himself/herself.
- Candidate's future prospects.

You can use different communicative options that *WhatsApp* offers (e.g. written messages, voice recording, emojis, *GIFs*, etc.).

Regarding the Role A in the control group (see Figure 15), *WhatsApp* is not used. Instead, students have to imagine themselves conducting the interview in an informal place: the canteen of the Faculty of Law and Economic Sciences.

#### Figure 15

Role A in the Control Group

### Role A: Noah Brown (UNWTO's manager / employer)

You are responsible for contracting the three students from *Universitat Jaume I*. After receiving twenty job applications from different students, you have decided to carry out a preselection of candidates in the canteen of the Faculty of Law and Economic Sciences. This preselection will be useful in order to soothe candidates' nerves and recreate a more informal and familiar context before the final interview.

First, you <u>introduce yourself</u> and <u>describe the objective of the preselection</u>. Second, <u>ask questions using the following information</u>; you may additionally use your own ideas:

- Candidate's personal information: name, age, degree.
- Candidate's management and use of Social Networks.
- Candidate's opinion about the attractiveness of this project.
- Candidate's perception of himself/herself.
- Candidate's future prospects.

On the other hand, Role B in the Experimental group (see Figure 16) requires students to use *Instagram* in addition to *WhatsApp*:

### Figure 16

Role B in the Experimental Group

# Role B: Andrea David (Candidate / Student from Universitat Jaume I)

You are a student at *Universitat Jaume I* who applied for the job last week. Today, you are going to participate in a preselection of candidates with an UNWTO'S manager / employer before the final interview. This preselection takes place on *WhatsApp*, where you have to answer and talk about some questions related to the project participation. You can use different communicative options that *WhatsApp* offers: written messages, voice recording, emojis, *GIFs*, etc. Moreover, it is possible that one of these questions is related to your management of Social Networks. If so, in order to make a good impression, share and talk about your *Instagram* account.

(Instagram account link: https://www.instagram.com/filmtourismus/).

Regarding Role B in the control group (see Figure 17), *WhatsApp* and *Instagram* were not used. Instead, a more traditional methodology was followed as only their voices were used:

Figure 17

Role B in the Control Group

# Role B: Andrea David (Candidate / Student from Universitat Jaume I)

You are a student at Universitat Jaume I who applied for the job last week. Today, you are going to participate in a preselection of candidates with UNWTO'S manager / employer before the final interview. This preselection takes place in the canteen of the Faculty of Law and Economic Sciences, where you have to answer and talk about some questions related to the project participation. Moreover, it is possible that one of these questions is related to your management of Social Networks.

In conclusion, the purpose of this role-play is to implement interactive and authentic material in the EFL classroom so as to bring experiential learning and real-life communication into the educational setting. With its implementation, this research expects to collect data that shows possible changes in the students' perceptual learning styles and to what extent Social Media is an efficient tool to promote students' perceptual learning styles and positive attitudes (e.g., motivation and confidence) in the language classroom. Moreover, students can work collaboratively as they improve their digital literacy from a pedagogical perspective. Furthermore, it also intends to build confidence and motivation in the students in order to use language in real contexts. It is deemed necessary to emphasise that the role-play was not designed to substitute traditional material or printed books. Instead, it aimed at complementing classroom material to achieve the learning goals effectively. Furthermore,

after the implementation of the task some qualitative data were collected with the

implementation of the self-assessment questionnaire.

The self-assessment questionnaire <sup>13</sup> (see Appendix 10) was designed with *Google Forms* and

as indicated in the instructions, the purpose of its implementation is to know participants'

opinion about their performance in the role-play. Therefore, there are not correct or incorrect

answers. In particular, the purpose is to elicit information related to participants'

communicative skills, confidence, and motivation.

Question 1 relates to the comprehension of the activity. Students had to choose one of the

following options: 'strongly disagree', 'disagree', 'neutral', 'agree', 'strongly agree'.

Question 2 makes students reflect upon their Communicative Competence. The students had

to choose one of the following options: 'strongly disagree', 'disagree', 'neutral', 'agree',

'strongly agree'.

Question 3 prompts students to think about the confidence that could have been built after

performing the activity. The students had to choose one of the following options: 'strongly

disagree', 'disagree', 'neutral', 'agree', 'strongly agree'.

Question 4 checks the students' motivation. The students had to choose one of the following

options: 'yes', 'no', 'maybe'.

<sup>13</sup> Available at: https://forms.gle/Ef4hCs6YCUVw73zR7

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Question 5 is an open question so the students could write any extra comment related to the Role-Play.

Question 6 is only included in the questionnaire of the Experimental Group and intends to get data related to the introduction of *WhatsApp* and *Instagram* in the task. The students had to choose one of the following options: 'strongly disagree', 'disagree', 'neutral', 'agree', 'strongly agree'.

Finally, after following the steps for the implementation of the instruments described in this chapter, results were obtained. The next chapter aims to describe the data obtained.

### 5.5. Procedures and Data Collection

Participation in this study was not mandatory for the students but it was proposed as a complementary activity that would provide 0.5 points extra credit in the written exam at the end of the semester.

The study took place during the students' regular class time in the second term (January - June) of the 2020/21 academic year. Different steps were followed in order to obtain results. Table 17 shows the data collecting project plan:

**Table 17**Data Collection Project Plan

Step Number	Name	Instrument(s)	When?	Where?
1	Preliminary Study	Placement Test	February	Virtual Classroom (i.e.,  Moodle platform)
		Preliminary Questionnaire	March	Google Forms
2	Pre-Questionnaire	Learning Styles'  Questionnaire	April	Google Forms
3	Self-Assessment Questionnaire	Treatment: Task (Role-Play)	April	In-person (i.e., at Universitat Jaume I)
		Self-Assessment Questionnaire	April	Google Forms
4	Post-Questionnaire	Learning Styles' Questionnaire	May	Google Forms

In total, the implementation of the study lasted four months and although the four steps were monitored by the researcher, participants had to use some online platforms autonomously. Moreover, with the implementation of *Google Forms*, results could be initially obtained with some graphics generated automatically by the online application. Then, some tables and graphics were created with the purpose of observing and analysing the results obtained more easily, according to the research purposes.

### 5.6. Conclusion

The present study was conducted during the COVID-19 world pandemic. Despite the limitations that this circumstance might cause, the new technologies facilitated its implementation. In particular, the Moodle platform that students used (i.e., Virtual Classroom), the application Google Forms and two Social Media apps (i.e., WhatsApp and Instagram), were chosen to carry out the questionnaires and the treatment of the present study. In total, 34 participants took part in the study and they were divided into two groups: experimental and control groups. Both groups followed the same four steps: (1) preliminary study, (2) pre-questionnaire, (3) self-assessment questionnaire, and (4) post-questionnaire. Firstly, the preliminary study was aimed to provide results related to the participants' characteristics, mainly about their English proficiency level and their degree of familiarisation with Social Media. Accordingly, the treatment would follow a specific design. The pre-questionnaire and post-questionnaire had the purpose of identifying both the perceptual learning styles of the students and which modality was predominant before and after the completion of the treatment. Finally, the self-assessment questionnaire was intended to obtain information about the students' confidence and motivation after their performance in the role-play. It is important to mention that the treatment was the same for both groups and it was exclusively designed for this study using authentic material (e.g., real tourism organisations and *Instagram* accounts). However, the devices that both groups employed were different, because the experimental group used Social Media applications and the control group used a voice recorder.

### 6. RESULTS

### 6.1. Introduction

This chapter presents the results obtained from the data collection procedure followed to carry out this study. The obtained data and results reveal information about the participants' general characteristics, language background, predilection for Social Media, perceptual learning styles, and conceptions about their performance in the role-play.

The following four sections present the data and results obtained from each of the instruments described in the previous chapter (see Table 18). In particular, Section 6.2. focuses on the data collected from the preliminary questionnaire; Section 6.3. deals with the results related to the pre-questionnaire; Section 6.4. regards the participants' performance in the role-play and the results obtained from the self-assessment questionnaire; and Section 6.5. shows the results of the post-questionnaire.

**Table 18**Presentation of the Data and Results

6.1. Preliminary Questionnaire		
6.2. Pre-Questionnaire	6.2.1. Experimental Group	
0.2. The Questionnaire	6.2.2. Control Group	
6.3. Task	6.3.1. Experimental Group	
U.S. Tusk	6.3.2. Control Group	
6.4. Post-Questionnaire	6.4.1. Experimental Group	
o. i. i ost Questionnume	6.4.2. Control Group	

# 6.2. Preliminary Questionnaire: Participants' Characteristics

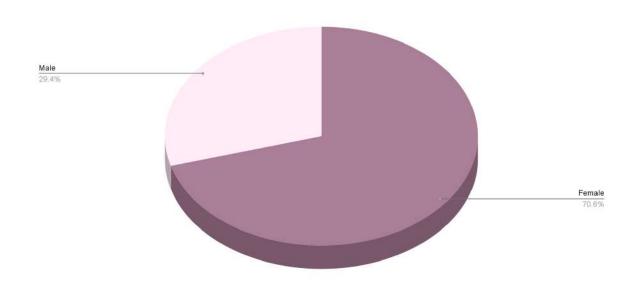
This section focuses on showing the information obtained from the preliminary questionnaire. As described in chapter 5, the preliminary questionnaire was divided into three different parts: (1) personal information, (2) language background, and (3) Social Media. Therefore, the purpose of the preliminary study was to obtain data regarding some individual characteristics of the participants (e.g., gender, age, or country) as well as their language background and Social Media preferences. Accordingly, the information revealed by the preliminary study would determine the design of the task (i.e., role-play).

Out of the bulk of 34 participants, 21 participants in the experimental group used Social Media applications to perform the role-play, whereas the 13 members of the control group did not. Despite this difference, the preliminary-questionnaire was the same for all of them. Therefore, we could also collect data from all the participants regarding their preferences towards the use of Social Media and identify the possible similarities and differences between both groups in that regard.

The answers from the preliminary questionnaire were analysed quantitatively. Regarding the first part of the questionnaire (i.e., personal information), Figure 18 shows that 24 of the participants were female and 10 were male.

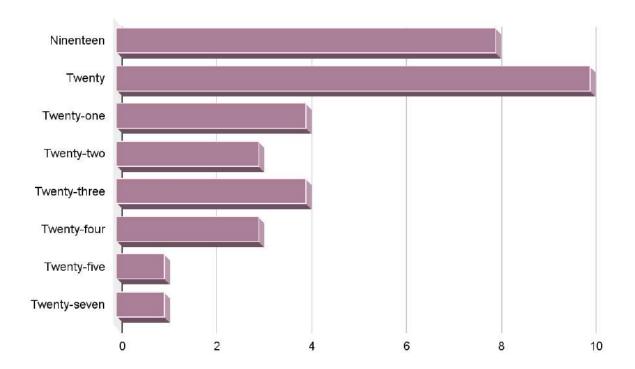
**Figure 18**Participants' Gender

70.6% = 24 students; 29.4% = 10 students



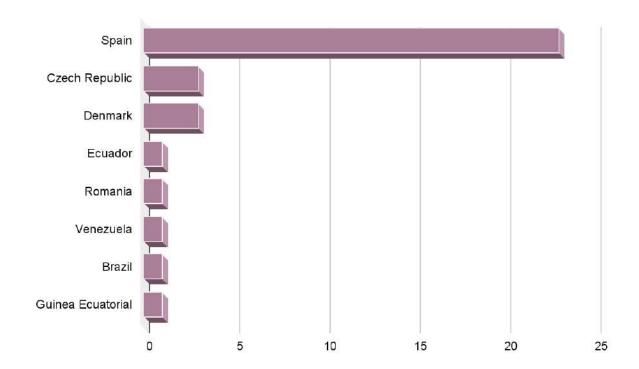
Furthermore, Figure 19 illustrates participants' ages, which range from 19 to 27. A total of 26 participants wrote that they were in their twenties, whereas a small number (8) affirmed to be 19 years old.

Figure 19
Participants' Age



Regarding their country, although all participants were permanently living in Spain with the exception of 6 Erasmus students (3 from the Czech Republic and 3 from Denmark), information obtained reveals that 23 students were born in Spain and that there was one student from each of the following countries: Ecuador, Romania, Venezuela, Brazil, and Guinea Ecuatorial (see Figure 20).

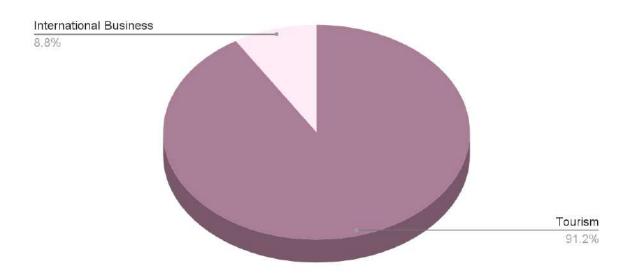
Figure 20
Participants' Country



As for the bachelor's degree they were enrolled in, all the participants were taking the subject 'English for Tourism', which belongs to the bachelor's degree in Tourism. However, the collected data showed that 3 international students who were taking part in the Erasmus+ programme were doing a bachelor's degree in International Business Communication at their home universities (see Figure 21).

Figure 21
Participants' Bachelor's Degree

91.2% = 31 students; 8.8% = 3 students

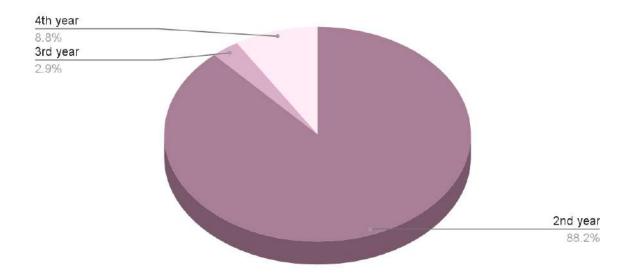


Finally, the subject 'English for Tourism' is studied in the second year of the Bachelor's Degree in Tourism. All the participants were taking the subject for the first time with the exception of 1, who was a 3rd-year student, and 3 students, who were in their 4th year (see Figure 22).

Figure 22

Participants' Academic Course

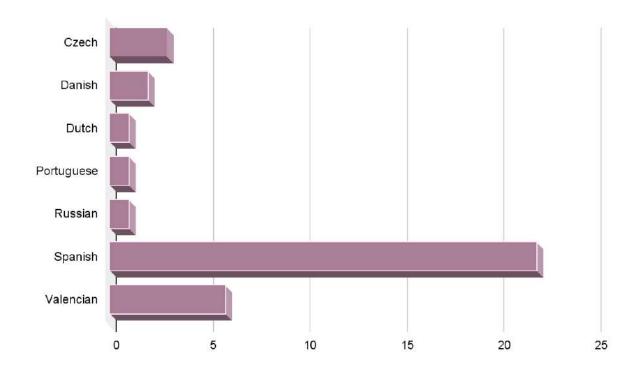
88.2% = 30 students; 8.8% = 3 students; 2.9% = 1 student



As for the language background of the participants, they were asked to indicate the language(s) spoken at home. According to the data collected, the most spoken language at home was Spanish, which was chosen by 22 students, followed by Valencian (chosen by 6 participants). Moreover, Czech was spoken at home by 3 students; Danish was chosen 2 times; and Dutch, Portuguese, and Russian 1 time each (see Figure 23).

Figure 23

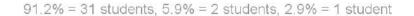
Participants' Language(s) Spoken at Home

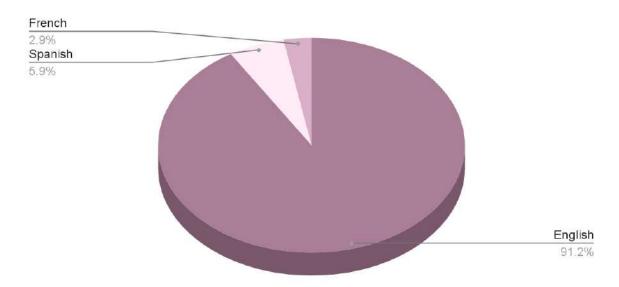


Regarding the participants' first foreign language, 31 participants selected English as their first foreign language, 2 students considered Spanish as their first foreign language and 1 of them indicated French (see Figure 24).

Figure 24

Participants' First Foreign Language



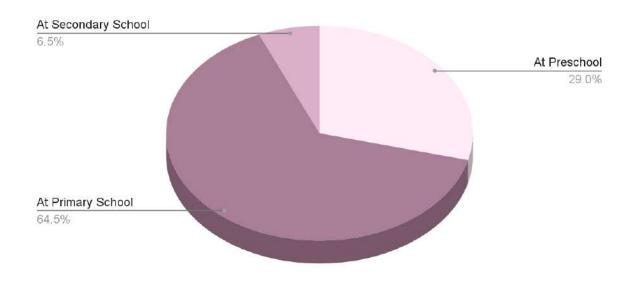


Considering the 31 participants who indicated that English was their first foreign language, Figure 25 shows that 20 began to study it at Primary School, 9 at Preschool and 2 at Secondary School.

Figure 25

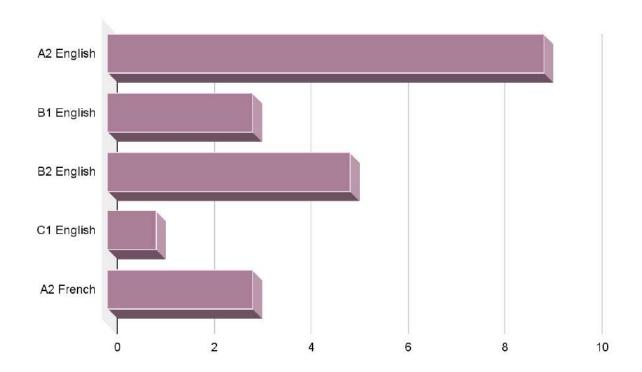
Participants' EFL at School

64.5% = 20 students; 29% = 9 students; 6.5% = 2 students



Regarding the official language certificates, participants indicated in the questionnaire whether they had any. If they selected any of the options provided, they had to specify which was the certified language and the level (see Figure 26). The data showed that the students had a total of 21 official language certificates, with English as the predominant language. In particular, there were 9 'A2 English certificates', 5 'B2 English certificates', 3 'B1 English certificates', 1 'C1 English certificate' and 3 'A2 French certificates'.

**Figure 26**Participants' Official Language Certificates

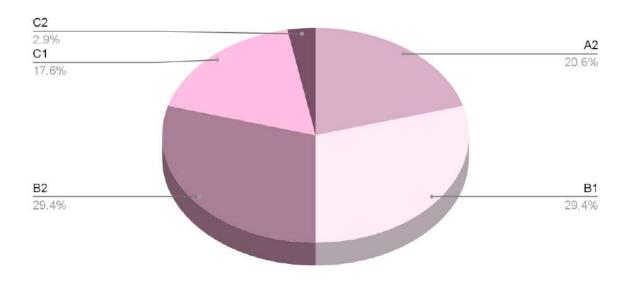


Finally, as not all the participants had official language certificates and most of them had obtained the certificate(s) some years ago, the Placement Test provided results that could show the EFL level of all the participants just before the design and implementation of the Task (see Figure 27).

Figure 27

Participants' Placement Test





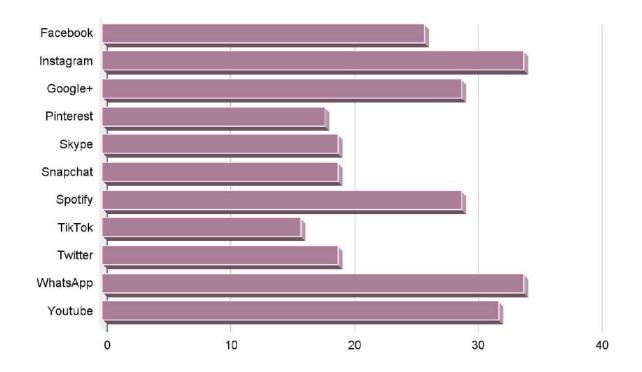
Results from the Placement Test showed a great variety of EFL levels: 10 obtained a B2 level; 10, B1 level; 7, A2 level; 6, C1 level; and 1, C2 level.

After the identification of the general characteristics of the participants and their EFL proficiency level, data regarding their Social Media preferences were obtained. Firstly, regarding the most relevant Social Media applications among students (see Figure 28), the 34 participants of the experimental group (100%) affirmed to be familiar with the use of *WhatsApp* and *Instagram*. Other relevant applications were: *Youtube* (32 students), *Google+* (29 participants), and *Spotify* (29 participants). According to the results obtained, *WhatsApp* 

and *Instagram* were the mostly used applications among students. Therefore, these two applications were selected to be included in the design of the task.

Figure 28

Participants' Mostly Used Social Media Apps



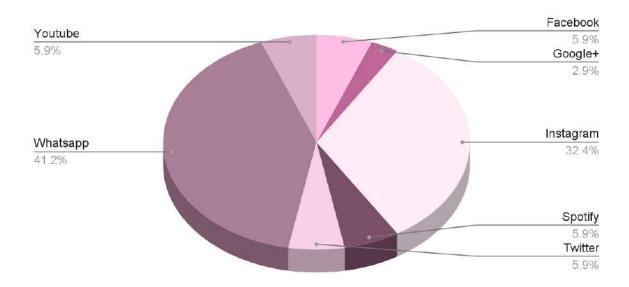
Secondly, taking into account the most used applications shown in Figure 29, the results obtained in the preliminary questionnaire also reveal that *WhatsApp* and *Instagram* were the most successful applications among the participants of this study. Following a quantitative methodology, Figure 29 shows which applications the participants selected as their first choice. Therefore, *WhatsApp* was chosen by 14 students and *Instagram* by 11. This questionnaire was designed in order to know which applications were considered as the most popular ones among the participants and, therefore, could be familiar, motivating, and

engaging to be integrated into the task design for the experimental group. Furthermore, no differences were found between the experimental and control groups in this respect.

Figure 29

Participants' Mostly Preferred Social Media Apps

41.2% = 14 votes; 32.4% = 11 votes; 5.9% = 2 votes; 2.9% = 1 vote



In conclusion, the information obtained from the preliminary questionnaire showed that there were no significant differences between the experimental and control groups. Therefore, the similitudes found and taken into consideration in the task design were the university degree (i.e., Bachelor's Degree in Tourism), the English proficiency level (i.e., B1.2.), and the Social Media applications (i.e., *WhatsApp* and *Instagram*).

### 6.3. Pre-Questionnaire: Perceptual Learning Styles

This section focuses on the results obtained from the pre-questionnaire (i.e., learning styles' questionnaire). The purpose of this questionnaire was to identify the perceptual learning styles of the participants regarding their involvement in language learning. The pre-questionnaire was implemented before the task performance. Appendices 4 and 5 show the participants' individual answers to each question in both groups.

The same pre-questionnaire was administered to the 34 participants and as described in chapter 5, it consists of 19 questions. The first eighteen questions each include three possible answers that indicate auditory, kinaesthetic, and visual learning styles, respectively. The nineteenth question contains six possible answers, two for each of the learning styles analysed. Therefore, a total of twenty answers may be attributed to each of the three perceptual learning styles.

Considering the purpose of this study with regard to students' learning styles in the language classroom, not all the existing learning variables were taken into account. Instead, Table 19 shows the three values regarding the perceptual Learning Styles' Questionnaire on which the study focuses: auditory learning style, kinaesthetic learning style and visual learning style. The three values belong to the learning styles variable, showing the tendencies that characterise the perceptual learning styles elicited by the questionnaire (see Section 3.3.).

**Table 19**Perceptual Learning Styles' Values

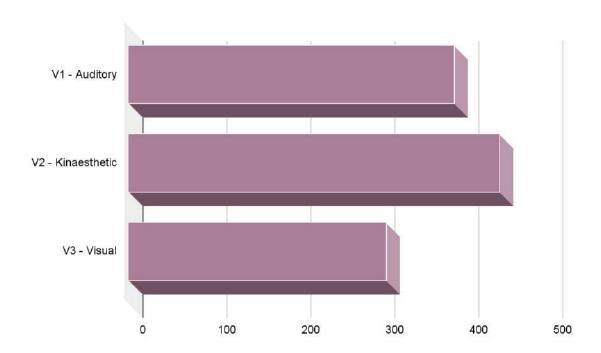
Values	Name
Value 1	Auditory learning style
Value 2	Kinaesthetic learning style
Value 3	Visual learning style

With the analysis of these three values, this work aims to obtain evidence of the possibly increasing number of students with multiple perceptual learning styles and to correlate them with the use of digital technologies in the classroom. According to the aforementioned values, students can be categorised as unimodal, bimodal and multimodal. As mentioned in Section 3.3., students are considered as unimodal when only one learning style gets at least the 50% of the answers, bimodal when there are two learning styles obtaining at least the 50% of the answers, and multimodal when the three values have obtained at least the 50% of the total. For instance, if the auditory mode got 30%, the kinaesthetic mode got 50%, and the visual mode got 70%; the participant would be classified as bimodal.

Regarding the total number of participants in this study (34), Figure 30 shows the total number of answers provided for each value. Considering that there are 34 participants and each value can be chosen a maximum of 20 times, the total number of possible answers for each variable is 680.

Figure 30

Values of the Pre-Questionnaire

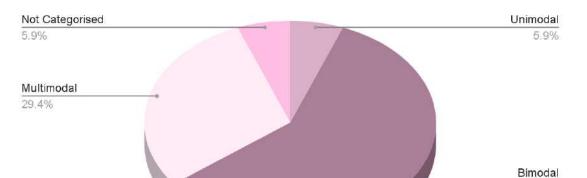


The data showed that the kinaesthetic learning style was the most frequent among the participants, providing a total of 441 answers. Moreover, the auditory learning style got a total of 387 answers. Finally, the visual learning style did not receive the 50% of the answers (340), obtaining a total of 306.

As for the categories taken into account in the present study (i.e., unimodal, bimodal, and multimodal), Figure 31 shows the classification of participants according to the results obtained. Furthermore, if none of the three values receives at least the 50% of the answers from a single participant, then that participant cannot be categorised as any of the three types. As it may be observed in Figure 31, 20 students were bimodal, 10 were multimodal, 2 were unimodal, and 2 could not be classified.

Figure 31

Categories of the Pre-Questionnaire



58.8% = 20 students; 29.4% = 10 students; 5.% = 2 students

58.8%

In conclusion, considering the 34 participants in this study, the kinaesthetic learning style was the most frequent, followed by the auditory and visual modes. Furthermore, regarding the categories, most than a half of the participants were identified as bimodal, followed by multimodal and unimodal. Finally, there were two participants that could not be categorised because they did not obtain a minimum of 50% in any of the perceptual learning modes. In order to analyse possible similarities and differences between the experimental and control groups, the following sections show the results obtained by both groups.

#### 6.3.1. Pre-Questionnaire: Experimental Group

Regarding the Experimental Group, Table 20 shows the number of answers that each participant has chosen for each value, as well as the corresponding category obtained.

Furthermore, Appendix 5 includes the individual responses of all the participants of the experimental group in relation to each of the questions included in the pre-questionnaire.

 Table 20

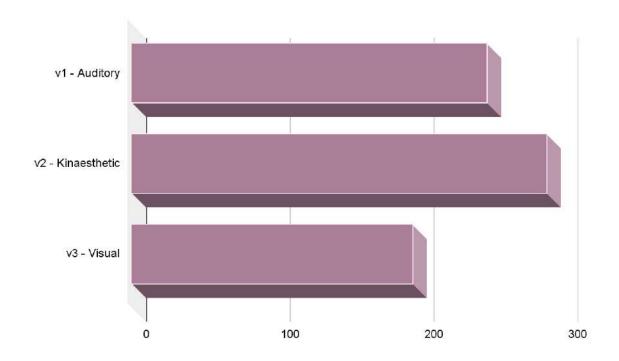
 Values and Category in the Pre-Questionnaire of the Experimental Group

Student	V1 - Auditory	V2 - Kinaesthetic	V3 - Visual	Category
1	12	14	10	Multimodal
2	3	13	8	Unimodal
3	13	13	5	Bimodal
4	14	15	7	Bimodal
5	4	14	10	Bimodal
6	11	15	11	Multimodal
7	8	15	10	Bimodal
8	9	15	12	Bimodal
9	17	14	6	Bimodal
10	17	15	15	Multimodal
11	12	11	12	Multimodal
12	11	18	12	Multimodal
13	15	11	12	Multimodal
14	11	10	5	Bimodal
15	17	14	6	Bimodal
16	13	17	9	Bimodal
17	8	11	10	Bimodal
18	13	12	14	Multimodal
19	15	14	5	Bimodal
20	13	13	7	Bimodal
21	11	14	9	Bimodal

Figure 32 shows the total number of answers given to each value. Considering that there are 21 participants in the experimental group and each value can be chosen a maximum of 20 times, the total number of possible answers for each value is 420.

Figure 32

Values of the Pre-Questionnaire in the Experimental Group

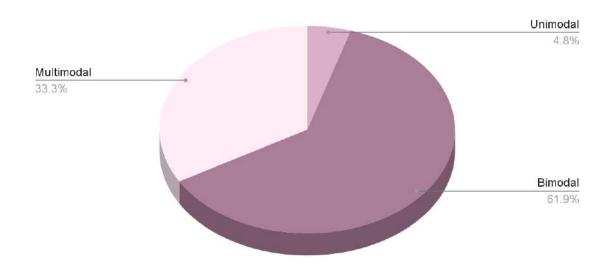


As it can be observed, v1 obtained a total of 247 answers; v2, 288; and v3, 195. Therefore, the kinaesthetic learning style was predominant among the participants of the experimental group, followed by the auditory learning style, and the visual learning style.

Figure 33 shows the number of participants in the Experimental Group categorised as unimodal, bimodal, multimodal, or not categorised. According to the results obtained, 13 students could be classified as bimodal, 7 as multimodal, and 1 as unimodal.

**Figure 33**Categories of the Pre-Questionnaire in the Experimental Group

61.9% = 13 students; 33.3% = 7 students; 4.8% = 1 student



## 6.3.2. Pre-Questionnaire: Control Group

With respect to the control group, Table 21 shows the number of answers that each participant chose for each value as well as the category accordingly assigned. Besides, Appendix 6 contains the individual responses of all the participants of the control group in relation to each of the questions included in the pre-questionnaire.

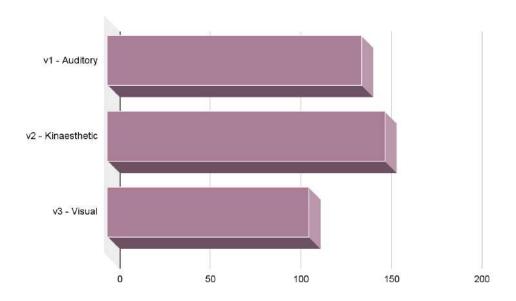
**Table 21**Values and Category in the Pre-Questionnaire of the Control Group

Student	V1 - Auditory	V2 - Kinaesthetic	V3 - Visual	Category
1	13	13	6	Bimodal
2	7	10	5	Unimodal
3	13	14	8	Bimodal
4	12	10	9	Bimodal
5	13	14	4	Bimodal
6	10	10	6	Bimodal
7	5	7	8	Not Categorised
8	10	17	16	Multimodal
9	9	6	7	Not Categorised
10	13	14	7	Bimodal
11	10	13	8	Bimodal
12	13	13	16	Multimodal
13	12	12	11	Multimodal

Regarding the total number of answers given to each of the three values, Figure 34 shows the results obtained. Considering that there are 13 participants in the control group and each variable can be chosen a maximum of 20 times, the total number of possible answers for each variable is 260.

Figure 34

Values of the Pre-Questionnaire in the Control Group



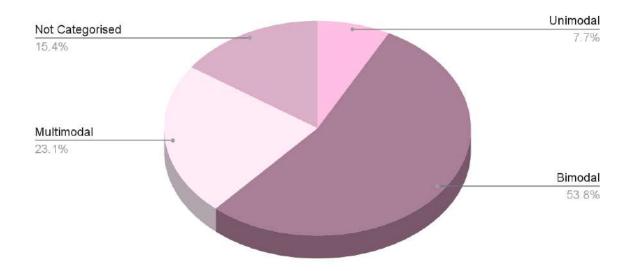
According to these results, V1-auditory obtained a total of 140 answers; V2-kinaesthetic, 153; and V3-visual, 111. Therefore, the kinaesthetic learning style was the predominant one among the participants of the control group, followed by the auditory learning style and the visual learning style.

Moreover, Figure 35 shows the number of participants in the control group categorised as unimodal, bimodal, multimodal, or not categorised. According to the results obtained, 7 students could be classified as bimodal, 3 as multimodal, 1 as unimodal, and 2 could not be categorised (i.e., none of the three values got a 50% of the answers).

Figure 35

Categories of the Pre-Questionnaire in the Control Group





In conclusion, the pre-questionnaire shows some similarities and differences between the experimental and control groups. Regarding the similarities, the kinaesthetic learning style seems to be the most selected preference among participants of both groups, followed by the auditory learning style and the visual mode. In this respect, most of the participants of the experimental and control groups were categorised as bimodal, followed by multimodal and unimodal categories. Regarding the differences between the experimental and control groups, it is worth noting that three students from the control group did not obtain a minimum of 50% in any of the three perceptual learning styles so they could not be categorised.

## 6.4. Task: Role-Play Performance and Self-Assessment Questionnaire

This section shows the results obtained from the self-assessment questionnaire, which took place after the students' participation in the task of this study: the role-play <sup>14</sup>. Through the implementation of the role-play, Social Media could be introduced as a variable in the EFL classroom so as to complement traditional material, reproduce real-life contexts and enhance communicative competence. Furthermore, the implementation of the role-play was a necessary treatment for the contrast between the pre and post questionnaires (see Section 5.4.2.) and, subsequently, for the collection of data about the effectiveness of interactive activities in the promotion of perceptual learning styles in the EFL classroom. With the purpose of getting data about the students' performance in the task, a self-assessment questionnaire was implemented. The completion of this questionnaire allowed the collection of data related to the participants' task perceptions, communication skills, confidence, and motivation. This questionnaire was the same for all participants, with a total of 5 questions, though the experimental group had a sixth question related to Social Media.

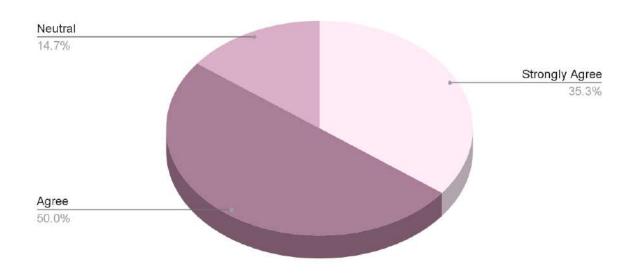
Focusing on the answers provided by the 34 participants in this study, Figure 36 shows the results obtained from the first question (see Section 6.3.3.), which checks the clarity of the information provided in the task (i.e., "The information provided was clear and useful to communicate with my peer").

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<sup>14</sup> Available at:

Figure 36
Self-Assessment of Information





The results show that 17 of the participants agreed with the statement, 12 participants strongly agreed, and 5 had a neutral position towards the assertion. From these results, we can deduce that the instructions provided in the role-play were appropriate for 85.3% of the participants. Moreover, 14.7% of the participants kept a neutral attitude towards the statement. Accordingly, it seems that the information provided was correct for effective performance.

Furthermore, Figure 37 shows the answers to the second question, which refers to communication skills (i.e., "With this activity, I could improve my communication skills"). They reveal that 17 participants agreed with the statement, 11 strongly agreed with it, and 6 were neutral in that regard. These results indicate that none of the participants regard the

activity as useless to improve their communication skills. Nevertheless, 17.6% of the participants could not agree with the statement, so it seems that the activity was not enough to improve their communicative competence.

**Figure 37**Self-Assessment of Communication Skills

50% = 17 students; 32.4% = 11 students; 17.6% = 6 students

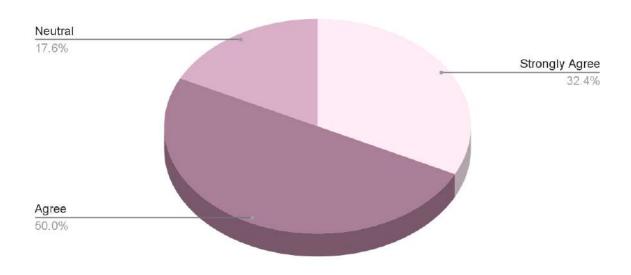


Figure 38 shows the answers related to the speakers' confidence after the task performance (i.e., "Now, I feel more confident to conduct an informal interview").

Figure 38
Self-Assessment of Confidence



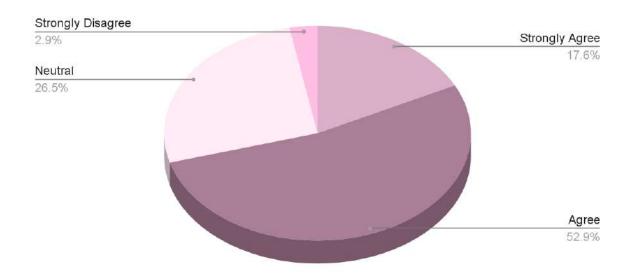


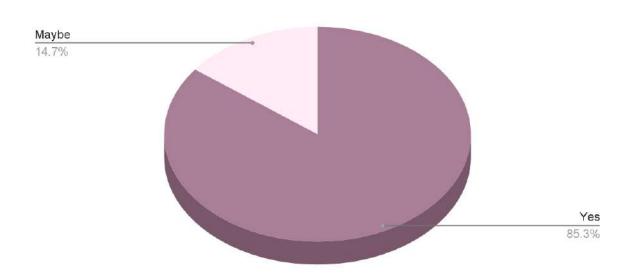
Figure 38 shows that 18 students agreed with the affirmation, 6 strongly agreed, 9 were neutral, and 1 strongly disagreed. Accordingly, most of the participants (70.5%) felt more confident to conduct an informal interview after their performance in the role-play. Furthermore, some (26.5%) kept a neutral position, so they did not agree or disagree with the statement. Only one participant disagreed (see Chapter 7).

Moreover, Figure 39 shows the participants' motivation regarding the task (i.e., "I liked the activity and I would like to participate in a similar one"). As illustrated, 29 students showed a positive attitude towards further implementation of a similar task, whereas 5 students left the

way open to this possible future situation. These results seem to indicate that the implementation of the role-play in the future would be successful among students.

Figure 39
Self-Assessment of Motivation

86.3% = 29 students; 14.7% = 5 students



Finally, Table 22 shows the comments that participants voluntarily wrote about the implementation of the task (i.e., "Would you like to add any comments about the Role-Play?"). Most of these comments manifest that students liked the activity and they mentioned some adjectives like 'original', 'positive', 'fun', 'different', 'perfect', 'interesting', 'nice', and 'confident'. Regarding the suggestions for improvement, one of them was eager to get feedback; another participant suggested that it would have been good to have more time to prepare it; a third student would have liked to have fewer instructions and therefore be freer to imagine possible scenarios. It is worth mentioning that students got

feedback from the instructor in a subsequent session and that the instructions and the time given were planned according to the purpose of the study. However, students' suggestions for improvements will be considered in further similar implementations. The purpose of analysing these comments is to know students' attitudes towards applying the role-play and the introduction of Social Media as an educational tool in the language classroom.

**Table 22**Self-Assessment Comments

Comment 1	"I would like to do more activities like this"		
Comment 2	"yes, I like it and I would like it repeat" [sic]		
Comment 3	"Very nice activity"		
Comment 4	"It's an original activity that can help us improve our skills"		
Comment 5	"Maybe if we get a feedback about how we wrote and if we did many mistakes, etc." [sic]		
Comment 6	"All correct and positive!"		
Comment 7	"Nothing, this is a very good activity"		
Comment 8	"I like it"		
Comment 9	"The activity was quite good and fun"		
Comment 10	"I think it was funny because we did something different and used what we learn in class"		
Comment 11	"I like the role-play"		
Comment 12	"I like this activity"		
Comment 13	"I like it a lot"		
Comment 14	"This activity is perfect to learn more English"		
Comment 15	"Creo q sería mejor no poner tantas preguntas q debemos hacer y dejar un poco más d imaginación a los estudiantes" ("I think it would be better not to include so many instructions and let us imagine more")		
Comment 16	"I really enjoyed it"		

Comment 17	"I would have liked more time to prepare it better"
Comment 18	"The comunication is interesting"
Comment 19	"I founded it interesting because you have to pretend you are another person and you only have a few minutes to prepare it, so you have to improvisate some times!!!" [sic]
Comment 20	"I really enjoyed it. I reckon its right way to learn a launguage. Too bad that the 80% of the classes are only based on grammar and more grammar, because when you move to another country to live you learn the launguage by mean the conversations." [sic]
Comment 21	"In my opinion the Role-Play is a very nice strategy to learn more english, because it combines a real life experience and makes us feel more confident for that situation in the future. And also makes us think more in an answer in english based in our lives and improvising with the knowledge we already have." [sic]

In conclusion, in relation to the 34 participants of this study, 28 improved their communication skills after their performance in the role-play. In addition, 24 felt more confident to take part in future communicative situations and 29 felt motivated to carry out further similar activities. The following sections show the results concerning the experimental and control groups in order to identify the possible similarities and differences.

#### 6.4.1. Task: Experimental Group

This subsection focuses on the role-plays performed by the experimental group <sup>15</sup> and on the results obtained in the self-assessment questionnaire in this group.

Firstly, the following screenshots are examples of students' interpretation of the role-play.

These examples have been included in this subsection because they illustrate the most

https://drive.google.com/drive/folders/1AQLrzf\_enYmY2I0LzqZ-BEJe7-luU0gZ?usp=sharing

<sup>&</sup>lt;sup>15</sup> Available at:

repeated communicative actions performed in the experimental group's role-play. The following elements indicate the extent to which participants use multimodal elements in order to communicate effectively with others:

- Emojis: 77

- Stickers: 31

- GIFs: 23

- Voice recordings: 20

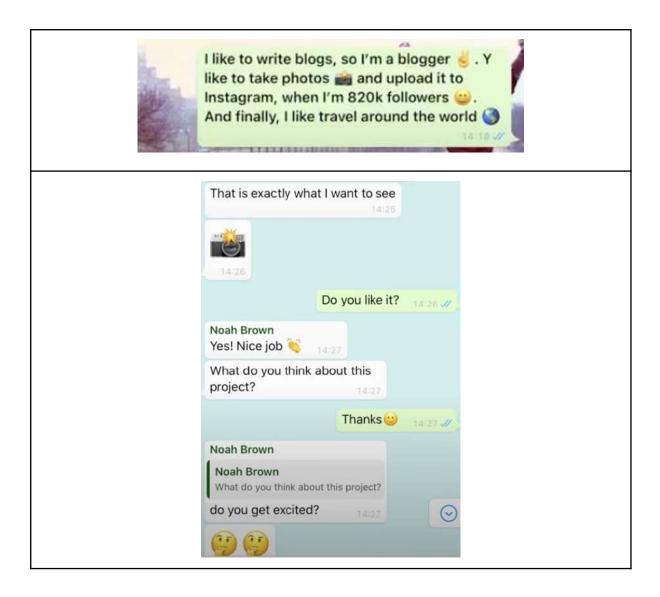
- Links: 11

- Pictures: 3

Figure 40 shows how participants use emojis in order to support the meaning of words (e.g., 'blogger', 'photos', or 'world'), to show feelings (e.g., a happy face or hand gestures) or to substitute words (e.g., a camera for 'photos').

Figure 40

Emojis in the Role-Play of the Experimental Group



Stickers, bigger than emojis, were also used to show the participants' feelings. For instance, picture 41 shows a sticker of Donald Duck clapping its hands, which may be interpreted as happiness or personal satisfaction.

Figure 41
Stickers in the Role-Play of the Experimental Group



Regarding GIFs, they were also used to convey different emotions. In this case, as GIFs are images that move, they are usually used for fun and humour. For example, Figure 42 exemplifies the use of a GIF in order to say 'hello'.

**Figure 42**GIFs in the Role-Play of the Experimental Group



Apart from images, participants also used voice recordings to communicate (see Figure 43).

Figure 43

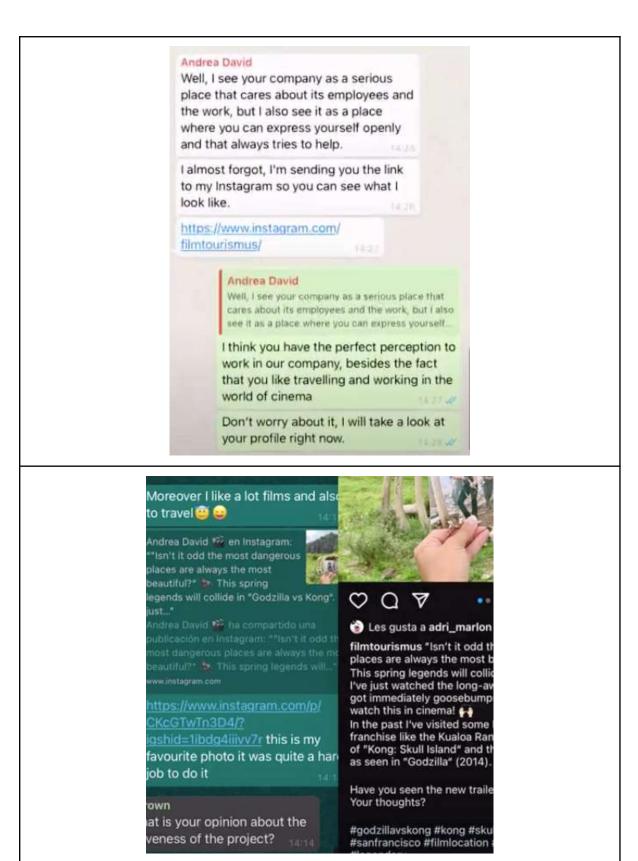
Voice Recordings in the Role-Play of the Experimental Group



Figure 44 shows how participants shared an *Instagram* link so they could navigate through the specified *Instagram* account.

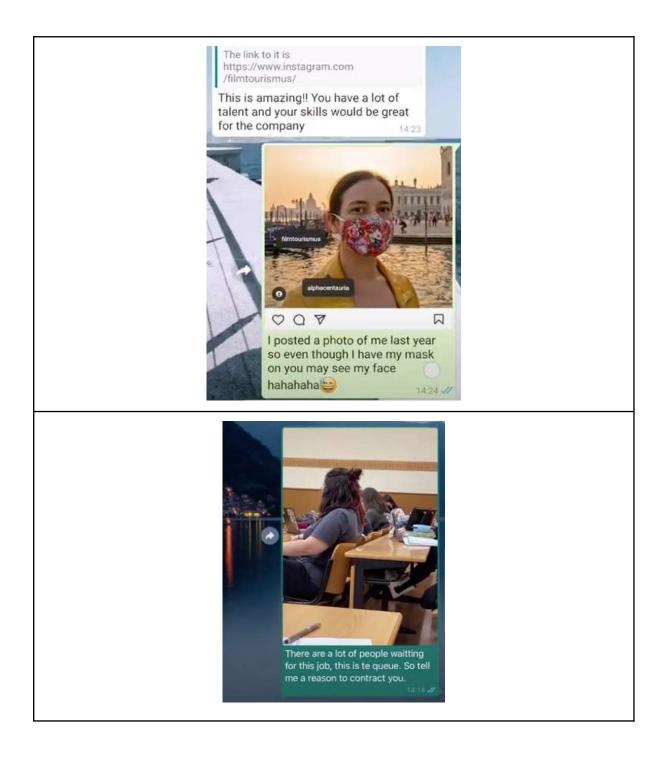
Figure 44

Links in the Role-Play of the Experimental Group



Finally, Figure 45 shows the use of photos with a message included. Whereas the first photo is a screenshot of a photo already posted on *Instagram*, the second picture was taken while the conversation took place.

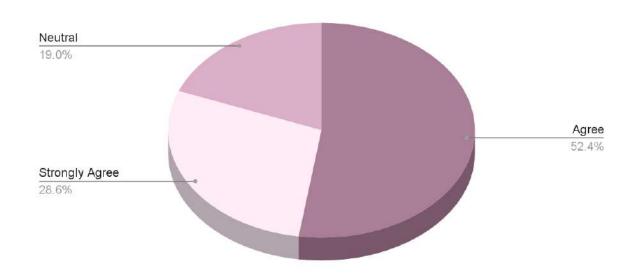
**Figure 45** *Pictures in the Role Play of the Experimental Group* 



Secondly, concerning the self-assessment questionnaire, Figure 46 shows the results for the first question: "The information provided was clear and useful to communicate with my peer". It illustrates that 11 students agreed with the assertion, 6 strongly agreed, and 4 were neutral. These results show that the instructions provided in the role-play for the experimental group were useful to carry out the activity with Social Media applications. The fact that 4 participants did not agree or disagree with the statement is discussed in Chapter 7.

Figure 46
Self-Assessment of Information in the Experimental Group



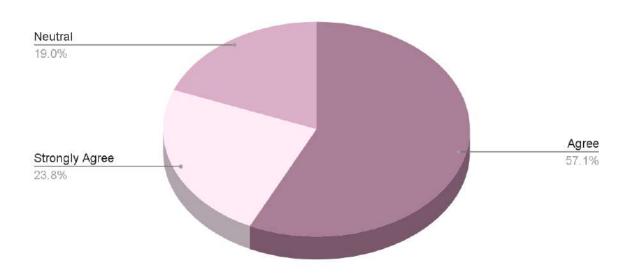


As for the second question, "With this activity, I could improve my communication skills", 12 participants agreed, 5 strongly agreed, and 4 remained neutral, as illustrated in Figure 47. As it can be observed, most of the participants (80.9%) considered they improved their

communication abilities with the role-play. Furthermore, the fact that some participants (19%) kept a neutral attitude towards the statement provided is discussed in Chapter 7.

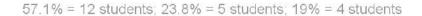
Figure 47
Self-Assessment of Communication Skills in the Experimental Group

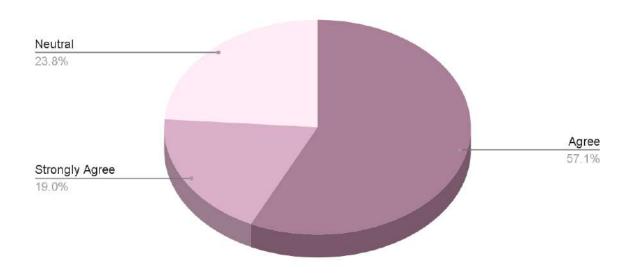
57.1% = 12 students; 23.8% = 5 students; 19% = 4 students



Besides, Figure 48 contains the answers to the third question: "Now, I feel more confident to conduct an informal interview".

Figure 48
Self-Assessment of Confidence in the Experimental Group





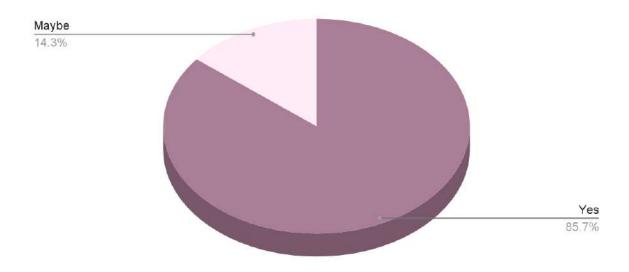
The results reveal that 12 students agreed in feeling confident after their performance in the role-play, 4 strongly agreed, and 5 were neutral. These results reveal that most of the participants (76.1%) considered they improved their confidence when using technological tools in the implementation of the role-play. However, the fact that the role-play was applied with digital devices could be the cause of the 23.8% of participants who could not decide whether they felt more confident or not after their performance in the activity. These results are further discussed in Chapter 7.

As for participants' motivation, Figure 49 contains the results of the fourth question: "I liked the activity and I would like to take part in a similar one". Accordingly, 18 students felt motivated to participate in other similar tasks, whereas 3 were indecisive. On this account,

these results suggest that the use of digital devices in the EFL classroom may motivate students to learn a foreign language in a new way. Furthermore, some participants (14.3%) were undecided, leaving the door open to do more similar activities and then decide.

Figure 49
Self-Assessment of Motivation in the Experimental Group

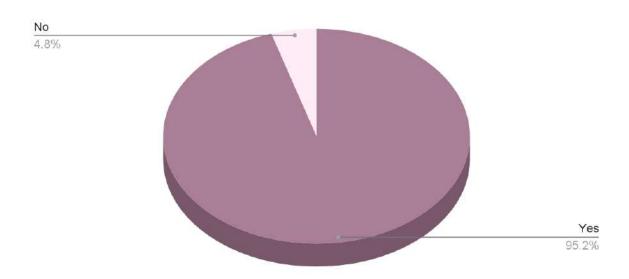




In addition to the five questions included in the self-assessment questionnaire of both groups (i.e., experimental and control), the self-assessment questionnaire included a sixth question for the experimental group, which was related to the use of Social Media in the task: "The use of Social Media and mobile phone devices in the task has been positive". Figure 50 shows the results for this question: 20 students assessed the introduction of Social Media as positive, whereas 1 considered it as negative.

Figure 50
Self-Assessment of Social Media in the Experimental Group

95.2% = 20 students; 4.8% = 1 student



Finally, Table 23 includes the comments that participants of the experimental group willingly wrote regarding the implementation of the task (i.e., "Would you like to add any comments about the role-play?"). The analysis of the students' comments can provide some evidence about their attitudes regarding the use of Social Media in the performance of the role-play. To sum up, one participant considered that the task was different from what they usually do in class, whereas the others reported that it was original, nice and positive, which was good to improve their skills. On the other hand, one participant was worried about the mistakes s/he would have made.

 Table 23

 Self-Assessment Comments in the Experimental Group

Comment 1	"I would like to do more activities like this"
Comment 2	"yes, I like it and I would like it repeat" [sic]
Comment 3	"Very nice activity"
Comment 4	"It's an original activity that can help us improve our skills"
Comment 5	"Maybe if we get a feedback about how we wrote and if we did many mistakes, etc." [sic]
Comment 6	"All correct and positive!"
Comment 7	"Nothing, this is a very good activity"
Comment 8	"I like it"
Comment 9	"The activity was quite good and fun"
Comment 10	"I think it was funny because we did something different and used what we learn in class"
Comment 11	"I like the role-play"
Comment 12	"I like this activity"
Comment 13	"I like it a lot"

# 6.4.2. Task: Control Group

The present subsection focuses on the role-plays interpreted by the control group and on the data collected from the self-assessment questionnaire of the aforementioned group.

Firstly, role-plays performed by the control group <sup>16</sup> show some common features:

https://drive.google.com/drive/folders/1Zks3H3O2HBGSg6JS-V0AM6rcs38Ic\_Kh?usp=sharing

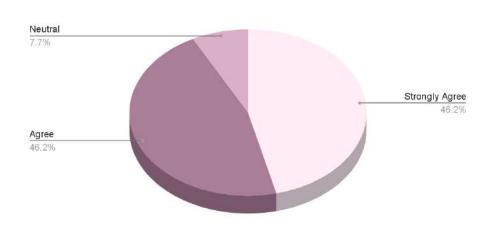
<sup>&</sup>lt;sup>16</sup> Available at:

- Students can communicate effectively with some grammar, vocabulary, or pronunciation mistakes that do not impede comprehension.
- Students understand the characteristics of the task and perform it effectively regarding the given instructions.
- The interviewer (i.e., Noah Brown) usually focuses on questions and the level of interaction is lower than the interviewee (i.e., Andrea David).
- Some students look nervous and show a nervous laugh.
- Some students make long pauses, use fillers or say "I don't know" when they do not know what to answer.

Secondly, as for the self-assessment questionnaire completed by the control group, Figure 51 shows the results for the first question, which is related to the clarity of the information provided in the task (i.e., "The information provided was clear and useful to communicate with my peer").

46.2% = 6 students; 7.7% = 1 student

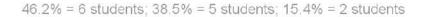
Figure 51
Self-Assessment of Information in the Control Group



Results revealed that 6 students strongly agreed, 6 agreed, and 1 was neutral regarding the first question. Therefore, most of the participants understood the instructions provided to carry out the role-play.

Figure 52 includes the results of the second question: "With this activity, I could improve my communication skills". According to the data collected, 6 students strongly agreed, 5 students agreed, and 2 were neutral.

Figure 52
Self-Assessment of Communication Skills in the Control Group



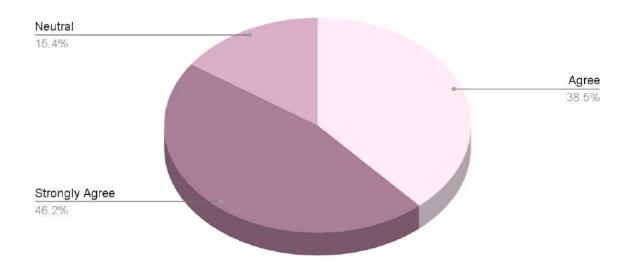
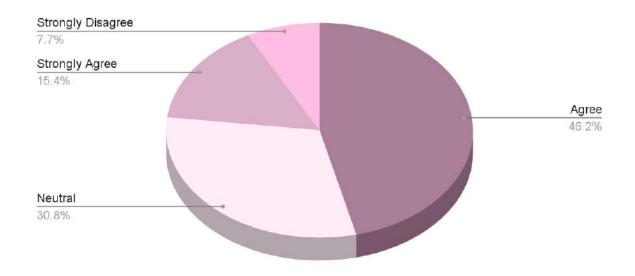


Figure 53 illustrates the answers given by the control group in the third question, which is related to their confidence after performing the role-play: "Now, I feel more confident to conduct an informal interview". Results obtained in this regard may indicate if the application

of the role-play following a traditional approach (i.e., implemented with a voice recorder, in the same way as in the last decades) reinforces their confidence when communicating with others in a foreign language.

Figure 53
Self-Assessment of Confidence in the Control Group

46.2% = 6 students; 30.8% = 4 students; 15.4% = 2 students; 7.7% = 1 student

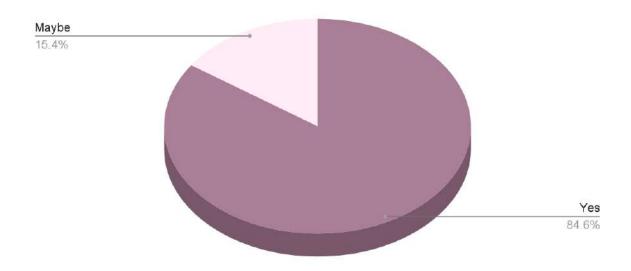


The results illustrate that 6 students agreed, 4 were indecisive, 2 strongly agreed, and 1 strongly disagreed in feeling confident after finishing the role-play. From these results we can suggest that the implementation of interactive activities (e.g., role-play) with traditional devices (e.g., voice recorder) may improve students' confidence. Nevertheless, the fact that 30.8% of students kept a neutral position and one participant strongly disagreed with the statement is discussed in Chapter 7.

Moreover, Figure 54 shows the answers related to the fourth question, related to participants' motivation: "I liked the activity and I would like to take part in a similar one". In this regard, 11 students agreed or strongly agreed and 2 were neutral. Therefore, these results seem to suggest that interactive activities implemented with traditional devices motivate most students to use the language in communicative situations. Chapter 7 analyses these results in detail.

Figure 54
Self-Assessment of Motivation in the Control Group





Finally, Table 24 contains the comments written by some participants of the control group voluntarily. All the comments were about the role-play (i.e., "Would you like to add any comments about the role-play?"). These comments are relevant to know students' opinions of their performances and to identify participants' attitudes towards the implementation of the

role-play. In general, some participants found the role-play interesting and enjoyable. One participant emphasised the importance of the connection to real-life situations to construct knowledge. Another participant commented that normal lessons are only focused on grammar, so this activity was useful to take part in future conversations. Two students offered suggestions about time management and the number of steps asked to be followed.

 Table 24

 Self-Assessment Comments in the Control Group

Comment 1	"This activity is perfect to learn more English"
Comment 2	"Creo q sería mejor no poner tantas preguntas q debemos hacer y dejar un poco más d imaginación a los estudiantes" ("I think it would be better not to include so many instructions and let us imagine more")
Comment 3	"I really enjoyed it"
Comment 4	"I would have liked more time to prepare it better"
Comment 5	"The comunication is interesting"
Comment 6	"I founded it interesting because you have to pretend you are another person and you only have a few minutes to prepare it, so you have to improvisate some times!!!" [sic]
Comment 7	"I really enjoyed it. I reckon its right way to learn a launguage. Too bad that the 80% of the classes are only based on grammar and more grammar, because when you move to another country to live you learn the launguage by mean the conversations." [sic]
Comment 8	"In my opinion the Role-Play is a very nice strategy to learn more english, because it combines a real life experience and makes us feel more confident for that situation in the future. And also makes us think more in an answer in english based in our lives and improvising with the knowledge we already have." [sic]

In conclusion, regarding the similarities found in the comparison of the experimental and control groups, both groups seem to find the activity useful to develop their communicative abilities. In relation to confidence and motivation, most of them agreed that they improved these attitudes after completing the role-play. As for the differences between the two groups, the control group has more participants that strongly agreed with the improvement of their communicative skills through the performance in the role-play. Moreover, the experimental group shows a higher level of confidence after performing the role-play in comparison with the control group. Finally, with regards to motivation, there were no significant differences between the groups.

## 6.5. Post-Questionnaire: Perceptual Learning Styles

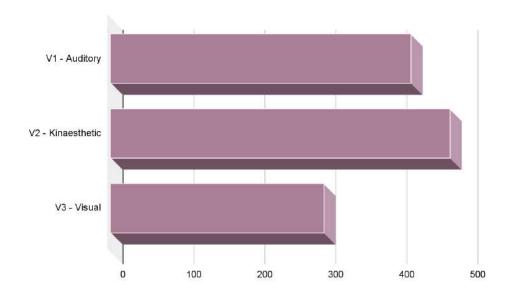
The present section focuses on the data collected from the implementation of the post-questionnaire, which was completed two weeks after the self-assessment questionnaire. The purpose of the post-questionnaire was to analyse the possible changes in the participants' perceptual learning styles after the realisation of the role-play. Appendices 9 and 10 show the individual answers of the participants of the experimental and control groups in each question.

The post-questionnaire was the same questionnaire implemented as a pre-questionnaire for the 34 participants. Therefore, the results obtained from the pre-questionnaire and post-questionnaire could be compared to see the evolution caused by the implementation of the role-play. Furthermore, the questionnaire contained 19 questions with 20 possible answers for each one of the three values analysed (see Section 5.4.2.): auditory, kinaesthetic, and visual. Hence, in view of the purpose of this questionnaire, not all the existing learning variables (see Figure 2) were considered in this study. Instead, only perceptual learning styles were taken into account.

As for the categorisation of participants regarding their perceptual inclinations, the same three categories of the pre-questionnaire were analysed: unimodal, bimodal, and multimodal. In other words, if a student got the 50% of the answers in one variable, s/he could be classified as unimodal; if the 50% were obtained in two values, the category achieved would be bimodal; in the case of getting the 50% of the answers in the three values, the result would be multimodal.

According to the results obtained from the 34 participants in the Post-Questionnaire, Figure 55 illustrates the total number of answers given to each of the three values. According to the number of participants (34) and the number of answers that can be attributed to each value in one questionnaire (20), the maximum number of answers that a value can get is 680.

Figure 55
Values of the Post-Questionnaire

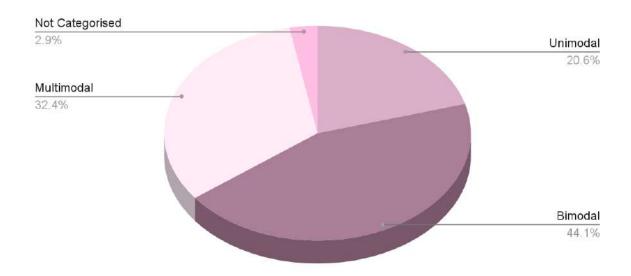


The results revealed that the most chosen learning style among the participants was kinaesthetic, with 477 answers, followed by the auditory learning style with 422 answers. However, the visual learning style did not get the 50% response rate (340), as it got 300 answers.

Regarding the categorisation of participants according to the results of the Post-Questionnaire, Figure 56 shows the results obtained. As observed, 7 students could be classified as unimodal, 15 were bimodal, 11 multimodal, and 1 could not be categorised because he did not give the 50% of the answers to any of the three perceptual modes.

**Figure 56**Categories of the Post-Questionnaire Results





In conclusion, taking into account the 34 participants in this study, the post-questionnaire showed results that seem to indicate a predominance of the kinaesthetic learning style,

followed by the auditory and visual modes. Besides, after the implementation of the role-play, it seems that multiple learning styles (i.e., bimodal and multimodal) are more predominant than the unimodal learning style. It is worth mentioning that 1 student could not be categorised because none of the three values (i.e., auditory, kinaesthetic, and visual) obtained, at least, 50% of the answers. With the purpose of identifying possible similarities and differences between the experimental and control groups, the following sections describe the results obtained from the post-questionnaire in each group.

## 6.5.1. Post-Questionnaire: Experimental Group

Regarding the experimental group, Table 25 shows the number of answers given by each participant to each of the three values as well as the category attributed to each participant. Furthermore, Appendix 9 includes the individual responses of all the participants of the experimental group concerning each of the questions included in the Post-Questionnaire.

**Table 25**Values and Category in the Post-Questionnaire of the Experimental Group

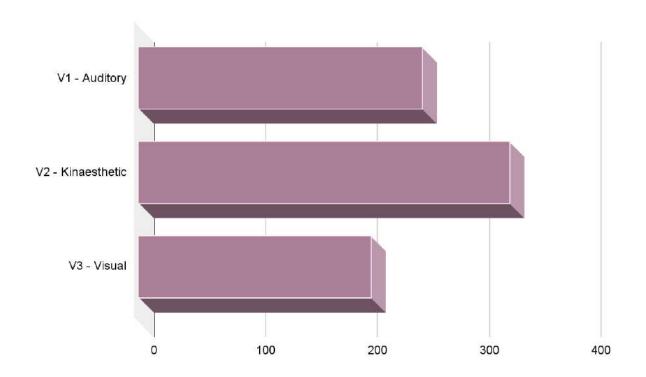
Student	V1	V2	V3	Category
1	12	19	12	Multimodal
2	6	15	9	Unimodal
3	8	19	7	Unimodal
4	16	20	9	Bimodal
5	7	15	14	Bimodal
6	7	15	14	Bimodal
7	8	11	16	Bimodal
8	18	15	6	Bimodal

9	9	18	12	Bimodal
10	15	18	10	Multimodal
11	17	12	16	Multimodal
12	16	16	10	Multimodal
13	11	19	13	Multimodal
14	8	11	3	Unimodal
15	6	13	6	Unimodal
16	20	20	7	Bimodal
17	13	11	8	Bimodal
18	16	15	14	Multimodal
19	13	17	3	Bimodal
20	12	15	6	Bimodal
21	15	17	12	Multimodal

In relation to the total number of answers given to each value, Figure 57 shows the results obtained. The total number of answers that can be given to each variable is 420, considering the 21 participants in the group and the 20 answers that can be attributed to each value in a single questionnaire.

Figure 57

Values of the Post-Questionnaire in the Experimental Group

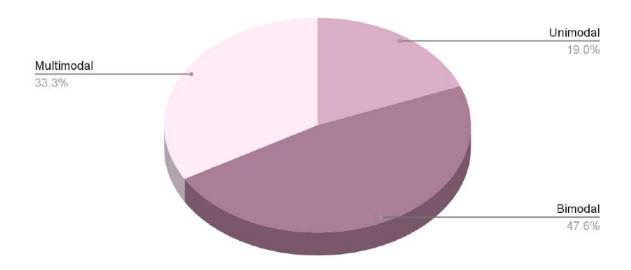


In total, V1-auditory received 253 answers; a total of 331 answers could be attributed to V2-kinaesthetic; V3-visual got 207 answers. Accordingly, the kinaesthetic learning style was the most preferred perceptual learning styles among participants of the experimental group, followed by the auditory and visual modes.

Furthermore, as shown in Figure 58, 10 students of the experimental group could be classified as bimodal; 7 as multimodal; and 4 as unimodal.

**Figure 58**Categories of the Post-Questionnaire in the Experimental Group





# 6.5.2. Post-Questionnaire: Control Group

As for the control group, Table 26 shows the number of answers each participant gave to each value and the category obtained. Furthermore, Appendix 12 includes the individual responses of all the participants of the control group concerning each of the questions included in the post-questionnaire.

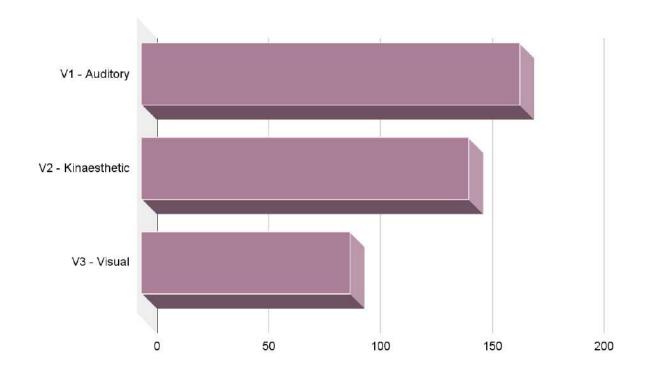
**Table 26**Values and Category in the Post-Questionnaire of the Control Group

Student	V1	V2	V3	Category
1	16	10	4	Bimodal
2	14	7	4	Unimodal
3	14	14	12	Multimodal
4	15	14	3	Bimodal
5	19	14	4	Bimodal
6	15	4	8	Unimodal
7	6	7	6	Not Categorised
8	7	10	10	Bimodal
9	7	10	4	Unimodal
10	15	16	10	Multimodal
11	11	13	11	Multimodal
12	14	14	12	Multimodal
13	16	13	5	Bimodal

About the total number of answers given to each of the three values, Figure 59 shows the results obtained. Taking into account that the control group is formed by 13 participants and each participant can choose each variable a maximum of 20 times, the total number of possible answers that can be attributed to each value is 260.

Figure 59

Values of the Post-Questionnaire in the Control Group



According to the results illustrated in Figure 59, a total of 169 answers were given to V1; V2 obtained 146 answers; and V3, 93. Therefore, the most preferred learning style was auditory, followed by the kinaesthetic learning style and, finally, the visual one.

As for the categories attributed to the participants of the control group, Figure 60 shows that 5 students were classified as bimodal, 4 as multimodal, 3 as unimodal, and 1 could not be categorised because none of the values received the 50% of the answers. These results obtained seem to indicate that the auditory learning style was promoted after the implementation of the role-play with a traditional approach (e.g., using a voice recorder). Furthermore, 9 participants showed preferences towards multiple modes of learning (i.e., multimodal and bimodal), whereas 4 students were unimodal or could not be categorised

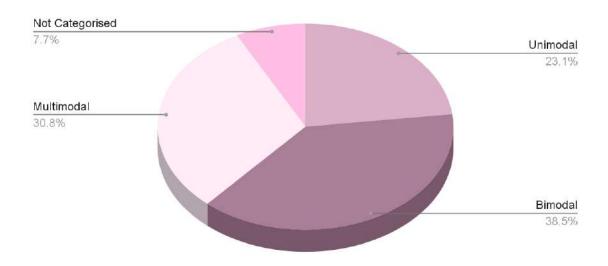
because they did not obtain a minimum of 50% in any of the values proposed (i.e., auditory, kinaesthetic, and visual).

As for the categories attributed to the participants of the control group, Figure 60 shows that 5 students were classified as bimodal, 4 as multimodal, 3 as unimodal, and 1 could not be categorised because none of the values (i.e., auditory, kinaesthetic, and visual) received the 50% of the answers. These results seem to indicate that the independent variable (i.e., the use of Social Media) affects the enhancement of the auditory learning style, which seems to be promoted with the implementation of the role-play without Social Media. Furthermore, as it may be also observed in Figure 60, there are more students with multiple modes of learning (i.e., bimodal and multimodal) than unimodal students.

Figure 60

Categories of the Post-Questionnaire in the Control Group

38.5% = 5 students; 30.8% = 4 students; 23.1% = 3 students; 7.7% = 1 student



In conclusion, the post-questionnaire was implemented after the performance of the role-play. The results obtained from the post-questionnaire show some similarities and differences between the experimental and control groups. Regarding the similarities, the visual learning style seems to be the least preferred among participants of both groups. In addition, the bimodal category is the most selected in the experimental and control groups, followed by multimodal and unimodal learning modes. As for the differences, the kinaesthetic learning style is the principal in the experimental group but the auditory learning style is the most prevailing in the control group. Another difference is that all participants in the experimental group could be categorised but it was not the case of 1 participant in the control group, who could not be categorised because none of the learning modes (i.e., auditory, kinaesthetic, and visual) obtained, at least, 50% of the answers.

# 6.6. Conclusion

The results obtained from the preliminary questionnaire were considered for the design of the role-play. Firstly, 29.4% of the participants obtained a B1 English proficiency level and another 29.4% a B2. Secondly, 100% of the participants admitted knowing *Instagram* and *Whatsapp*. For this reason, the treatment of this experiment (i.e., role-play) was designed for students with B1.2. level and the two applications used by the experimental group to perform it were *Instagram* and *Whatsapp*. In addition, results obtained in the pre-questionnaire showed that the kinaesthetic learning style was the most preferred with a total of 441 answers and the bimodal category the most frequent with 20 students. They also revealed that the multimodal category was present in the language classroom with 10 students. These results were useful to compare the data collected from the post-questionnaire, which was implemented after the role-play. Results of the post-questionnaire indicated that the

kinaesthetic learning style was the most frequent mode among participants with 477 answers, whereas 15 students were categorised as bimodal. Furthermore, the percentage of the multimodal mode slightly increased up to 32.4%. Finally, data collected from the self-assessment questionnaire showed positive results about students' confidence and motivation. More specifically, most of the participants agreed or strongly agreed with the utility of the role-play to enhance their confidence when conducting an interview and with further implementation of similar activities. Finally, the analysis of these results and the comparison between both groups are explained in detail in the next chapter (see Chapter 7), which focuses on providing an answer to the three RQs proposed in this dissertation.

# 7. ANALYSIS AND DISCUSSION

#### 7.1. Introduction

The present study was designed to determine the evolution of students' perceptual learning styles towards multimodality and the effectiveness of introducing Social Media applications in the EFL classroom to improve students' Communicative Competence. An initial objective of this project was to analyse the Communicative Language Teaching Approach from a digital perspective. Therefore, the first research question focuses on determining to what extent Social Media support students' communicative competence in the language learning context. Moreover, the second objective was to identify university students' perceptual learning styles. So, the second research question revolves around a possible relationship between the use of multimodal online applications and the emergence of multiple perceptual learning modes. Finally, the third objective of this dissertation was to determine students' attitudes towards the use of Social Media applications in future implementation in the EFL learning environment. Thus, the third research question attempts to identify university students' attitudes towards future implementation of Social Media in the EFL classroom. The three objectives and research questions are summarised in Table 27.

**Table 27** *Objectives and Research Questions of the Present Study* 

Objectives	Research Questions		
To analyse the effectiveness of using Social Media applications (i.e., <i>WhatsApp</i> and <i>Instagram</i> ) to develop students' communication skills.	RQ1) To what extent do Social Media applications support the enhancement of students' communicative competence in EFL?		
To identify the number of students with multiple perceptual learning styles among the new generation and the impact of social media on their perceptual learning preferences.	RQ2) Does the use of multimodal online applications in the classroom exert an influence on the emergence of multiple perceptual learning modes among Generation Z?		
To determine the degree of motivation and confidence of the students regarding the implementation of authentic materials in the EFL classroom.	EFL classroom improve students'		

In particular, RQ1 can be answered according to the performance of the role-play and the results of the question "With this activity, I could improve my communication skills", included in the self-assessment questionnaire of both groups. Furthermore, the answer to RQ2 examines the results obtained from the learning styles' questionnaire (i.e., pre-questionnaire and post-questionnaire) of the experimental group and identifies the similarities and differences between this group and the control group regarding the possible consequences derived from the use of digital devices in the treatment of this study (i.e., role-play). Finally, in order to answer RQ3, we analyse and discuss the results obtained from the questions included in the self-assessment questionnaire that regard motivation and confidence as two variables that could be promoted with the implementation of the treatment. To conclude, in the light of the results shown in chapter 6, the following sections provide an answer to the

three research questions proposed in this study considering the main topics of the present dissertation, namely communicative competence, perceptual learning styles, digital literacy, motivation, and confidence.

7.2. Research Question 1: To what extent do Social Media applications support the enhancement of students' communicative competence in EFL?

The emergence of Social Media in everyday life can be considered as revolutionary because it has changed the way people communicate. In particular, young people use online applications to interact with others at the same time that face new challenges, such as being communicatively competent in a multimodal world. For this reason, the present doctoral dissertation examines the relevance of students' digital literacies to improve their communicative competence. In addition, this doctoral dissertation aims to obtain results that show the benefits of digital instruction. For instance, according to different authors (Oblinger and Oblinger, 2005; European Communities, 2007; Healey et al., 2011; Collier et al., 2013), digital instruction offers a wide range of strategies that students can use according to their learning and communicative preferences and also in real contexts because the tools and applications are readily available. Another objective of this work is to introduce real-life situations in the language classroom in order to promote learning autonomy and lifelong learning, which seem to be key aspects to ensure effective communication inside and outside the classroom (UNESCO, 2004; Girón-García, 2013).

In order to answer the RQ1, this section takes into account the answers provided in some questions of the self-assessment questionnaire (see Appendix 10), as well as the performance of both groups in the role-play. For instance, the use of multimodal elements by the

experimental group or the hesitations by the control group are considered. Therefore, the following paragraphs show the analysis of the data collected from the role-play and the subsequent self-assessment questionnaire. The data analysed seem to reinforce the hypothesis that interactive activities bringing real communicative contexts in the classroom improve students' communicative competence.

In the following paragraphs, we discuss the results obtained from two questions included in the self-assessment questionnaire: (1) "With this activity, I could improve my communication skills" and (2) "The use of Social Media and mobile phone devices in the task has been positive" (included in the self-assessment questionnaire of the experimental group). The obtention of these results was useful in order to analyse students' communicative abilities in face-to-face conversations and in digital environments. Results showed that a total of 28 students considered that they could improve their communication skills after interpreting the role-play, in addition, 20 students of the experimental group regarded the use of Instagram and WhatsApp as positive pedagogical applications. From these results, we could understand that participants viewed the role-play activity and Social Media applications as useful in order to foster their communicative abilities. In addition, we also analysed participants' communicative strategies employed during the interaction in the role-play, such as the multimodal elements (e.g., emojis or GIFs) used by the experimental group or the nervous laugh by the control group. Therefore, we could conclude both groups could foster their communication abilities in different contexts: digital and face-to-face.

Firstly, in the light of the results obtained in the second question of the self-assessment questionnaire (see Figure 37), "With this activity, I could improve my communication skills",

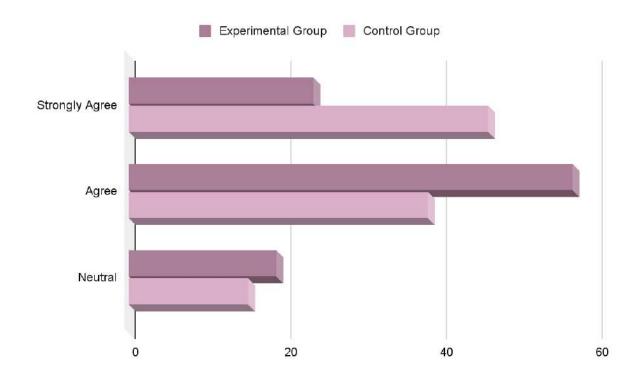
we may suggest that the use of Social Media to carry out the role-play was successful. For instance, none of the participants answered 'no'. However, 17.6% of the students had a neutral position, which means that participants could not agree or disagree with the statement. We consider that this neutral position is due to the fact that students only performed one role-play and it could have been necessary to do more role-play activities. Furthermore, the following comments (see Section 6.4.) show the participants' satisfaction with the activity in communicative terms so they lead us to think that the role-play is an effective task in the promotion of communicative competence among EFL students:

- "This activity is perfect to learn more English".
- "The comunication is interesting".
- "I reckon its right way to learn a language". [sic]
- "It's an original activity that can help us improve our skills".

Furthermore, we found that all the students agreed that the task was useful but it is noteworthy the fact that there are no significant differences between the experimental and control groups (see Figure 61). Although the task was not exactly the same, the fact that the results obtained from the two groups were similar means that the design of the task, which considered their bachelors' degree, was relevant for all the participants.

Figure 61

Analysis of the Communicative Competence in the Experimental and Control Groups



According to the results illustrated in Figure 61, 17 participants in the experimental group and 11 participants in the control group considered that the implementation of the role-play was helpful to foster their communication skills. Therefore, the control group got a slightly higher percentage of participants who strongly agreed or agreed, which may be attributed to the high degree of familiarity of the students with the traditional materials employed: a printed book and a voice recorder. In other words, the results obtained by the control group in terms of confidence (see Section 7.4.) may be slightly better in comparison to the experimental group because the task was presented in a more traditional way, so students were more familiar with the procedure. The fact that nobody disagreed with the statement is relevant. We think that the design of the role-play is key to facilitating the task for all the students. Particularly, the role-play implemented in this experiment was exclusively designed

for it. Firstly, the role-play considers the bachelor's degree of the participants enrolled in (i.e., Tourism) because the context of the role-play revolves around a project, *Photofilm the World*, which does not exist in the real world and was invented for the role-play. Secondly, the context in which the conversation would take place is the students' university, Universitat Jaume I. Thirdly, two real organisations (i.e., The United Nations World Tourism Organisation and the World Film Society) were included in the role-play in order to support the credibility of the situation described.

Secondly, we found that the incorporation of Social Media and mobile phones into the performance of the role-play was considered positive by the participants. This statement is supported by the answers provided in the last question of the self-assessment questionnaire by the experimental group: "The use of Social Media and mobile phone devices in the task has been positive". Only one participant, out of 21, expressed his/her disagreement with the statement. We think that the experience was not positive for this student because his/her mobile phone did not allow for screen recording. In particular, at the end of the implementation of the Role-Play, one student showed her difficulties recording the screen.

Furthermore, according to the quantitative analysis of emojis, stickers, GIFs, voice recordings, links and pictures by the experimental group (see Section 6.4.1.), it may also be affirmed that Social Media encourage students to express themselves as they normally would do in their native language. For instance, all of the participants of this study affirmed managing *Whatsapp* (see Figure 28) in their daily life, so multimodal elements in the analysed conversations were frequently employed. For example, we found 77 emojis, 31 stickers and 23 GIFs. So, it can be stated that the use of digital devices such as smartphones

can be regarded as a bridge between social and learning atmospheres. For this reason, the use of Social Media applications for pedagogical purposes at university could serve as an approach between students/participants' interactions in real life and in the educational context, which would favour their communicative linguistic competence.

In conclusion, in our experiment it has been shown that the implementation of authentic materials is essential for the promotion of communicative activities in the EFL context. Particularly, the design of the role-play has favoured students' interaction and provides them with some input that has been useful in order to be communicatively efficient outside the learning environment. In relation to the experimental group, we can also suggest that the employment of digital technologies and applications in the language classroom favours students' active participation. The use of mobile phones together with the integration of Social Media applications have engaged participants in interactive and collaborative activities. In relation to the learners' communicative competence, the application of WhatsApp or Instagram in the language learning process could be regarded as a solution to improve the negative results regarding the English proficiency level in Spain (EF English Proficiency Index, 2020). On the other hand, the control group used traditional materials such as a piece of paper and a voice recorder. For this reason, the communicative process could take place effectively but it was physiologically limited as they could only speak and listen to each other. In other words, they could not share videos, use emojis or GIFs, as the experimental group could do. Therefore, we can conclude that the implementation of interactive activities is positive regardless of the materials employed in class. For instance, students' communicative skills are promoted and students can adopt an active role when constructing meaning through interaction. Nevertheless, we propose the integration of Social

Media applications in the interactive activities because these applications such as *Instagram* can connect students to the real world and consequently show them how to use language in real life situations with real examples.

7.3. Research Question 2: Does the use of multimodal online applications in the

classroom exert an influence on the emergence of multiple perceptual learning modes

among Generation Z?

Students construct their knowledge in agreement with some variables, such as learning styles.

Furthermore, learning styles can be classified according to different dimensions, such as

sensory stimulation (Dunn & Griggs, 1995). From this perspective, the students'

physiological learning modes (i.e., auditory, kinaesthetic, or visual) determine the selection of

specific learning strategies (see Table 10). We have shown that visual students prefer to read

the information, auditory students like listening to oral explanations and kinaesthetic students

enjoy working with real examples. Moreover, the frequent use of particular strategies may

indicate the perceptual learning modality of the student (i.e., unimodal, bimodal, or

multimodal). Therefore, this dissertation aims to analyse the influence of multimodal

environments on students' perceptual modalities and identify to what extent multimodality

exerts some influence on students' multiple perceptions. With the consideration of students'

physiological inclinations, this doctoral dissertation aims to provide proposals for improving

the learning process in the language classroom so that it can be applicable to new situations.

The Perceptual Learning Styles Questionnaire 17 designed for the analysis of students'

physiological learning modalities has provided some background information to confirm the

<sup>17</sup> Available at: https://forms.gle/iTXgwHVNdfyd4hbeA

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noteworthy predominance of students with multiple learning styles (i.e., bimodal and multimodal students). In addition, the existence of unimodal students is very low in comparison to bimodal or multimodal students. Particularly, the results provided in the pre-questionnaire indicated that 2 students were unimodal, 2 could not be categorised, and 30 had multiple modes (bimodal and multimodal students); whereas the results obtained from the post-questionnaire revealed that there were 7 unimodal students, 1 that could not be categorised, and 26 that were bimodal or multimodal. From these results we can affirm that most of the students have multiple learning styles, which may possibly be a consequence derived from their exposure to digital devices and multimodal applications.

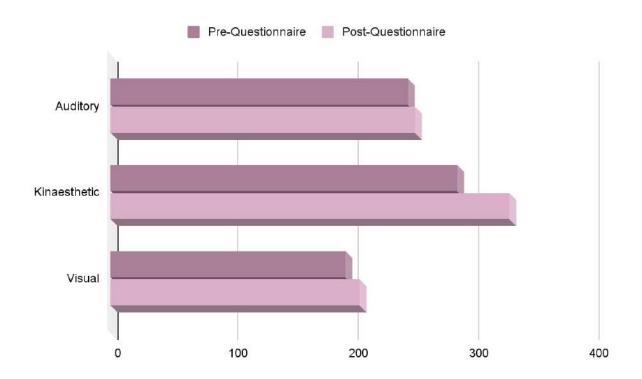
Considering the results obtained by the experimental group, we can also state that the incorporation of *WhatsApp* and *Instagram* in the treatment of our study (e.g., role-play) promoted students' perceptual learning styles because of the increase in the number of answers selected in the post-questionnaire, after the implementation of the role-play with Social Media applications. For example, the pre-questionnaire obtained a total of 730 answers whereas there were a total of 791 answers in the post-questionnaire, each one related to a different value (i.e., auditory, kinaesthetic, and visual). Nevertheless, although the three values showed an increase in the number of responses, the multiple modalities that could be assigned to each participant (i.e., bimodal or multimodal) slightly decreased due to the rise of the kinaesthetic learning style. For instance, out of the 21 participants in the experimental group, the kinaesthetic learning style was the mostly preferred value by 10 participants in the pre-questionnaire (see Table 20) and by 14 participants in the post-questionnaire (see Table 25). Therefore, the predilection towards the kinaesthetic learning style by the majority of students seemed to cause the increase in the number of unimodal students (i.e., kinaesthetic

learners). The fact that kinaesthetic students were predominant in the experimental group seems to support the information shown in Table 10, which describes kinaesthetic learners as students who prefer to practise instead of just learning the theory, take notice of real examples, and use all the senses.

In relation to the values analysed in this study (i.e., auditory, kinaesthetic, and visual), Figure 62 shows in detail the results obtained in the pre-questionnaire and post-questionnaire by the experimental group according to the answers given to each of the three values.

Figure 62

Analysis of the Values in the Experimental Group



The results illustrated in Figure 62 show that the auditory learning style got 247 answers in the pre-questionnaire and 253 answers in the post-questionnaire; the kinaesthetic learning

style was selected 288 times in the pre-questionnaire and 331 in the post-questionnaire; and the visual learning style obtained 195 answers in the pre-questionnaire and 207 in the post-questionnaire. Therefore, we may conclude that (1) the kinaesthetic learning style was the value that obtained most of the answers before and after the implementation of the role-play and (2) multimodal applications support the three physiological modes that students may consider when applying learning strategies, specially the kinaesthetic learning style. Accordingly, Social Media can be regarded as a pedagogical tool that may be useful for all the students since it supports the stronger learning styles and reinforces the weaker ones. The fact that one student enjoys learning in different ways implies that the teacher can encourage students to use of a wide range of learning strategies with ease, a fact that is defended by the Style-Matching Hypothesis (Pashler et al., 2009), which supports the reciprocity between the instructional method with students' learning styles to benefit effective learning. In other words, multimodal applications allow students with multiple learning styles (i.e., bimodal and multimodal students) to use a wide range of learning strategies according to their multiple perceptual modes.

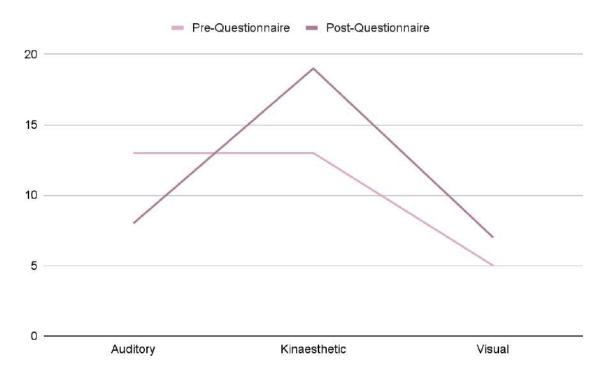
Regarding students' perceptual modalities in the experimental group, the percentage of students with multiple learning styles (i.e., bimodal and multimodal) decreased from 20 participants to 17. This fall in the number of students with multiple learning styles may be a consequence of the increase in the number of students with kinaesthetic modes. As for the number of students with unimodal learning styles, it increased from 1 student to 4. Moreover, three out of the four unimodal students in the experimental group (i.e., Student 3, Student 14, and Student 15) obtained the unimodal category after the implementation of the role-play due to the prevalence of the kinaesthetic value over the other two and the slight decrease of the

auditory mode. The following three figures (see Figure 63, Figure 64, and Figure 65) illustrate the comparison of the results obtained by Student 3, Student 14, and Student 15.

Firstly, Figure 63 illustrates the comparison of the results obtained by Student 3 in the experimental group. As it can be seen, this student was bimodal before the treatment and became unimodal after carrying out the role-play. Particularly, the number of answers given to the kinaesthetic value was clearly higher in the post-questionnaire and the visual learning style slightly increased. However, the auditory mode obtained fewer answers than in the pre-questionnaire.

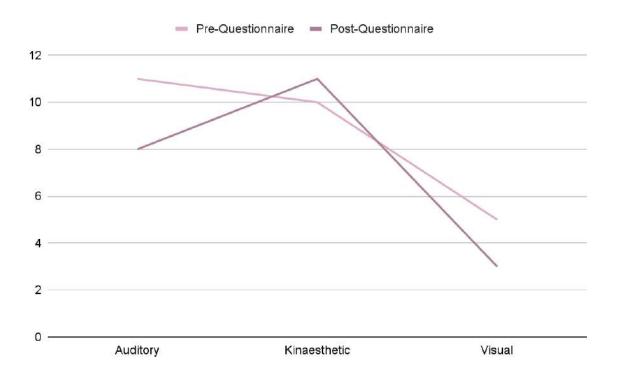
Figure 63

Student 3 of the Experimental Group



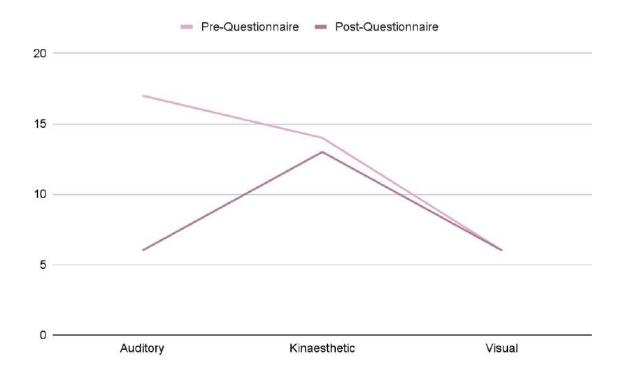
Secondly, Figure 64 shows the analysis of Student 14 regarding his/her perceptual learning styles before and after the implementation of the role-play. In particular, it shows a slight increase in the kinaesthetic learning style. Before the implementation of the role-play, this student was bimodal (i.e., auditory and kinaesthetic) but the decrease of both the auditory and visual modes made this student become unimodal.

Figure 64
Student 14 of the Experimental Group



Thirdly, Figure 65 exemplifies the results obtained by Student 15, who also became unimodal after the treatment. Namely, in the pre-questionnaire, this student gave most of his/her answers to the auditory learning style. However, after the implementation of the role-play, the predilection for the auditory value noticeably decreased.

Figure 65
Student 15 of the Experimental Group

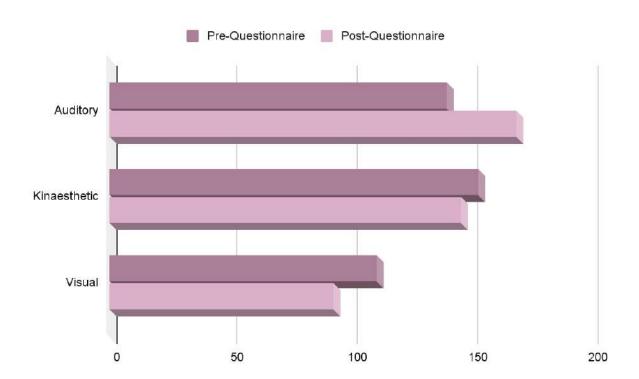


In conclusion, the three learning styles (i.e., auditory, kinaesthetic, and visual) were fostered in the experimental group. In contrast, the number of unimodal students slightly increased due to the significant rise of the kinaesthetic value (see Figure 63, Figure 64 and Figure 65), which is characterised by the consideration of real and pragmatic examples in the classroom. However, despite the slight increase in the number of unimodal students, the amount of bimodal or multimodal students (17) still was considerably higher than the number of unimodal students (4). From these results, we may conclude that the integration of Social Media in interactive activities fosters the three Perceptual Learning Styles described by Dunn and Dunn (1993, 1999), specially the kinaesthetic learning style, which may indicate that students like to see the practicality of the theory.

As opposed to the experimental group, the results of the control group show an increase in the auditory learning style and a decrease in both the kinaesthetic and visual options. Figure 66 shows the results obtained by the control group in that regard. As it may be observed, there is a considerable increase in the number of answers attributed to the auditory learning style, whereas the kinaesthetic and visual modes were not fostered.

Figure 66

Analysis of the Values in the Control Group



The results obtained by the control group show that traditional methodologies do not foster all the perceptual learning modes, as innovative methodologies do (see Figure 62). However, it seems that traditional methodologies are beneficial for auditory learners, who prefer to explain and understand explanations by talking or using voice recorders (see Table 10). As a matter of fact, the tools used by students of the control group in order to perform the

Role-Play were a piece of paper and a voice recorder. On this detail, teachers who would like to focus their lessons on listening skills could employ traditional methodologies. However, the obtained results suggest that traditional methodologies do not consider the multimodal context that surrounds students in contrast to methodologies that engage students in interaction through digital applications such as Social Media, which can be regarded as a valuable window into real experiences. Therefore, we may conclude that traditional methodologies seem not to promote all the perceptual modes but only the auditory learning style in communicative activities. In this respect, considering the high number of students with multiple modes that seem to be present in the classroom, traditional methodologies could be considered as one of the possible causes of the poor proficiency English level that Spanish learners have (EF English Proficiency Index, 2020), which is ranged in the 33rd position in the global ranking of countries and regions.

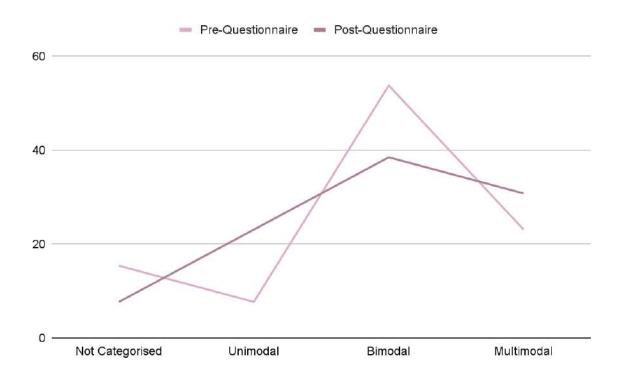
Secondly, the percentage of multimodal learners in the control group slightly increased 7.7%, from 23.1% to 30.8%, because there were 3 multimodal students according to the results obtained from the pre-questionnaire and 4 students after the performance of the role-play; and the number of bimodal students decreased from 7 to 5. Previous results show that the number of students with multiple learning styles slightly decreased from 10 to 9. From these results, we may suggest that traditional approaches do not support multiple learning modes and seem to be distant to the multimodal world that surrounds students.

Thirdly, the number of unimodal students increased from 1 to 3 and there was still 1 student that could not be categorised because none of the three values obtained the 50% of the total number of answers in the questionnaire. These results suggest that traditional approaches

would be useful to work on face-to-face communication, where the auditory learning style can be fostered. However, the Internet entails online communication and the COVID-19 world pandemic has required online learning so traditional learning methodologies would not be useful to improve students' communicative competence in those new scenarios. As Figure 67 shows, after the implementation of the role-play through a traditional approach (e.g., with a voice recorder), there were some students that could not be assigned to any modality and the number of unimodal students clearly increased. Furthermore, the values related to multiple learning styles did not obtain positive results because the number of bimodal students significantly decreased and the number of multimodal students slightly improved.

Figure 67

Analysis of the Modalities in the Control Group



To sum up, according to the analysis of the results of the present experimental study, we may conclude that the habitual use of digital devices and the exposure to multimodal interactive applications may have shaped a new generation of students (i.e., Generation Z) with an inclination towards multiple physiological modes. In particular, Social Media applications seem to foster the combination and mutual assistance of all perceptual learning styles and therefore contribute to the emergence of bimodal and multimodal students. In this regard, the educational system could be facing new challenges and learning outcomes, such as making students able to communicate in multimodal contexts. The present study claims the affordability of the implementation of Social Media applications (e.g., WhatsApp and Instagram) in the language classroom at the university. By doing so, teachers can rely on pedagogical tools that support methodologies encouraging students to use a wide range of learning strategies.

7.4. Research Question 3: What are university students' attitudes towards a future implementation of Social Media in the EFL classroom?

Although students are used to employing Social Media in their routines, the presence of such applications in the EFL classroom is difficult to find. It is true that digital devices can be dangerous in the hands of some students and consequently most secondary schools ban their use inside the classroom (Beneito and Vicente-Chirivella, 2021). Nevertheless, we consider that educational centres are responsible for considering the real context of the new generation of students and teach how to use digital devices correctly instead of ignoring reality. If schools taught digital strategies in this regard, apart from contributing to the fight against cyberbullying, the digital competence of the students would improve. This dissertation defends that teachers need to be digitally literate and be aware of the pedagogical use that

Social Media may have in the language classroom, which can be used without invading students' privacy and can also increase the consciousness of social problems such as cyberbullying.

Concerning the current situation in the EFL classroom, it is common to find students' books that include pictures of emails or websites in their activities. Nevertheless, although technological tools are considered by language books, for legal reasons, among others, students hardly ever use any digital device to carry out the activities before they enter into the university. Consequently, the communicative process that students experience in the classroom before their experience at the university is very different from the interaction that occurs in real life. As Beare (2019) affirmed:

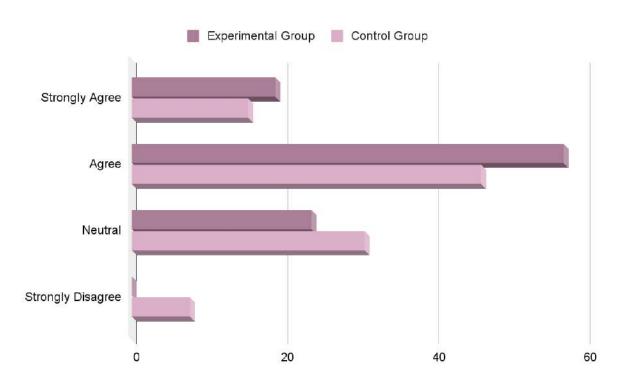
Smartphones are here to stay. For English teachers, that means we need to either ban iPhones, Androids, Blackberries and whatever next flavor arrives – or – we have to learn how to incorporate the use of smartphones into our routine. I've discovered that just ignoring their use in class doesn't help. After all, I am an English teacher trying to encourage my students to communicate in the English language.

In order to provide an answer to the third research question of this study, the present section analyses the answers given to two statements included in the self-assessment questionnaire, which are related to confidence and motivation: (1) "Now, I feel more confident to conduct an informal interview" and (2) "I liked the activity and I would like to take part in a similar one". Furthermore, comments written by participants focusing on confidence, motivation or any other relevant aspect in this regard, are also analysed.

Firstly, it seems that the implementation of authentic materials (e.g., role-play) in the EFL classroom seems to improve students' confidence. Results obtained by both the experimental and control groups are shown in Figure 68. According to what it is illustrated, most of the participants agree or strongly agree with the statement "Now, I feel more confident to conduct an informal interview". In particular, the option 'agree' has obtained better results than 'strongly agree' and there are some participants that keep a neutral position. We consider that the fact that students only performed one role-play could be the reason why some participants kept a neutral position. Therefore, the completion of more interactive activities that consider authenticity in the design could improve these results. Finally, it is necessary to mention that the participant that selected 'strongly disagree' realised his/her mistake in the fulfilment of the questionnaire because s/he misunderstood the question.

Figure 68

Analysis of the Students' Confidence



Based on the results illustrated in Figure 68, we can conclude that a high degree of authenticity of materials seems to offer positive results in relation to the students' confidence, regardless of the type of devices that are used (e.g., voice recorder or mobile phone). In order to support this statement, some comments written by the participants of the experimental and control group are discussed in the following paragraphs.

Regarding the experimental group, we found three comments that deal with confidence (see Table 23). For example, "Maybe if we get a feedback about how we wrote and if we did many mistakes, etc" [sic]. With this affirmation, the student shows a traditional and passive role within the language learning process, which is focused on writing mistakes and not on the communicative and active role. Nevertheless, other students criticised this traditional view and highlighted the originality of the activity, which could improve their skills and consequently their confidence: "It's an original activity that can help us improve our skills" and "I think it was funny because we did something different and used what we learn in class".

In relation to the comments of the control group (see Table 24), one student did not feel confident enough to write the comment in English: "Creo q sería mejor no poner tantas preguntas q debemos hacer y dejar un poco más d imaginación a los estudiantes" ("I think it would be better not to include so many instructions and let us imagine more"). In this comment, the student criticised the number of instructions given because s/he felt that the dialogue was too directed by the proposal. On this subject, we designed the role-play with some specific instructions in view of the objectives we wanted to achieve. Furthermore, another student complained about the time s/he had to prepare the activity, which is another

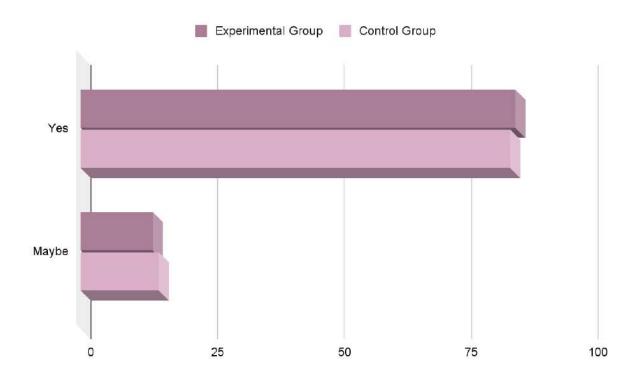
aspect that may make students gain confidence: "I would have liked more time to prepare it better". Finally, another student emphasised that activities that consider real life improve their confidence: "In my opinion the role-play is a very nice strategy to learn more english, because it combines a real life experience and makes us feel more confident for that situation in the future".

To sum up, we think that the Role-Play proposed in this doctoral dissertation improves students' confidence because it can help them forget about grammatical errors and focus more on communicative achievement, make them able to communicate effectively in a foreign language in multimodal ways and feel more comfortable preparing for real life situations.

As for students' motivation, results obtained from the question "I liked the activity and I would like to take part in a similar one", included in the self-assessment questionnaire, are analysed. As it can be observed in Figure 69, none of the participants from the two groups rejected the proposal of participating in another role-play but all of them accepted the offer with the exception of 5 students, who were not sure regarding a future implementation of a similar activity.

Figure 69

Analysis of Students' Motivation



We may conclude that language students feel motivated to perform interactive activities in the EFL classroom. Furthermore, we did not find any difference regarding the use of traditional materials (e.g., voice recorder) or digital tools (e.g., mobile phones). As it has been described in Section 5.4.3., the role-play was exclusively designed for this study. It took into account the real context that surrounded the participants (e.g., the university, their future prospects or some real tourism organisations) so it may have contributed to improve the students' motivation. In this respect, we think that students feel motivated to participate in activities that engage them in real-life communicative situations because they can construct linguistic competence appropriate for the multimodal and globalised world. With the aim of substantiating this affirmation, students' comments written in the self-assessment questionnaire are analysed.

Firstly, focusing on the introduction of Social Media, we found more positive comments in the experimental group than in the control group, which may be an indication of the role of Social Media to improve students' motivation. Some comments that emphasise the importance of using innovative applications are: "I would like to do more activities like this", "yes, I like it and I would like it repeat" [sic] and "I think it was funny because we did something different and used what we learn in class". As we can appreciate from these comments, students felt motivated because they enjoyed it and they recognised they had never done something similar before. Students also mentioned the importance of putting theory into practice.

Secondly, one student of the control group also criticised the traditional teaching methods and affirmed that they are not useful to achieve the language learning objectives: "I really enjoyed it. I reckon its right way to learn a launguage. Too bad that the 80% of the classes are only based on grammar and more grammar, because when you move to another country to live you learn the launguage by mean the conversations." [sic]

In conclusion, the consideration of real-life situations in the EFL classroom seems to improve students' confidence and motivation. In this respect, we could affirm that, according to the results obtained, authenticity improves students' attitudes such as confidence and motivation to learn. Furthermore, in this experimental study, we have regarded Social Media applications as a bridge between the language classroom and real life. The experience has been positive considering the pedagogical affordability that *WhatsApp* and *Instagram* have offered. According to Godwin-Jones (2018), the use of mobile phones in the language classroom

enriches the learning experience with authentic language resources through apps and online sites and enables collaborative linguistic activities that also enhance 21st-century language skills. For this reason, Social Media applications can be considered as a possible solution to the problems that may be derived from traditional approaches, such as frustration in the language learning process or the passive role of the students and their consequent poor communicative competence.

# 7.5. Conclusion

The aim of the present chapter has been to give a response to the three Research Questions proposed in this study, on the basis of the answers provided by the participants. Firstly, it has examined the communicative skills shown by the students in the completion of a task in a digital setting. Secondly, it has analysed the new learning profiles that have emerged in the EFL classroom as a consequence of the increasing use of Social Media applications among Generation Z. Thirdly, it has discussed the attitudes that students have shown towards the introduction of Social Media in the EFL classroom.

The first Research Question addresses the communicative competence of students in a digital learning environment. It was relevant to find that none of the participants in the Experimental Group found the activity useless to foster communicative skills. Furthermore, there were no relevant differences between the innovative and traditional implementations regarding the materials employed. The fact that a few students kept a neutral attitude towards the statement "With this activity, I could improve my communication skills" can be explained by the performance of a single task (e.g., role-play). Therefore, we think that with the implementation of subsequent similar tasks, students could adopt a position regarding the

statement presented. Nevertheless, collected data also showed the positive experience of students with Social Media in the performance of the Role-Play. Moreover, students employed most of the multimodal elements offered by the application *WhatsApp* and performed the task with ease. For this reason, we indicate that the authenticity of materials is key to improve communication skills and that the use of Social Media is positive for EFL students because online applications can bring real-life communicative situations into the classroom.

The second Research Question points out to what extent multimodal online applications promote students' perceptual learning styles. We found that traditional approaches only seem to foster the auditory mode whereas Social Media applications promoted all the students' physiological learning styles (i.e., auditory, kinaesthetic, and visual). Furthermore, the results concerning perceptual modalities (i.e., unimodal, bimodal, and multimodal) revealed that the new generation of learners has multiple sensory modalities: bimodal or multimodal. In other words, a single subject may manifest learning traits belonging to auditory, kinaesthetic, and visual characteristics. The literature on the topic (see Section 3.3.) states that one student may manifest learning styles attributed to each of the three Perceptual Learning Styles at the same time (Villanueva and Navarro, 1997; VARK, 2021). Therefore, the promotion of students' physiological modes by the exposure to multimodal contexts has created a new learning environment that teachers need to face by using the appropriate methodologies, so students can employ a wide variety of learning strategies. For this reason, the present study proposes Social Media applications as helpful materials employed in the EFL classroom at the university.

The third research question deals with the attitudes shown by the students in relation to the use of Social Media as a pedagogical tool. The fact that 100% of the participants knew the applications chosen to perform the role-play has facilitated the development of the task. Therefore, the introduction of *WhatsApp* and *Instagram* in the EFL classroom was very positive for the students, who showed great levels of confidence and motivation regarding communication. Moreover, during the performance of the role-play, we observed that students felt comfortable with the management of mobile phone devices and showed great interest in the activity. These observations are supported by the comments of the students of the experimental group, who expressed their contentment with the innovative experience.

To conclude, we leave an open door for further investigations. The present analysis advances some general conclusions drawn in the next and last chapter, which also considers future lines of research in view of the results obtained and the limitations of this research.

# 8. GENERAL CONCLUSIONS AND SUGGESTED FURTHER RESEARCH

The present doctoral dissertation focuses on the examination of the possible correlation between multimodal online applications and multiple perceptual learning modes (i.e., bimodality and multimodality). Moreover, it also supports the use of authentic materials to consider real-life situations and construct knowledge in the field of language education. For this reason, the study is contextualised on the basis of Social Constructivism (Vygotsky, 1978) and experiential learning (Kolb, 1984). The three research questions presented in this work are focused on the use of Social Media and the possible influence exerted on communicative competence, multiple perceptual learning categories, and confidence and motivation. Finally, a role-play (see Appendices 7 and 8) was designed in order to obtain results and, therefore, provide an answer to the three research questions and draw some conclusions.

Along these lines, we stress the importance of tailoring instructional methods to learning styles, bearing in mind the pedagogical affordances that Social Media applications can provide. As Villanueva and Navarro (1997) and Girón-García (2013) pointed out, learning styles are not fixed schemes that predetermine students' selection of learning strategies. Therefore, the present dissertation defines learning styles as internal characteristics that determine the choice of learning strategies according to the objectives and the context of the activity presented. In particular, we focused on perceptual learning styles (i.e., auditory, kinaesthetic, and visual), which refer to the physiological modes that students manifest in learning contexts. Apart from that, we also support the Style-Matching Hypothesis, which highlights the importance of matching teaching methodologies to learning styles. For this

reason, we consider that the identification of learning styles is paramount to design activities that allow learners to choose the most appropriate strategies and find the best way to learn according to their personal needs. In addition, learning styles can be shaped by internal and external factors, such as the exposure to multimodal applications. Taking into account the involvement of Generation Z students with digital applications, we found that the participants of this study, who were university students, manifested learning tendencies towards multiple modes. Therefore, the results obtained in this experiment seem to confirm that external factors, such as multimodal environments, shape learning styles. Accordingly, EFL teachers should consider multimodal learning in the design of activities and provide students with a wide range of strategies. Otherwise, students will not not be able to communicate effectively outside the classroom.

In this dissertation, we have observed that the emergence of Social Media applications among Generation Z is a key issue in the development of students' perceptual learning preferences. Students who belong to this generation are surrounded by digital applications (e.g., WhatsApp, Instagram, or Youtube), which are frequently used to interact with others through the exchange of messages, voice recordings, photos or videos. However, as Luzón, Ruiz-Madrid and Villanueva (2010) affirmed, students lack in academic digital literacy. In other words, Generation Z knows well how to use Social Media applications to communicate but they do not have the same management when the purpose is pedagogical. For this reason, it is important to train teachers, who become facilitators of knowledge (Benson, 2013) in order to promote academic digital literacy among students. Accordingly, the present work has focused on the need to make students aware of how to use digital applications for pedagogical purposes. We believe that by designing and applying activities that integrate

authentic materials in the classroom, students can improve their digital literacy skills and develop their learning autonomy. Along with that, students need to be confident and motivated to build skills and construct knowledge in a life-long learning context as they learn a foreign language. The study included in this dissertation has obtained some results that seem to indicate the positive effects of using Social Media applications in class on students' communicative confidence and motivation. For instance, some students showed their motivation with comments such as "I think it was funny because we did something different and used what we learn in class". On this matter, the introduction of Social Media in the EFL classroom allows teachers to adopt multiple roles (e.g., controller, organiser, assessor, prompter, participant, resource, tutor, or observer) (Harmer, 2007), which facilitate the adoption of a learner-centred approach, enables students to adopt an active role in the classroom, and provide students with the necessary skills to experiment with the foreign language inside and outside the educational context.

In our research, we have verified that Social Media applications are frequently employed by students for social purposes. For this reason, we found students very comfortable using them in the classroom. For instance, they already knew how to create a *WhatsApp* group, how to share links of other Social Networks or how to record the screen of the mobile phone. Nevertheless, during the implementation of the Role-Play, they recognised that they had never used *WhatsApp* or *Instagram* to perform an activity in the learning setting. At first, when the activity was presented, participants were very surprised with the introduction of Social Networks in the classroom and they felt very motivated to communicate with mobile phone devices. For example, some students took pictures of the surroundings to support their messages whereas others sent voice recorded messages, which was very surprising for me as

it used to be very hard to make them speak in English during the academic course because they used to be shy or afraid of making mistakes. Accordingly, we believe that considering the real context of the students in the design of activities is key to making them feel confident and motivated during the communicative process.

According to our research, we conclude that the outbreak of multimodal communication through Social Media applications may have the following implications:

- There are new ways of constructing language knowledge that are very different from reading decontextualised texts or writing a letter to a friend on a piece of paper.
   Therefore, traditional approaches are not the most effective in the promotion of communicative competence.
- Social Media applications can be regarded as an open window to the real world, which offers millions of opportunities to experience learning in real-like environments.
- The promotion of the Communicative Approach in a globalised world cannot be understood without the use of digital devices. Nowadays, ICTs have evolved into active tools that enhance creativity, collaboration and interaction.
- The design of authentic materials enables learners to use authentic language meaningfully and purposefully (Girón-García & Boghiu-Balaur, 2021). We consider that students need to see the utility of using language in different contexts in order to comprehend the benefits derived from the language learning process.
- Students need to take an active role in the language learning process in order to engage in learning activities and practise language skills appropriately. Then, we

- agree that the construction of language competence requires the exchange of knowledge.
- Teachers need to be regarded as facilitators of knowledge transfer (Benson, 2013).

  According to the different situations and challenges they may face in the classroom, the use of multimodal online applications can be beneficial to adopt different roles and promote a more diverse teaching methodology.
- Bearing in mind the current pandemic situation, learning autonomy (Holec, 1981;
   Little, 1991) becomes essential in order to face new challenges such as online learning scenarios.
- Language learning is a never ending process so students need to have the appropriate skills to guarantee lifelong learning. Digital resources are good allies to continue the learning process outside the classroom.
- With the use of Social Media applications, users can write messages, listen to voice recordings, watch videos and photos or exchange multimodal elements such as emojis. Therefore, perceptual learning styles are empowered with the use of Social Media applications.
- Generation Z presents multiple perceptual learning modes that need to be matched by appropriate teaching methodologies. Effective learning, therefore, demands multimodal resources.
- Multiple learning predilections require the employment of a wide range of strategies, which can be offered by digital applications. In other words, digital applications can provide students with strategies that are appropriate to different learning styles.

- Learners who belong to Generation Z show different brain structures. For instance, they demand instant communication and rely on computers. Therefore, the language educational field needs to contemplate learners' needs and future prospects.
- Globalisation entails responsibility in the use of digital technologies. Digital Instruction facilitates the improvement of digital literacy skills so that learners may be aware of the appropriate use of online resources such as Social Networks not only inside the classroom but also outside.
- The management of multimodal applications comprises the handling of multiple tasks at the same time. For this reason, students can be regarded as multiliterate since they create meaning through multimodal resources.
- The affordability of using Social Media applications at the University is a great opportunity for the educational system to improve the achievement of learning outcomes in the EFL setting.

We can draw some conclusions concerning the relationship between Social Media and perceptual learning styles in the EFL classroom:

- Social Media are suitable communication networks to support students' communicative competence in the language learning context.
- Multimodal online applications empower perceptual learning styles (i.e., auditory, kinaesthetic, and visual). Consequently, multiple perceptual learning modes (i.e., bimodal and multimodal) have a considerable presence among the new generation of learners.
- Generation Z shows positive attitudes towards the implementation of Social Media in the EFL classroom since they show high levels of confidence and motivation.

Taking into consideration the presence of multiple perceptual categories among the learners, it could be understood that multimodal materials should be included in the design of future activities. Particularly, future designs should be focused on (1) social constructivism of knowledge, (2) the enhancement of communication skills, (3) the promotion of learning autonomy and lifelong learning, (4) digital literacies for pedagogical purposes, (5) the improvement of confidence and motivation, (6) the connection between the classroom and real-life contexts, and (7) the strengthening of perceptual learning styles.

The present experiment has endeavoured to analyse the possible effects of Social Media applications or other multimodal contexts on (1) students' communicative skills, (2) perceptual learning styles and categories, and (3) attitudes such as confidence and motivation. Nevertheless, the study has been subject to some limitations.

Firstly, the COVID-19 pandemic set up some restrictions in the development of the academic year. Quarantines caused the decrease in the number of students that attended face-to-face lessons. For instance, students who were positive or whose family members were positive, and students who had been in direct contact with positive cases, had to stay at home for some days. Moreover, social distancing caused difficulties to work in groups inside the classroom because students could not sit together.

Secondly, we are aware that the number of participants has been a limitation in our study. Groups with more students enrolled were not available when the implementation of the experiment took place. Furthermore, bearing in mind the context derived from the COVID-19

pandemic and the advantage that the professor of the students was also the researcher of this study, it was concluded that the best option was to apply the study with the 34 participants that finally took part in the experiment. Nevertheless, more results could have been obtained with the participation of more students.

Thirdly, the learning styles' questionnaire used to carry out the research is a product of previous research carried out by Villanueva and Navarro (1997), Girón-García (2013), and VARK (2021). However, we are convinced that it would have been more precise to implement a questionnaire designed for the identification of perceptual learning styles, including the multimodal learning style. It is true that VARK (2021) analyses some of these values: Visual, Aural (i.e., auditory), Read-write (i.e., auditory), and Kinaesthetic. However, according to the results obtained in this study, we suggest that the following two aspects should be improved. On the one hand, the multimodal categorisation is not mentioned in the beginning of the questionnaire but it is included as a possible result to be obtained. In fact, VARK (2021) affirms that having multiple learning styles implies being part of "the majority as around two thirds of any population seems to fit into that group". On the other hand, it differentiates the read-write (i.e., tactile) from the kinaesthetic learning style, whereas different authors and institutions (e.g., Willingham, 2005; Li et al., 2016; Engage Education, 2018) do not distinguish between them because of their similarities. In this respect, as most of the characteristics of the tactile learning mode are included in the kinaesthetic mode, the present work does not differentiate between kinaesthetic and tactile styles All in all, the scarce number of questionnaires of perceptual learning styles available and the need to update the existing questionnaires to the most recent context, have been a limitation to implement the study.

Fourthly, the self-assessment questionnaire was designed for this study according to the objectives to be achieved. We are aware that the adoption of other questionnaires could identify attitudes such as confidence or motivation with more accuracy.

Lastly, the number of sessions devoted to implementing the experiment was also a limitation. We consider that more ambitious studies demand more time. For this reason, the data and results obtained are the first step of further research.

Bearing in mind the conclusions drawn and the suggestions previously described, some ideas for further research should be focused on:

- The promotion of digital literacies in the pedagogical context. Although Generation Z is surrounded by digital tools, this generation of learners lacks in academic digital literacy (Luzón, Ruiz-Madrid & Villanueva, 2010). Therefore, pedagogical training is required. We believe that digital training in the classroom would be also beneficial to prevent some problems derived from the misuse of digital devices, such as cyberbullying.
- The establishment of a more defined student profile with the design of questionnaires that take into account perceptual learning styles and multiple learning categories (e.g., multimodal). The identification of perceptual learning styles is supported by the Style-Matching Hypothesis, which suggests matching teaching methodologies to learners' learning styles. Therefore, being aware of the characteristics of our students

- would ease the learning strategies provided to the students and, consequently, effective learning would take place.
- The design of multimodal activities. The application of multimodal learning would foster all the perceptual modes, reinforcing the strongest and strengthening the weakest. Moreover, multimodal activities can bring the real world into the classroom so students can be better prepared to face challenges in the future. With the design of multimodal activities, learners can become autonomous and lifelong learning can occur.
- The influence of other variables in students' learning styles. The objective of the present study is to analyse the relationship between Social Media or multimodal environments in students' perceptual learning modes. Nevertheless, further research could analyse if other variables (i.e., age, gender, degree) may also influence students' learning perception.
- The improvement of perceptual learning styles' questionnaires in order to be more precise and updated, considering the limitations previously mentioned. For instance, perceptual learning styles' questionnaires should regard multimodality.
- The further investigation of possible relationships between other types of communicative activities that consider real-life situations, rather than the role-play, and students' variables, such as students' learning styles or attitudes.

Finally, my research revolves around the use of Social Media applications as tools for designing activities in the university classroom. Therefore, although the focus of this research is not on genre studies and/or digital genres, the present work has the potential to study future lines of research. For example, further research could be related to the evolution of digital

genres and how their characteristics can help better understand new ways of knowledge transfer and activities' design for new generations of students. In this regard, studying multimodal characteristics can play a fundamental role. In particular, performing a multimodal analysis on Social Media can help teachers appreciate the environment of a particular application in order to be able to design activities that are engaging, useful, and relevant to the needs of 21st century learners. In addition, such an analysis can also be beneficial for students because if students are aware of these multimodal features, they can comprehend how Social Media applications work for learning purposes, not only in the classroom, but also outside. Therefore, this analysis could benefit the university community in general.

In conclusion, this project has only been a first step towards the design of more complex future studies. In the light of the results obtained, there is an open field to further investigate the possible correlation between multimodality and perceptual learning styles in the EFL field.

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#### **APPENDICES**

#### **Appendix 1. Lyrics**

Albert Einstein once said everyone's a genius but if you judge a fish on its ability to climb a tree it will live its whole life believing that it is stupid

Ladies and gentlemen of the jury today on trial we have modern day schooling Glad you could come Not only does he make fish climb trees he also makes them climb down and do a 10 mile run Tell me school: are you proud of the things you've done? turning millions of people into robots Do you find that fun? Do you realize how many children relate to that fish swimming upstream in class never finding their gifts thinking they are stupid believing they are useless? Well the time has come no more excuses

and accuse him of killing creativity, individuality and being intellectually abusive he's an ancient institution that has outlived his usage

So your honor, this concludes my open statement and if I may present the evidence of my case

I call school to the stand

#### Proceed!

I will prove it

Exhibit A: Here's a modern day phone, recognize it?

Now here's a phone from 150 years ago

Big difference right?

Stay with me

Here's a car from today and here's a car from 150 years ago Big difference right?

Well get this: here's a classroom of today and here's a class we used 150 years ago

Now ain't that a shame?

In literally more than a century

nothing has changed

yet you claim to prepare students for the future

But with evidence like that

I must ask:

Do you prepare students for the future or the past?

I did a background check on you
and let the record show that you were made to train people to work in factories
which explains why you put students in straight rows nice and neat
Tell 'em: sit still, raise your hand if you want to speak
give them a short break to eat
and for eight hours a day tell them what to think
Oh and make them compete to get an A
a letter which determines product quality
Hence grade A of meat

I get it.

Back then times where different

We all have a past

I myself am no Ghandi

But today we don't need to make robot zombies

The world has progressed

And now we need people who think

creatively,

innovatively,

critically,

independently

See, every scientist will tell you that no two brains are the same

And every parent with two or more children will confirm that claim

So please explain

with the ability to connect

#### why you treat students like cookie cutter frames or snap back hats giving them this one size fits all crap

Watch your language!

Sorry your honor!

But if a doctor prescribed the exact same medicine to all of his patients
the results would be tragic
So many people would get sick
Yet, when it comes to school
this is exactly what happens.
This educational malpractice
where one teacher stands in front of 20 kids
each one having different strengths
different needs
different gifts

and you teach the same thing the same way.

that's horrific

different dreams

Ladies and gentlemen, the defendant should not be acquitted This may be one of the worst criminal offenses ever to be committed.

And let's mention the way you treat your employees

Objection!

Overruled. I wanna hear this!

It's a shame

I mean, teachers have the most important job on the planet yet they are underpaid

No wonder why so many students are shortchanged.

Let's be honest

Teachers should earn just as much as doctors

Because a doctor can do heart surgery and save the life of a kid.

But a great teacher can reach the heart of that kid and allow him to truly live

See, teachers are heroes that often get blamed.

But they're not the problem

They work in a system without many options or rights

Curriculums are created by policy makers

most of which have never taught a day in their life

Just obsessed with standardized tests

they think bubbling in a multiple choice question will determine success

That's outlandish

in fact these tests are too crude to be used and should be abandoned.

But don't take my word for it.

take Fredrick J Keely

the man who invented standardized testing

who said and I quote "These tests are too crude to be used and should be abandoned"

Ladies and gentlemen of the jury

if we continue down this road the results will be lethal

I don't have much faith in school

but I do have faith in people

and if we can customize health care,

cars

and Facebook pages

then it is our duty to do the same for education to

upgrade it,

change it,

do away with school spirit.

Because that's useless

unless we are working to bring the spirit out of each and every student

that should be our task.

No more common core

Instead, let's reach the core of every heart in every class

Sure, math is important

but no more than art or dance

let's give every gift an equal chance

I know this sounds like a dream,

but countries like Finland are doing impressive things

they have shorter days,

teachers make a decent wage,

homework is non existent

and they focus on collaboration instead of competition.

But here's the kicker, boys and girls:

Their educational system

outperforms every other country in the world.

Other places like Singapore are succeeding rapidly

schools like Montessori

programs like Khan Academy

there is no single solution

But let's get moving because while students may be 20% of our population

They are 100% of our future

So let's attend to their dreams

and there's no telling what we can achieve

This is a world in which I believe

A world where fish are no longer forced to climb trees

I rest my case

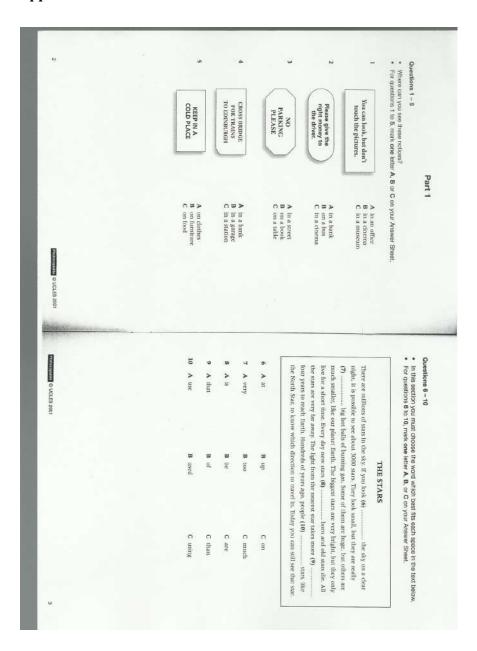
Video available at:

 $\underline{https://www.youtube.com/watch?v=dqTTojTija8\&index=3\&t=43s\&list=LL0DGF47PryWm2idDyAui}\\ \underline{JwO}$ 

Lyrics available at:

https://lyricstranslate.com

#### **Appendix 2. Placement Test**



## Questions 11 - 20

In this section you must choose the word which best fits each space in the texts.
 For questions 11 to 20, mark one letter A, B, C or D on your Answer Sheet.

# Good smiles ahead for young teeth

15	Z	3	12	Ξ
15 A person	14 A much	13 A from	12 A their	
erson	nuch	mor	beir	A getting
В	В		В	=
B people	B lot	B of	B his	B got
C	C	0	0	c
children	C many	C among	C them	C have
۵	D	D	D	D
D family	D deal	D between	D theirs	D having

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# Christopher Columbus and the New World

20 A as	19	18	17	3
>	>	>	>	
85	19 A Next	find	lied	-
8	В	В	50	
B but	Secondly	B know	told	and the second
С	c	С	С	
because	C Finally	think	cheated	***************************************
D If	Ð	D 0	D a	
	nce	D expect	sked	

э пхен	A 751	29 He sp	28 Don't p	27 She cam A quite	26 I've a A rej	25 Becau A sh	24 The sit		23 My h	22 I'll gi	hedroom.  A except	• For quest	Questions 21 - 40  In this section y
Townson and the	b	ent a long tin	make such a	ime to live h	I've always  A regarded	Because it had not A shortage	The singer ended the concert  A by  B with	A occasion	A would get  My holiday in Par	ve you my sj	rept Num	tions 21 to 4	21 – 40 action you m
from a bur	B made	He spent a long time looking for a tie which	B trouble	She came to live here a month ago.  A quite B beyond C alread	B thought C mea	rained for severa  B drop	B with	B chance	A would get B got  My holiday in Paris gave me a great	pare keys in case y	B otherwise	40, mark one lette	ust choose the w
on on the band the	C went		c worry	c already	best friend. C meant	I months, there was	C in D as	C	C	I'll give you my spare keys in case you home before me.	C unless	sertence.  For questions 21 to 40, mark one letter A, B, C or D on your Answer Sheet.  The children won't go to sleep	ard or phrase which
from a human on the hand, the suffered no contour behavior	D wore	with his new shirt.	Don't make such a	D almost	D supposed	Because it had not rained for several months, there was a	D as	D possibility	will get D get to improve my French accent	me before me.	D but	Intence.  r questions 21 to 40, mark one letter A. B. C or D on your Answer Sheet.  The children won't go to steep	Questions 21 – 40  • In this section you must choose the word or phrase which best completes each
-	J 40		39	38	37		36	35	34	THE REAL PROPERTY.	33	z z	31
								- 22			-		
	You ought to tak  A concern	as pressured	My remarks wen	I suggest we  A meeting	as if nothing had  A came	A peak	National leaders	Mary was disapp  A bleached	The book  A comprises	A responsible	It was clear that	A Moreover	She had change A almost
	You ought to take up swimming for t  A concern B relief	to processor as assugan	My remarks wereas a jo	İ	Jane remained calm when she won t as if trothing had happened.  A came  B brought	A peak B summit	National leaders from all over the we	Mary was disappointed with her new A bleached B died		A responsible B reliable	It was clear that the young couple w	A Moreover B As well as	She had changed so much that  A almost B hardly
	to take i		wereas a jok		Jane remained calm when she won the lottery and		National leaders from all over the world are expected to attend the	sappoi			It was clear that the young couple were of taking charge of the	teachi	he had changed so much thatanyone recognised her. almost B hardly C not D near

#### Part 2

# Do not start this part unless told to do so by your test supervisor.

## Questions 41 - 50

- In this section you must choose the word or phrase which beet fits each space in the texts.
   For questions 41 to 50, mark one letter A, B, C or D on your Answer Sheet.

#### CLOCKS

watch manufacturing centre for the next 100 years. became (45) .... ..... available, and Switzerland became the world's leading

- 55	7	6	12	=
>	>	>	>	>
45 A mostly	A lasted	3 A vast	42 A average	41 A despite
В	8	8	В	В
B chiefly	B endured	B large	B medium	B although
c	c	C	0	0
C greatly	C kept	C wide	C general	C otherwise
D	D	D	D	ם
D widely	D remained	D mass	D common	D average

# **Dublin City Walks**

2.30 p.m. at the Tourist Information Office. No advance (49) ....
necessary. Special (50) .......are available for families of more than ten people. Dublin City Walks (48) ...... .... are available for families, children and parties .... twice daily. Meet your guide at 10:30 a.m. or

50	49	48	47	46
>	4	>	>	A
50 A funds	49 A paying	48 A take place	47 A near	A introduce
œ	В		œ	В
B costs	B reserving	B occur	B late	B present
C	c	С	0	C
C fres	C warning	C work	C recent	C move
ם	D	U	D	U
D rates	D booking	D function	D close	D show

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Phateophase © UCLES 2001

- Questions 51 60

  In this section you must chaose the word or phrase which best completes each sentence.

  For questions 51 to 60, mark one letter A, B, C or D on your Answer Sheet.

- 52 Don't you get ifed .......waitching TV every night?

  A with B by C of D D at
- 53 Go on, finish the dessert. It needs ...... tomorrow. B cating C to cat D caten

...... up because it won't stay fresh until

- 54 We're not used to .
  A be B have C being D having
- 55 I'd rather we .
  A wouldn't B shouldn't C hadn't D didn't
- 56 She obviously dich't want to discuss the matter so I didn't ....... the point.

  A maintain B chase C follow D pursue
- 57 Anyone ..... after the start of the play is not allowed in until the interval.

  A arrives B has arrived C arriving D arrived
- 59 The restaurant was far too noisy to be ................... to relaxed conversation.

  A conductive B suitable C practical D fruitful
- 60 In this branch of medicine, it is vital to ............... open to new ideas.

  A stand B continue C hold D remain
- Photogram © UCLES 2001

**Appendix 3. Placement Test Answers** 

Part 1					Part 2		
1 C	9 C	17 A	25 A	33 C	41 B	49 D	57 C
2 B	10 B	18 B	26 A	34 C	42 A	50 D	58 B
3 A	11 C	19 C	27 D	35 D	43 D	51 C	59 A
4 C	12 A	20 A	28 A	36 B	44 D	52 C	60 D
5 C	13 B	21 C	29 C	37 C	45 D	53 B	
6 A	14 A	22 D	30 D	38 B	46 A	54 C	
7 A	15 C	23 B	31 B	39 C	47 C	55 D	
8 C	16 D	24 B	32 B	40 C	48 A	56 D	

#### Appendix 4. Perceptual Learning Styles' Questionnaire



### Perceptual Learning Styles' Questionnaire PR1 / EG (1)

This questionnaire has been designed to identify your perceptual learning style. Please, choose the answer which best explains your preference and click the box next to it. If more than one item matches your preference, then click more than one option. Do not leave any question blank. Remember: there are no correct or incorrect answers

Adapted from Villanueva and Navarro (1997), Girón-García (2013) and VARK (2021).

1. A website has a video showing how to do an online exam in the Virtual Classroom of my university. There is a teacher speaking, some lists and words describing what to do and some diagrams. I would learn most from:	*
listening to the explanation of the teacher.	
watching the actions (for example, what to do first and how to do it).	
reading the written descriptions.	
2. I want to learn how to create a Kahoot! on a computer. I would: *	
talk with the teacher or other students, who know about the application.	
start using Kahoot! and learn by trial and error.	
read the written instructions that came with the application.	

3. I am in a new city and I want to find out more about a tour that I am going on. I would: *
talk with the person who planned the tour or others who are going on the tour.
use a map and see where the places are.
read about the tour on the itinerary.
4. I have completed an online questionnaire in the Virtual Classroom and I would like some   *  feedback. I would like to have feedback:
from a verbal explanation of the teacher.
using examples from what I have answered.
using a written description of my results.
5. When I have to learn the rules of English Conditionals from the Internet, I like: *
audio channels where I can listen to podcasts.
videos showing how to use English Conditionals in real contexts.
interesting design and visual features (for example, a colourful picture with the written rules).
6. I prefer an English teacher who uses: *
question and answer, talk, group discussion, or guest speakers.
demonstrations, models, or practical sessions.
handouts, books or readings.

7. I felt very nervous in one exam last week and I forgot almost everything I had studied. As it had never happened to me, I decided to go to the hospital. I would prefer that the doctor:	*
described what was wrong.	
used a plastic model of a brain to show me what was wrong.	
showed me a diagram of what was wrong.	
8. I have been accepted in an exchange programme and I want to find out about a flat in order to share it with two of my classmates. Before visiting the flat, I would:	*
talk with the owner.	
view a video of the property.	
read a written description of the rooms and other features.	
9. I have a trip to London next week and I want to learn how to take better photos with my new camera. I would:	*
ask questions and talk with a photographer about professional photography.	
look for examples of good and poor photos showing how to improve them.	
use the written instructions about how to take photos.	
10. I am organising a Tourism exhibition for next week and I need to mount a self-assembled kit of a table for the stand of my town. I would learn best from:	*
advice from someone who has done it before.	
watching a video of a person assembling a similar table.	
reading the written instructions that came with the parts for the table.	

11. I have just arrived in a new city and I need to find the way to the hotel. I would: *
ask a person in the street to tell me the directions.
use a map of the city.
write down the street directions I need to remember.
12. When I finish my degree, I can apply for a Master's degree. In order to choose the most appropriate, these are important for me:
communicating with others through discussion.
using words well in written communication.
working with designs, maps, or charts.
13. I want to learn about a new project that will be carried out by the Tourist Information office * of my city. I would ask for:
an opportunity to discuss the project.
examples where the project has been used successfully.
a written report describing the main features of the project.
14. I work as a tourist guide in a medieval town and I want to learn how to play a game that was * used in medieval times in order to explain it to visitors. I would:
listen to an expert on medieval games explaining it and ask him / her questions.
watch other experts playing the game.
write down its characteristics or strategies.

15. I want to save more money to travel around the world, so I have to decide how to do it. In order to decide between a range of options, I would:
talk with a financial advisor about the options.
consider examples of each option using my financial information.
use graphs showing different options.
16. When I have to learn the characteristics of a monument that I have to visit, I: *
ask questions and talk about the monument with a friend.
use examples of other similar monuments.
read books, articles and handouts about the most important features of the monument.
17. In order to learn English grammar, I: *
listen to the teacher's explanation.
put the grammar rule into practice by doing some exercises related to it.
read rules and written examples.
18. In order to learn English vocabulary, I: *
repeat words or sentences out loud so I can memorise them.
consider the context or real examples where that vocabulary can be applied.
use dictionaries to find the written definitions.

19. Which of the following statements are true for you? *
I like to take part in discussions.
I prefer oral instructions to written instructions.
Writing allows me to generate ideas.
I understand concepts better with real cases.
I associate words or sentences with images.
Images say more than words.

**Appendix 5. Pre-Questionnaire of the Experimental Group** 

Student 1			
QUESTION	AUDITORY	KINAESTHETIC	VISUAL
1		X	
2	X		
3		X	X
4			X
5		X	X
6	X	X	
7	X		
8	X	X	X
9		X	X
10	X	X	X
11		X	X
12	X		
13			X
14		X	
15		X	
16	X	X	X
17	X	X	X
18		X	X
19	X	X	X
		X	
TOTAL	9	15	12

Student 2			
QUESTION	AUDITORY	KINAESTHETIC	VISUAL
1	X	X	
2	X		
3		X	X
4		X	
5		X	X
6		X	
7		X	
8			X
9		X	
10			X
11		X	
12			X
13			X
14	X	X	
15		X	
16			X
17		X	
18		X	
19		X	
			X
TOTAL	3	13	8

Student 3			
QUESTION	AUDITORY	KINAESTHETIC	VISUAL
1		X	
2		X	
3	X		
4		X	
5		X	X
6			X
7	X		
8	X		
9	X	X	
10	X		
11		X	
12	X		
13		X	
14	X		
15	X		X
16	X	X	
17	X	X	
18	X		
19		X	X
			X
TOTAL	11	10	5

Student 4			
QUESTION	AUDITORY	KINAESTHETIC	VISUAL
1	X		
2		X	
3	X		X
4	X		
5		X	
6	X	X	
7	X	X	
8	X		X
9		X	
10	X	X	
11	X		
12	X	X	
13		X	X
14	X		X
15		X	
16		X	
17	X		X
18	X	X	
19		X	
	X	X	
TOTAL	13	13	5

Student 5			
QUESTION	AUDITORY	KINAESTHETIC	VISUAL
1		X	
2	X		
3			X
4	X	X	
5		X	X
6	X	X	
7	X		
8	X	X	X
9	X	X	
10	X	X	
11		X	
12	X	X	
13	X		X
14	X	X	
15	X		
16		X	X
17	X	X	X
18		X	X
19	X	X	
	X	X	
TOTAL	14	15	7

Student 6			
QUESTION	AUDITORY	KINAESTHETIC	VISUAL
1	X	X	
2	X		
3		X	X
4	X	X	
5		X	
6		X	
7	X		
8	X	X	X
9		X	
10		X	X
11	X	X	X
12	X		X
13	X		X
14	X	X	X
15	X	X	
16			X
17		X	X
18	X	X	
19		X	X
		X	X
TOTAL	11	15	11

Student 7			
QUESTION	AUDITORY	KINAESTHETIC	VISUAL
1	X	X	
2	X	X	
3	X		X
4		X	
5		X	
6	X	X	
7			X
8	X	X	X
9		X	
10	X		X
11	X	X	
12	X		X
13		X	X
14		X	X
15		X	
16		X	X
17		X	
18		X	
19			X
		X	X
TOTAL	8	15	10

Student 8			
QUESTION	AUDITORY	KINAESTHETIC	VISUAL
1		X	
2		X	
3	X		
4		X	X
5		X	X
6	X	X	X
7	X		
8	X		
9		X	X
10	X	X	
11	X		
12	X		
13		X	X
14	X	X	
15		X	X
16	X		X
17	X	X	X
18	X	X	
19	X	X	X
		X	X
TOTAL	12	14	10

Student 9			
QUESTION	AUDITORY	KINAESTHETIC	VISUAL
1	X	X	
2	X	X	X
3	X	X	
4		X	
5		X	X
6	X	X	
7			X
8	X		
9	X	X	
10	X		
11	X	X	
12	X		
13	X	X	X
14	X		
15	X	X	
16	X		
17	X	X	X
18	X	X	
19	X	X	X
	X	X	
TOTAL	17	14	6

Student 10			
QUESTION	AUDITORY	KINAESTHETIC	VISUAL
1		X	X
2	X	X	
3	X		X
4		X	X
5		X	X
6	X	X	
7	X	X	X
8	X		X
9	X	X	
10	X	X	
11	X	X	X
12	X	X	X
13	X	X	X
14	X		X
15	X		X
16			X
17	X	X	X
18	X	X	X
19	X	X	
		X	X
TOTAL	17	15	15

Student 11			
QUESTION	AUDITORY	KINAESTHETIC	VISUAL
1	X	X	X
2	X		X
3	X		X
4	X	X	
5			X
6		X	X
7	X		X
8	X		X
9		X	
10		X	X
11	X		X
12	X		
13	X	X	X
14	X	X	
15	X		
16		X	
17	X	X	X
18		X	X
19			
		X	
TOTAL	12	11	12

Student 12			
QUESTION	AUDITORY	KINAESTHETIC	VISUAL
1		X	X
2		X	X
3	X	X	
4	X	X	
5		X	X
6	X	X	
7		X	
8	X		X
9	X	X	
10		X	X
11	X	X	
12	X		
13		X	X
14	X	X	
15	X	X	X
16		X	X
17	X	X	X
18		X	X
19		X	X
	X	X	X
TOTAL	11	18	12

Student 13			
QUESTION	AUDITORY	KINAESTHETIC	VISUAL
1	X	X	
2	X		X
3	X		X
4	X		
5		X	X
6		X	
7	X		X
8	X	X	X
9	X	X	
10	X		X
11	X	X	
12	X		X
13	X		X
14	X	X	
15	X		X
16			X
17	X	X	X
18		X	X
19	X	X	
		X	
TOTAL	15	11	12

Student 14			
QUESTION	AUDITORY	KINAESTHETIC	VISUAL
1		X	X
2		X	
3		X	
4			X
5		X	X
6	X		
7			X
8			X
9	X	X	
10	X	X	
11		X	
12		X	
13		X	X
14		X	
15		X	
16	X		X
17		X	X
18			X
19		X	X
		X	
TOTAL	4	14	10

Student 15			
QUESTION	AUDITORY	KINAESTHETIC	VISUAL
1	X	X	
2	X	X	X
3	X	X	
4		X	
5		X	X
6	X	X	
7			X
8	X		
9	X	X	
10	X		
11	X	X	
12	X		
13	X	X	X
14	X		
15	X	X	
16	X		
17	X	X	X
18	X	X	
19	X	X	X
	X	X	
TOTAL	17	14	6

Student 16			
QUESTION	AUDITORY	KINAESTHETIC	VISUAL
1		X	X
2	X	X	
3		X	
4	X	X	
5		X	X
6	X	X	
7	X		X
8	X	X	X
9	X	X	
10		X	X
11	X	X	
12	X		
13		X	
14	X	X	
15	X		X
16		X	
17		X	X
18	X	X	
19	X	X	X
	X	X	X
TOTAL	13	17	9

Student 17			
QUESTION	AUDITORY	KINAESTHETIC	VISUAL
1		X	
2	X		X
3	X		X
4	X		
5		X	
6		X	X
7		X	X
8		X	X
9	X	X	
10	X		
11	X	X	
12		X	
13		X	
14	X		
15			X
16			X
17			X
18		X	
19	X		X
		X	X
TOTAL	8	11	10

Student 18			
QUESTION	AUDITORY	KINAESTHETIC	VISUAL
1	X	X	
2	X		
3	X	X	
4	X	X	
5	X	X	X
6		X	X
7		X	
8	X		X
9	X	X	
10		X	X
11		X	X
12			X
13		X	X
14	X		X
15	X		X
16	X		X
17	X	X	X
18	X	X	X
19	X		X
			X
TOTAL	13	12	14

Student 19			
QUESTION	AUDITORY	KINAESTHETIC	VISUAL
1	X	X	
2		X	
3	X	X	
4		X	X
5	X	X	
6	X	X	
7	X		
8	X		
9		X	
10	X	X	
11	X	X	
12	X	X	
13	X		
14	X		
15		X	
16	X		X
17	X	X	X
18	X		X
19	X	X	X
		X	
TOTAL	15	14	5

Student 20			
QUESTION	AUDITORY	KINAESTHETIC	VISUAL
1	X	X	
2		X	X
3		X	X
4		X	
5			X
6	X	X	
7	X		
8	X		
9	X	X	
10		X	X
11	X		X
12	X		
13	X	X	
14		X	
15	X		
16	X		X
17	X	X	
18	X	X	
19		X	X
	X	X	
TOTAL	13	13	7

Student 21			
QUESTION	AUDITORY	KINAESTHETIC	VISUAL
1	X	X	
2			X
3		X	X
4	X	X	
5			X
6	X	X	
7	X	X	
8	X		X
9	X	X	
10			X
11	X	X	
12	X		
13		X	
14	X	X	X
15		X	
16		X	X
17	X	X	X
18		X	
19	X		X
		X	
TOTAL	11	14	9

**Appendix 6. Pre-Questionnaire of the Control Group** 

Student 1			
QUESTION	AUDITORY	KINAESTHETIC	VISUAL
1	X		X
2		X	
3			X
4		X	X
5		X	
6	X	X	
7	X		
8	X	X	X
9	X	X	
10	X	X	
11	X	X	
12	X	X	
13		X	
14	X	X	
15		X	
16			X
17	X		X
18	X		
19	X	X	
	X		
TOTAL	13	13	6

Student 2			
QUESTION	AUDITORY	KINAESTHETIC	VISUAL
1	X	X	
2			
3	X	X	
4			X
5		X	X
6	X		X
7	X		X
8	X		
9	X	X	
10	X		X
11		X	
12	X	X	
13	X		X
14	X		
15		X	
16	X		X
17	X	X	X
18		X	
19			X
		X	
TOTAL	12	10	9

Student 3			
QUESTION	AUDITORY	KINAESTHETIC	VISUAL
1	X	X	
2		X	
3		X	X
4	X		X
5	X		
6	X	X	
7		X	
8	X	X	X
9	X	X	
10		X	X
11		X	X
12	X		
13	X	X	
14	X	X	
15		X	
16			X
17	X		X
18	X		
19	X	X	X
	X	X	
TOTAL	13	14	8

Student 4			
QUESTION	AUDITORY	KINAESTHETIC	VISUAL
1		X	
2			
3			X
4	X	X	
5		X	
6	X		
7	X		
8		X	
9		X	
10		X	
11	X		
12			X
13			X
14	X		
15		X	
16			X
17		X	
18	X	X	
19			X
	X	X	
TOTAL	7	10	5

	St	udent 5	
QUESTION	AUDITORY	KINAESTHETIC	VISUAL
1		X	
2			
3	X		
4	X	X	
5		X	X
6	X	X	
7	X		
8	X	X	
9	X		
10	X	X	
11	X		X
12	X	X	
13		X	
14	X		
15		X	
16		X	
17	X	X	X
18		X	
19	X	X	
	X	X	X
TOTAL	13	14	4

	Stu	udent 6	
QUESTION	AUDITORY	KINAESTHETIC	VISUAL
1			X
2		X	
3	X		
4			X
5			X
6	X	X	
7			X
8	X		X
9		X	
10		X	
11	X	X	
12			X
13		X	
14	X	X	
15		X	
16	X	X	
17	X		
18	X		
19	X		
	X	X	
TOTAL	10	10	6

	Str	udent 7	
QUESTION	AUDITORY	KINAESTHETIC	VISUAL
1			X
2			X
3		X	
4			X
5			X
6			X
7	X		
8			X
9		X	
10	X		
11		X	
12	X		
13	X		
14		X	
15		X	
16			X
17		X	
18	X		
19		X	X
TOTAL	5	7	8

	Stu	udent 8	
QUESTION	AUDITORY	KINAESTHETIC	VISUAL
1		X	X
2		X	X
3	X	X	X
4			X
5		X	X
6		X	X
7	X		
8	X	X	X
9		X	X
10		X	X
11	X	X	X
12		X	
13	X	X	X
14	X	X	X
15	X	X	
16			X
17	X	X	X
18		X	X
19	X	X	X
	X	X	
TOTAL	10	17	16

	Str	udent 9	
QUESTION	AUDITORY	KINAESTHETIC	VISUAL
1	X		
2		X	
3			X
4		X	
5			X
6		X	
7			X
8	X		
9		X	
10	X		
11	X		
12			X
13	X		
14			X
15			X
16	X	X	
17		X	
18	X		
19	X		X
	X		
TOTAL	9	6	7

	Stu	ident 10	
QUESTION	AUDITORY	KINAESTHETIC	VISUAL
1		X	
2		X	
3	X		
4			X
5		X	
6	X		X
7	X		
8	X	X	X
9		X	X
10		X	
11	X	X	
12	X	X	
13	X		
14	X	X	X
15	X	X	
16	X		X
17	X	X	X
18	X	X	
19		X	
	X	X	
TOTAL	13	14	7

	Stu	dent 11	
QUESTION	AUDITORY	KINAESTHETIC	VISUAL
1		X	X
2		X	
3	X		
4			X
5	X	X	
6	X		X
7	X		
8		X	X
9		X	X
10	X		
11	X	X	
12		X	
13		X	X
14		X	
15		X	
16	X		X
17	X	X	X
18	X		
19		X	
	X	X	
TOTAL	10	13	8

	Stu	dent 12	
QUESTION	AUDITORY	KINAESTHETIC	VISUAL
1	X		X
2		X	X
3	X	X	X
4		X	X
5		X	X
6	X	X	
7	X		X
8	X	X	X
9	X		X
10	X		X
11		X	
12	X	X	X
13		X	X
14	X		X
15	X	X	
16			X
17	X	X	X
18	X	X	X
19	X		X
		X	
TOTAL	13	13	16

	Stu	ident 13	
QUESTION	AUDITORY	KINAESTHETIC	VISUAL
1	X	X	
2		X	
3		X	
4	X		X
5		X	X
6	X		X
7	X		X
8			X
9		X	X
10	X		
11		X	
12	X		X
13	X	X	
14	X	X	
15		X	X
16	X	X	
17	X	X	
18	X		X
19			X
	X	X	X
TOTAL	12	12	11

#### **Appendix 7. Workbook Activities**

1 Read the text about preparing for job interviews. Choose the best option, a, b or c, for each gap.

#### Mistakes to avoid when preparing for interview

A common mistake many candidates make is not doing enough background research into the company into which they hope to be recruited. Having some background knowledge of the <sup>1</sup>\_\_\_ of the organization and how it operates will not only make you feel better prepared and more <sup>2</sup>\_\_\_ , but it will also help you answer the interviewer's questions in more detail because you have more information to draw on. Furthermore, if it's obvious that you haven't researched the company website and the other applicants have, you can kiss goodbye to your hopes of being <sup>3</sup>\_\_\_ .

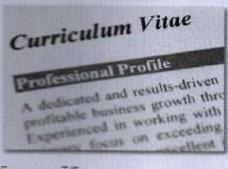
It is equally important to be well or exact as far as talking about you set is concerned. In fact, there is simply no excess not to be! "\_\_\_ and sounding uncertain when trying to assert sandard job interview questions such as what do you consider your biggest \_\_\_ ? or where do you see yourself in five years? creates a bad \_\_\_ . Of course, you will need to ?\_\_\_ you assert to fit the circumstances each time but you should be clear which skills and strengths you want to \_\_\_ in order to demonstrate that you are the best candidate for the job. If you aren't clear what your selling points are, how can you get them across to the interviewer?

1 a formation	<b>b</b> structure	<b>c</b> make-up
2 a confident	<b>b</b> sure	<b>c</b> certain
3 a chosen	<b>b</b> taken	<b>c</b> selected
4 a Waiting	<b>b</b> Hesitating	<b>c</b> Pausing
5 a lack	<b>b</b> problem	<b>c</b> weakness
6 a feeling	<b>b</b> idea	c impression
7 a model	<b>b</b> tailor	<b>c</b> change
8 a highlight	<b>b</b> exaggerate	c emphasis

- 2 Put the words in order to make six common questions that you could ask or be asked at a job interview.
  - 1 me / problem / handled / example / you / Can / it / how / you / an / a / of / and / one
  - 2 me / about / involves / something / the / you / more / what / tell / Could / lob
  - 3 attractive / you / this / about / do / position / most / What / find
  - 4 your / briefly / previous / through / Could / experience / run / you
  - 5 who /reviewed / and /my / How / be / that / will / performance / does
  - 6 would / How / friend / you / or / a / describe / colleague
- 3 ())) 8.2 Listen to four extracts from Joanna's interview for a job as tour leader with an adventure tourism company. Which four questions from Exercise 2 does she answer?

a	b	c	d
			<u> </u>

- 4 Listen again and choose true (T) or false (F).
  - 1 Joanna thinks that her interpersonal skills are a strong seeing point. T/F
  - 2 She has worked on the reception desk of a Spanish hotel. T/F
  - 3 The clients of the educational tour company she worked for were European. T/F
  - 4 She didn't enjoy working with minors. T/F
  - 5 Joanna feels the job would give her the opportunity to develop her customer service skills. T/F
  - 6 One of Joanna's clients had a panic attack when she missed her flight. TIF



#### **Appendix 8. Role-Play of the Experimental Group**

**Context:** The United Nations World Tourism Organisation (UNWTO), the United Nations agency in charge of the promotion of responsible, sustainable and universally accessible tourism, is looking for three students at *Universitat Jaume I* to participate in a project, named *Photofilm the World*. The project is carried out in cooperation with the World Film Society (WFS), a non-profit organisation that wants to improve world films and increase collaboration of international projects. This project aims at promoting world destinations that have previously been the setting of famous films. Particularly, the three contracted students would work as tourist guides through official accounts of *Instagram*.

## Role A: Noah Brown (UNWTO's manager / employer)

You are responsible for contracting the three students from *Universitat Jaume I*. After receiving twenty job applications from different students, you decide to carry out a preselection of candidates before the final interview. In order to soothe the candidates' nerves and recreate a more informal and familiar context, you decide to use *WhatsApp* to know more about them.

First, you <u>introduce yourself</u> and <u>describe the objective of the preselection</u>. Second, <u>ask questions using the following information</u>; you may additionally use your own ideas:

- Candidate's personal information: name, age, degree.
- Candidate's management and use of Social Networks.
- Candidate's opinion about the attractiveness of this project.
- Candidate's perception of himself/herself.
- Candidate's future prospects.

You can use different communicative options that *WhatsApp* offers (e.g., written messages, voice recording, emojis, *GIFs*, etc.).

Context: The United Nations World Tourism Organisation (UNWTO), the United Nations agency in charge of the promotion of responsible, sustainable and

universally accessible tourism, is looking for three students at *Universitat Jaume* I to participate in a project, named *Photofilm the World*. The project is carried out in cooperation with the World Film Society (WFS), a non-profit organisation that wants to improve world films and increase collaboration of international projects. This project aims at promoting world destinations that have previously been the setting of famous films. Particularly, the three contracted students would work as tourist guides through official accounts of *Instagram*.

# Role B: Andrea David (Candidate / Student from Universitat Jaume I)

You are a student at *Universitat Jaume I* who applied for the job last week. Today, you are going to participate in a preselection of candidates with an UNWTO'S manager / employer before the final interview. This preselection takes place on *WhatsApp*, where you have to answer and talk about some questions related to the project participation. You can use different communicative options that *WhatsApp* offers: written messages, voice recording, emojis, *GIFs*, etc. Moreover, it is possible that one of these questions is related to your management of Social Networks. If so, in order to make a good impression, share and talk about your *Instagram* account.

(Instagram account link: https://www.instagram.com/filmtourismus/).

#### **Appendix 9. Role-Play of the Control Group**

**Context:** The United Nations World Tourism Organisation (UNWTO), the United Nations agency in charge of the promotion of responsible, sustainable and universally accessible tourism, is looking for three students at *Universitat Jaume I* to participate in a project, named *Photofilm the World*. The project is carried out in cooperation with the World Film Society (WFS), a non-profit organisation that wants to improve world films and increase collaboration of international projects. This project aims at promoting world destinations that have previously been the setting of famous films. Particularly, the three contracted students would work as tourist guides through official accounts of *Instagram*.

## Role A: Noah Brown (UNWTO's manager / employer)

You are responsible for contracting the three students from *Universitat Jaume I*. After receiving twenty job applications from different students, you have decided to carry out a preselection of candidates in the canteen of the Faculty of Law and Economic Sciences. This preselection will be useful in order to soothe candidates' nerves and recreate a more informal and familiar context before the final interview.

First, you <u>introduce yourself</u> and <u>describe the objective of the preselection</u>. Second, <u>ask questions using the following information</u>; you may additionally use your own ideas:

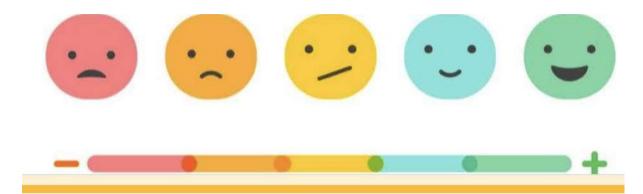
- Candidate's personal information: name, age, degree.
- Candidate's management and use of Social Networks.
- Candidate's opinion about the attractiveness of this project.
- Candidate's perception of himself/herself.
- Candidate's future prospects.

**Context:** The United Nations World Tourism Organisation (UNWTO), the United Nations agency in charge of the promotion of responsible, sustainable and universally accessible tourism, is looking for three students at *Universitat Jaume I* to participate in a project, named *Photofilm the World*. The project is carried out in cooperation with the World Film Society (WFS), a non-profit organisation that wants to improve world films and increase collaboration of international projects. This project aims at promoting world destinations that have previously been the setting of famous films. Particularly, the three contracted students would work as tourist guides through official accounts of Instagram.

# Role B: Andrea David (Candidate / Student from Universitat Jaume I)

You are a student at Universitat Jaume I who applied for the job last week. Today, you are going to participate in a preselection of candidates with UNWTO'S manager / employer before the final interview. This preselection takes place in the canteen of the Faculty of Law and Economic Sciences, where you have to answer and talk about some questions related to the project participation. Moreover, it is possible that one of these questions is related to your management of Social Networks.

### **Appendix 10. Self-Assessment Questionnaire**



# Self-Assessment Questionnaire PR1 / EG

This questionnaire has been designed to know your opinion regarding your performance in the Role-Play. Remember: there are no correct or incorrect answers.

1. The information provided was clear and useful to communicate with my peer.
Strongly disagree
O Disagree
O Neutral
○ Agree
Strongly Agree
2. With this activity, I could improve my communication skills.
2. With this activity, I could improve my communication skills.  Strongly disagree
Strongly disagree
Strongly disagree  Disagree

3. Now, I feel more confident to conduct an informal interview.
Strongly disagree
O Disagree
O Neutral
○ Agree
Strongly agree
4. I liked the activity and I would like to take part in a similar one.
○ Yes
○ No
○ Maybe
5. The use of Social Media and mobile phone devices in the task has been positive.
Strongly disagree
O Disagree
O Neutral
○ Agree
Strongly agree
6. Would you like to add any comments about the Role-Play?

**Appendix 11. Post-Questionnaire of the Experimental Group** 

Student 1			
QUESTION	AUDITORY	KINAESTHETIC	VISUAL
1	X	X	X
2	X	X	
3		X	X
4	X		X
5		X	X
6	X	X	
7	X	X	
8	X	X	X
9		X	
10	X	X	X
11	X	X	
12	X	X	
13		X	X
14		X	
15		X	
16	X	X	X
17	X	X	X
18		X	X
19	X	X	X
		X	X
TOTAL	12	19	12

Student 2			
QUESTION	AUDITORY	KINAESTHETIC	VISUAL
1	X	X	X
2	X	X	
3	X	X	X
4		X	
5		X	X
6		X	
7	X	X	X
8	X	X	X
9	X	X	
10	X	X	
11		X	X
12		X	X
13		X	
14	X	X	
15	X	X	X
16	X	X	X
17		X	X
18	X	X	X
19			X
		X	X
TOTAL	11	19	13

Student 3			
QUESTION	AUDITORY	KINAESTHETIC	VISUAL
1	X	X	
2		X	X
3		X	X
4		X	
5		X	X
6		X	
7	X	X	
8		X	X
9		X	
10		X	X
11		X	X
12	X	X	
13		X	
14		X	
15	X	X	
16		X	
17	X	X	
18	X	X	
19	X		
	X	X	X
TOTAL	8	19	7

Student 4			
QUESTION	AUDITORY	KINAESTHETIC	VISUAL
1		X	X
2	X	X	
3	X	X	
4	X	X	X
5		X	X
6	X	X	
7		X	X
8	X	X	
9	X	X	
10	X	X	
11	X	X	X
12	X	X	
13	X	X	
14	X	X	
15	X	X	X
16	X	X	X
17	X	X	
18	X	X	X
19	X	X	X
		X	
TOTAL	16	20	9

Student 5			
QUESTION	AUDITORY	KINAESTHETIC	VISUAL
1		X	X
2	X	X	
3	X	X	
4		X	X
5		X	X
6		X	
7	X		X
8		X	X
9		X	X
10			X
11		X	X
12	X		X
13			X
14		X	X
15	X		X
16		X	
17		X	
18	X	X	
19		X	X
	X	X	X
TOTAL	7	15	14

Student 6			
QUESTION	AUDITORY	KINAESTHETIC	VISUAL
1	X	X	X
2	X	X	
3		X	X
4	X		X
5		X	X
6	X		
7			X
8		X	X
9		X	X
10			X
11		X	
12		X	
13		X	X
14	X	X	X
15		X	X
16		X	
17	X	X	
18	X	X	X
19			X
		X	X
TOTAL	7	15	14

Student 7			
QUESTION	AUDITORY	KINAESTHETIC	VISUAL
1	X	X	X
2			X
3		X	X
4	X		X
5			X
6	X	X	
7			X
8	X	X	X
9		X	X
10		X	X
11	X	X	X
12		X	X
13	X		X
14	X	X	
15	X		
16			X
17			X
18		X	
19			X
		X	X
TOTAL	8	11	16

Student 8			
QUESTION	AUDITORY	KINAESTHETIC	VISUAL
1		X	
2	X		
3	X		
4	X	X	
5		X	X
6	X	X	X
7	X		
8	X		
9	X	X	
10	X	X	
11	X		
12	X	X	
13	X	X	X
14	X	X	
15	X	X	
16	X	X	
17	X	X	
18	X	X	X
19	X	X	X
	X	X	X
TOTAL	18	15	6

Student 9			
QUESTION	AUDITORY	KINAESTHETIC	VISUAL
1		X	X
2	X	X	
3	X	X	X
4		X	
5		X	X
6		X	X
7		X	X
8	X	X	
9		X	X
10		X	X
11	X	X	
12		X	X
13	X		
14		X	X
15		X	
16	X		X
17	X	X	X
18	X	X	
19		X	
	X	X	X
TOTAL	9	18	12

Student 10			
QUESTION	AUDITORY	KINAESTHETIC	VISUAL
1		X	X
2		X	X
3	X	X	
4	X	X	
5		X	X
6	X	X	
7	X	X	
8	X	X	X
9	X	X	
10	X	X	
11	X	X	
12		X	X
13		X	
14	X	X	
15	X	X	X
16	X	X	X
17	X	X	
18	X	X	X
19	X		X
	X		X
TOTAL	15	18	10

Student 11			
QUESTION	AUDITORY	KINAESTHETIC	VISUAL
1	X		X
2	X	X	
3	X		X
4	X	X	X
5		X	X
6	X	X	
7	X		X
8	X	X	X
9	X	X	X
10	X	X	X
11	X		X
12	X	X	
13	X		X
14	X	X	X
15		X	X
16	X		
17	X	X	X
18	X	X	X
19	X		X
			X
TOTAL	17	12	16

Student 12			
QUESTION	AUDITORY	KINAESTHETIC	VISUAL
1		X	X
2	X	X	
3	X	X	
4	X		X
5		X	X
6	X	X	
7	X		X
8	X	X	
9	X	X	
10	X	X	
11		X	
12	X	X	
13	X	X	
14	X	X	
15	X	X	X
16		X	X
17	X		X
18	X		X
19	X	X	X
	X	X	X
TOTAL	16	16	10

Student 13			
QUESTION	AUDITORY	KINAESTHETIC	VISUAL
1		X	X
2	X	X	
3		X	
4			X
5			X
6		X	
7			X
8		X	
9	X	X	
10	X	X	
11		X	
12		X	X
13			X
14		X	
15	X	X	
16	X		X
17		X	
18		X	X
19		X	X
		X	
TOTAL	6	15	9

Student 14			
QUESTION	AUDITORY	KINAESTHETIC	VISUAL
1		X	
2		X	
3	X		
4	X	X	
5		X	
6		X	
7	X		
8	X		
9		X	
10		X	
11	X		
12		X	
13		X	
14			X
15	X		
16		X	
17	X		
18	X		
19			X
		X	X
TOTAL	8	11	3

Student 15			
QUESTION	AUDITORY	KINAESTHETIC	VISUAL
1	X	X	
2		X	
3	X		
4		X	
5			X
6		X	
7	X	X	
8			X
9		X	X
10			X
11	X		
12	X		X
13		X	
14		X	
15		X	
16	X		
17		X	
18		X	
19		X	X
		X	
TOTAL	6	13	6

Student 16			
QUESTION	AUDITORY	KINAESTHETIC	VISUAL
1	X	X	
2	X	X	
3	X	X	
4	X	X	X
5	X	X	X
6	X	X	
7	X	X	X
8	X	X	
9	X	X	
10	X	X	
11	X	X	
12	X	X	X
13	X	X	
14	X	X	
15	X	X	
16	X	X	
17	X	X	X
18	X	X	
19	X	X	X
	X	X	X
TOTAL	20	20	7

Student 17			
QUESTION	AUDITORY	KINAESTHETIC	VISUAL
1	X		
2	X		X
3	X		
4	X	X	
5		X	
6		X	X
7			X
8	X	X	
9	X		X
10	X		
11	X	X	
12	X		
13		X	
14	X	X	
15		X	
16		X	
17	X	X	X
18	X		X
19	X		X
		X	X
TOTAL	13	11	8

Student 18			
QUESTION	AUDITORY	KINAESTHETIC	VISUAL
1	X	X	
2	X	X	
3	X	X	X
4	X	X	
5		X	X
6		X	X
7	X		X
8	X	X	X
9		X	X
10	X		X
11	X	X	
12	X	X	
13	X	X	X
14	X	X	
15	X		X
16	X	X	X
17	X	X	X
18	X		X
19			X
	X	X	X
TOTAL	16	15	14

Student 19			
QUESTION	AUDITORY	KINAESTHETIC	VISUAL
1	X	X	
2		X	
3	X	X	
4	X	X	
5		X	X
6	X	X	
7		X	X
8	X		
9	X	X	
10		X	
11	X	X	
12	X	X	
13		X	
14		X	
15		X	
16	X		
17	X	X	
18	X	X	
19	X		X
	X	X	
TOTAL	13	17	3

Students 20			
QUESTION	AUDITORY	KINAESTHETIC	VISUAL
1		X	
2	X	X	
3	X		X
4		X	
5		X	X
6	X	X	
7		X	
8			X
9	X	X	
10	X	X	
11		X	X
12	X		
13	X		
14	X	X	
15	X		
16	X	X	
17		X	
18	X	X	
19		X	X
	X	X	X
TOTAL	12	15	6

Student 21			
QUESTION	AUDITORY	KINAESTHETIC	VISUAL
1	X	X	
2		X	X
3		X	X
4	X	X	X
5		X	X
6	X	X	
7	X		
8		X	X
9	X	X	X
10	X	X	
11	X	X	
12	X		
13	X	X	
14	X	X	X
15		X	X
16	X	X	
17	X	X	X
18	X	X	X
19	X		X
	X	X	X
TOTAL	15	17	12

**Appendix 9. Post-Questionnaire of the Control Group** 

Student 1			
QUESTION	AUDITORY	KINAESTHETIC	VISUAL
1		X	
2	X	X	
3	X		
4		X	
5	X	X	
6	X		
7	X		
8	X		
9	X	X	
10	X		X
11	X		X
12	X		
13	X	X	
14	X		
15	X	X	
16		X	
17		X	X
18	X		X
19	X	X	
	X		
TOTAL	16	10	4

Student 2			
QUESTION	AUDITORY	KINAESTHETIC	VISUAL
1			X
2	X		
3	X		
4		X	
5	X		
6	X		
7			X
8		X	
9		X	
10	X		
11	X	X	
12	X		
13	X		
14	X		
15	X		
16		X	
17	X		
18	X	X	
19	X		X
	X	X	X
TOTAL	14	7	4

Student 3			
QUESTION	AUDITORY	KINAESTHETIC	VISUAL
1	X	X	
2		X	
3		X	X
4	X		X
5		X	
6	X	X	X
7	X		X
8		X	X
9		X	
10	X		X
11	X	X	
12	X	X	X
13	X		X
14	X		
15	X	X	
16			X
17	X	X	X
18	X	X	X
19	X	X	X
	X	X	
TOTAL	14	14	12

Student 4			
QUESTION	AUDITORY	KINAESTHETIC	VISUAL
1	X	X	
2		X	
3	X	X	X
4	X	X	X
5		X	
6	X		
7	X	X	
8	X	X	X
9		X	
10	X	X	
11	X	X	
12	X	X	
13		X	
14	X		
15	X	X	
16	X	X	
17	X		
18	X		
19	X		
TOTAL	15	14	3

Student 5			
QUESTION	AUDITORY	KINAESTHETIC	VISUAL
1	X		X
2	X		
3	X		
4	X	X	
5		X	X
6	X	X	
7	X		
8	X	X	
9	X	X	
10	X	X	
11	X		X
12	X	X	
13	X	X	
14	X	X	
15	X		
16	X	X	
17	X	X	
18	X	X	
19	X	X	X
	X	X	
TOTAL	19	14	4

Student 6			
QUESTION	AUDITORY	KINAESTHETIC	VISUAL
1	X		
2			X
3	X		
4	X		
5	X		
6			X
7			X
8	X		
9	X		
10			X
11	X		
12		X	
13	X	X	
14	X		
15	X		
16	X		X
17	X		X
18	X	X	
19	X		X
	X	X	X
TOTAL	15	4	8

Student 7			
QUESTION	AUDITORY	KINAESTHETIC	VISUAL
1		X	
2			X
3		X	
4	X		
5			X
6		X	
7	X		
8			X
9		X	
10	X		
11		X	
12			X
13	X		
14	X		
15		X	
16			X
17		X	
18	X		
19			
			X
TOTAL	6	7	6

Student 8			
QUESTION	AUDITORY	KINAESTHETIC	VISUAL
1		X	
2		X	
3	X		
4		X	X
5			X
6	X		
7	X		
8		X	
9		X	
10	X		X
11	X	X	
12			X
13			X
14	X	X	
15	X		
16			X
17		X	X
18		X	X
19			X
		X	X
TOTAL	7	10	10

Student 9			
QUESTION	AUDITORY	KINAESTHETIC	VISUAL
1		X	
2		X	
3	X		
4		X	
5	X		
6		X	
7	X		
8			X
9		X	
10	X		
11		X	
12			X
13		X	
14	X		
15			X
16		X	
17		X	
18	X		
19	X		X
		X	
TOTAL	7	10	4

Student 10			
QUESTION	AUDITORY	KINAESTHETIC	VISUAL
1	X	X	X
2	X	X	
3	X		X
4			X
5		X	
6	X	X	X
7	X		
8	X	X	X
9	X	X	
10	X	X	
11	X	X	
12		X	
13		X	X
14	X	X	X
15	X	X	
16	X		X
17	X	X	X
18	X	X	X
19		X	
	X	X	
TOTAL	15	16	10

Student 11			
QUESTION	AUDITORY	KINAESTHETIC	VISUAL
1		X	X
2		X	
3	X	X	
4	X		X
5		X	X
6	X		X
7	X		
8		X	X
9		X	X
10	X		
11	X	X	
12	X		
13		X	X
14	X		X
15		X	
16	X		X
17		X	X
18	X	X	X
19	X	X	
		X	
TOTAL	11	13	11

Student 12				
QUESTION	AUDITORY	KINAESTHETIC	VISUAL	
1	X	X		
2		X		
3		X	X	
4	X		X	
5		X		
6	X	X	X	
7	X		X	
8		X	X	
9		X		
10	X		X	
11	X	X		
12	X	X	X	
13	X		X	
14	X			
15	X	X		
16			X	
17	X	X	X	
18	X	X	X	
19	X	X	X	
	X	X		
TOTAL	14	14	12	

Student 13				
QUESTION	AUDITORY	KINAESTHETIC	VISUAL	
1	X	X		
2	X		X	
3	X	X		
4	X	X		
5	X	X		
6	X	X		
7	X		X	
8	X	X		
9		X		
10		X		
11		X		
12	X		X	
13	X	X		
14	X	X		
15		X		
16	X			
17	X	X		
18	X		X	
19	X			
	X		X	
TOTAL	16	13	5	



## Programa de Doctorado en Lenguas Aplicadas, Literatura y Traducción

Escuela de Doctorado de la Universitat Jaume I

## El Empoderamiento de los Estilos de Aprendizaje Perceptivos con el Uso de las Redes Sociales en el Aula Universitaria de Lengua Extranjera

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Hace treinta y dos años, el Ministerio de Educación, Cultura y Deporte implementó el programa bilingüe en el sistema educativo español. Desde entonces, la lengua inglesa forma parte de las vidas de muchos estudiantes y eso ha llevado a los expertos en lingüística aplicada a investigar dicho ámbito con el objetivo de mejorar la enseñanza y el aprendizaje de inglés. El surgimiento de la tecnología de los medios revolucionó el panorama educativo ya que nuevas maneras de intercambiar información y comunicarse aparecieron. Por tanto, la investigación relacionada con las herramientas digitales es reciente y necesaria. Más aún, si tenemos en cuenta los malos resultados reflejados por EF English Proficiency Index (2020), que sitúa a España en la 33ª posición en el ranking de países y regiones.

Esta investigación se centra en tres ámbitos: la enseñanza y aprendizaje de inglés como lengua extranjera, los estilos de aprendizaje perceptivos y la educación digital. En concreto, el trabajo ha descrito los enfoques humanísticos de aprendizaje de lengua extranjera más relevantes, los estilos de aprendizaje perceptivos de las nuevas generaciones de estudiantes (Generación Z) en entornos multimodales y la alfabetización digital. El estudio implementado en esta tesis doctoral tiene como principal objetivo obtener información que muestre el posible empoderamiento de los estilos de aprendizaje perceptivos como consecuencia del uso de las redes sociales en los procesos de comunicación de los estudiantes. Por otra parte, el estudio se basa en la construcción social del conocimiento lingüístico y comunicativo en entornos de aprendizaje multimodales, donde los estudiantes interactúan a través del sonido o la imagen, entre otros. Para llevar a cabo el experimento, se propone usar las redes sociales en el aula de lengua extranjera y así promover el constructivismo social, el aprendizaje experiencial, la enseñanza comunicativa, la autonomía de aprendizaje, el aprendizaje a lo largo de la vida y todos los estilos de aprendizaje perceptivos. Las tres preguntas de investigación son:

- 1) ¿En qué medida las redes sociales aumentan la competencia comunicativa de los estudiantes en inglés como lengua extranjera?
- 2) ¿El uso de aplicaciones multimodales online en el aula ejerce alguna influencia en el surgimiento de múltiples modos de aprendizaje perceptivos en la generación Z?
- 3) ¿Puede el uso de las redes sociales en el aula de inglés como lengua extranjera mejorar la confianza y motivación de los estudiantes?

El aprendizaje y la enseñanza de lenguas extranjeras ha experimentado una evolución hacia un enfoque comunicativo. Desde el punto de vista sociconstructivista (Vygotsky, 1978), los estudiantes crean conocimiento a través de la interacción. Es decir, a través de la experiencia, los estudiantes generan conocimientos que se unen al conocimiento previo. Piaget (1966) también contribuyó a elaborar la teoría constructivista, basándose en el conocimiento del contenido. Los dos autores defienden la idea de que el aprendizaje es un proceso activo donde la lengua es un elemento clave y el estudiante es el centro de dicho proceso. El hecho de que el estudiante asocie su conocimiento previo con el conocimiento que está adquiriendo da lugar al aprendizaje significativo (Ausubel, 2002). Por ese motivo, el estudio incluido en este trabajo ha sido diseñado teniendo en cuenta las características del entorno de los estudiantes respecto a las herramientas que utilizan en su día a día para comunicarse, incluyendo así material auténtico que les permita experimentar interacciones reales dentro del aula. En definitiva, el proceso de aprendizaje que se pretende conseguir a través de la construcción social del conocimiento es significativo y experiencial.

El surgimiento de las herramientas tecnológicas, más conocidas por Tecnologías de la Información y las Comunicaciones (TIC), ha facilitado el diseño de actividades significativas

y, al mismo tiempo, ha creado nuevas posibilidades de comunicación y construcción de conocimiento. Por ejemplo, los blogs, los podcasts o las redes sociales, como *WhatsApp* o *Instagram*, son herramientas que posibilitan el uso de cualquier lengua extranjera en situaciones comunicativas reales, y en cualquier momento y parte del mundo. Asimismo, la interacción que tiene lugar a través del uso de las redes sociales permite construir el conocimiento lingüístico mediante el papel colaborativo, interactivo y activo de los estudiantes (Buchberger, 2001).

Son distintos los enfoques de aprendizaje que han contribuido en la aparición del enfoque comunicativo. En primer lugar, el enfoque cognitivo explica el comportamiento humano según los procesos mentales construidos en su memoria. Por tanto, este enfoque considera que la lengua es una acción cognitiva, basada en la percepción del entorno, que transforma la información recibida en información que se puede producir. Piaget (1968), en su teoría sobre la cognición, afirmó que la experiencia permite a los estudiantes organizar el conocimiento según sus estructuras mentales. Así pues, el enfoque cognitivo se centra en el estudiante y, más concretamente, en sus estructuras cognitivas. En segundo lugar, la perspectiva nocional-funcional introdujo algunas características en la organización del currículo, como las estrategias de aprendizaje o la autonomía de aprendizaje. El objetivo de esta nueva organización en el aprendizaje de lenguas es la comunicación, teniendo en cuenta el entorno comunicativo. Finalmente, el enfoque comunicativo (Hymes, 1967; Halliday, 1970) sustituyó el término 'competencia lingüística' por 'competencia comunicativa'. Además, dentro de la competencia comunicativa, este enfoque introdujo distintas subcompetencias: competencia lingüística, competencia sociolingüística o competencia estratégica. La competencia comunicativa, así pues, es un conjunto de subcompetencias que además de tener como objetivo conocer las reglas gramaticales, por ejemplo, también pretende saber qué decir y cómo interactuar en distintos contextos. En otras palabras, los estudiantes deben aprender cómo formular correctamente los actos de habla (Hymes, 1972), como por ejemplo: afirmar, preguntar, dar órdenes, describir, explicar, perdonar, o dar las gracias (Searle, 1980).

Como consecuencia de la introducción del enfoque comunicativo en el aula de lengua extranjera, los materiales y el rol del profesor ha cambiado respecto a la enseñanza más tradicional. Por una parte, el enfoque comunicativo distingue cinco componentes que están relacionados entre sí: lingüístico, pragmalingüístico, sociopragmático, estratégico y discursivo. Estos componentes son considerados en el diseño curricular de las cuatro habilidades lingüísticas: escuchar, leer, hablar y escribir (Usó-Juan y Martínez-Flor, 2008). Las actividades basadas en el desarrollo de la competencia comunicativa no se basan en la memorización de las reglas, sino en la adquisición de diferentes componentes que permiten a los alumnos comunicarse efectivamente en distintos entornos. Asimismo, la enseñanza comunicativa de lenguas es una respuesta a la revolución producida por la globalización (Richards, 2006), que ha cambiado el estatus de la lengua inglesa, la cual se ha convertido en la lengua de comunicación global. Dentro de esta enseñanza, las actividades deben promover situaciones comunicativas auténticas. Para ello, las actividades deben ser significativas, tener un propósito comunicativo o simular interacciones reales. Un ejemplo de actividad comunicativa es el juego de rol, actividad diseñada en el estudio de esta tesis doctoral. Además, siguiendo las teorías socioconstructivistas, humanistas y comunicativas, los docentes deben utilizar distintos recursos en el aula, promover estrategias de aprendizaje o considerar las diversas necesidades de los estudiantes. Para ello, el profesor debe adoptar un papel activo, considerar a sus estudiantes como el punto central del proceso de enseñanza y aprendizaje, y promover su autonomía de aprendizaje y el aprendizaje a lo largo de la vida (Holec, 1981; Little, 1991; Girón-García, 2013).

El proceso de aprendizaje es complejo, no solo por el surgimiento de nuevos enfoques o las consecuencias derivadas de las TIC, sino también por las variables individuales de los alumnos. Cada estudiante experimenta el proceso de aprendizaje de una manera diferente y, consecuentemente, utilizan estrategias de aprendizaje distintas. La frecuencia en el uso de estrategias de aprendizaje específicas muestra qué estilos de aprendizaje hay entre el alumnado (Villanueva y Navarro, 1997). Por una parte, las estrategias de aprendizaje son técnicas y acciones que los estudiantes emplean de manera consciente para aprender (Oxford, 1990). Por otra parte, los estilos de aprendizaje hacen referencia a las características de los estudiantes que determinan sus preferencias en relación a la concentración, procesamiento o retención de información (Dunn y Dunn, 1993). Entre las dimensiones que existen en los estilos de aprendizaje (tipos de personalidad o diferencias biológicas), esta tesis doctoral analiza las preferencias sensoriales o fisiológicas.

Los estilos de aprendizaje perceptivos hacen referencia a los canales fisiológicos que los estudiantes utilizan para aprender (Gargallo-Camarillas y Girón-García, 2016). Esta tesis doctoral se ha centrado en el modelo desarrollado por Dunn and Dunn (1992) y en la teoría desarrollada, en 1992, por Neil Fleming y Colleen Mills, conocida como VARK o VAK (2021). Existen cuatro estilos de aprendizaje perceptivos:

- Visual: los estudiantes visuales aprenden a través de la visión. Les gusta leer, usar gráficos o diseñar presentaciones.
- Auditivo: este estilo se caracteriza por el uso del oído en el proceso de aprendizaje.
   Por tanto, los alumnos auditivos aprenden mejor escuchando a sus profesores o actividades grupales.

- 3) Táctil: también conocido como háptico, el estilo de aprendizaje táctil se basa en el contacto físico con las manos. Por tanto, los estudiantes táctiles suelen trabajar con ordenadores o dibujar. Este estilo de aprendizaje suele incluirse junto con el kinestésico, ya que este último engloba muchas de las características del estilo táctil. Por este motivo, esta tesis doctoral lo incluye dentro del estilo kinestésico.
- 4) Kinestésico: los estudiantes kinestésicos aprenden a través de la práctica y con ejemplos o casos reales. En este caso, no solo se utilizan las manos, sino también el resto del cuerpo.

Es importante recalcar que un mismo estudiante puede tener distintos estilos de aprendizaje, igual o distintamente desarrollados. Por ejemplo, un alumno puede considerarse 50% visual, 70% auditivo y 20% kinestésico. En este sentido, el estudiante, al haber obtenido un 50% o más en dos de los tres estilos analizados, puede categorizarse como bimodal. Además de esta categoría, también existe la categoría unimodal, que se obtiene cuando un estudiante alcanza un 50% o más solo en uno de los tres estilos de aprendizaje, y la categoría multimodal, basada en la obtención de un 50% en los tres estilos de aprendizaje analizados.

La comunicación multimodal ha generado cambios fuera y dentro de las instituciones educativas. Por ejemplo, los estudiantes no envían cartas, sino que escriben mensajes a través de la aplicación *WhatsApp*. En el proceso comunicativo, se utilizan elementos como imágenes, vídeos, grabaciones de voz o emoticonos. Sin embargo, aunque estos elementos son comunes en ámbitos sociales, no siempre se utilizan en el aula. Por este motivo, el estudio diseñado utiliza las TIC y las redes sociales en el aula universitaria de inglés como lengua extranjera. Asimismo, el estudio implementado en esta tesis doctoral se basa en la

hipótesis de que la mayoría de los estudiantes son bimodales o multimodales como consecuencia de los múltiples modos de comunicación existentes.

Para afrontar los cambios sociales, tecnológicos y metodológicos, este trabajo sugiere promover la enseñanza digital en el aprendizaje de lenguas extranjeras. Para ello, los docentes necesitan estar preparados para utilizar herramientas digitales y diseñar actividades apropiadas para promover metodologías comunicativas, activas y participativas. En este sentido, los estudiantes adquieren, al mismo tiempo, una competencia digital necesaria para desarrollar su autonomía. En definitiva, los cambios mencionados anteriormente han definido a la nueva generación de estudiantes (Generación Z), quienes presentan nuevas preferencias, son activos, colaborativos, inmediatos y digitales (Oblinger and Oblinger, 2005). Estas características se visibilizaron durante el confinamiento provocado por la pandemia mundial COVID-19, cuando las instituciones educativas experimentaron un profundo proceso de digitalización, utilizando plataformas como *Google Meet* para impartir las clases, o cuando el gobierno pidió ayuda a los 'influencers' para apelar a la responsabilidad colectiva a través de las redes sociales.

El surgimiento de Internet también ha ampliado el concepto de alfabetización. Actualmente, se entiende como alfabetización las acciones que las personas realizan con fines sociales y personales, y teniendo en cuenta aspectos como la planificación, la organización, la negociación de significado, o la adaptación a distintas convenciones. Así pues, la alfabetización ha sido tradicionalmente definida como la habilidad de leer o escribir. Sin embargo, en el siglo 21 se ha redefinido el concepto, englobando acciones como crear, asociar o proporcionar significado a distintas realidades (UNESCO, 2004; Ministerio de Educación y Formación Profesional, 2015). Para promover la alfabetización del siglo 21 entre

los estudiantes, esta investigación propone utilizar las redes sociales para diseñar y realizar diferentes actividades. Existen muchos beneficios de usar las redes sociales con fines educativos. Por ejemplo, desarrollan las habilidades necesarias en la era digital, facilitan el autoaprendizaje, o promueven la participación en el proceso de aprendizaje.

Considerando los aspectos teóricos desarrollados en esta tesis doctoral, el estudio diseñado incluye una variable independiente y tres variables dependientes. Por un lado, la variable independiente es el uso de las redes sociales. Por otra parte, las tres variables independientes son el aumento de la competencia comunicativa, el surgimiento de estilos de aprendizaje múltiples y la mejora de la confianza y la motivación de los estudiantes. Es decir, el estudio pretende analizar el efecto de las redes sociales en la competencia comunicativa de los estudiantes, en los estilos de aprendizaje múltiples (estilos bimodales o multimodales) y en la confianza y motivación de los estudiantes en el aprendizaje de inglés como lengua extranjera. A pesar de las limitaciones relacionadas con la asistencia presencial, la distancia de seguridad personal o el uso de mascarillas, el estudio se implementó durante el segundo semestre del curso 2020/21, en concreto entre febrero de 2021 y mayo de 2021. En total, 34 participantes del Grado en Turismo de la Universitat Jaume I participaron. Los 34 participantes estaban matriculados en dos grupos, el grupo A (con 21 estudiantes) y el grupo B (con 13 estudiantes). Debido al mayor número de estudiantes en el grupo A y a que la autora de esta tesis doctoral era la profesora de dicho grupo, se consideró más apropiado designar el grupo A como el grupo experimental y el grupo B como el grupo control. Así pues, el estudio se implementaría en ambos grupos pero las redes sociales solo se utilizarían en el grupo experimental.

El proceso de implementación del estudio se dividió en cuatro fases:

- Estudio preliminar: con el objetivo de obtener información de los participantes en relación a su nivel lingüístico y su grado de familiaridad y preferencias sobre las redes sociales, se implementaron dos cuestionarios, un test de nivel y un cuestionario preliminar.
- Precuestionario: se identificaron los estilos de aprendizaje de los participantes de ambos grupos con un cuestionario de estilos de aprendizaje.
- 3) Cuestionario de evaluación: se implementó el tratamiento del estudio (juego de rol) y, seguidamente, los estudiantes respondieron a algunas preguntas en relación a sus habilidades comunicativas, confianza y motivación.
- 4) Postcuestionario: con el objetivo de analizar las posibles diferencias entre los estilos de aprendizaje identificados antes de la aplicación del juego de rol, los participantes respondieron, por segunda vez, a las preguntas incluidas en el cuestionario de estilos de aprendizaje perceptuales.

Respecto a la primera pregunta de investigación, los resultados sugirieron que las actividades interactivas y significativas, como el juego de rol, aumentan efectivamente las habilidades comunicativas de los estudiantes. Cabe destacar que la actividad se diseñó explícitamente para este estudio, considerando aspectos como el nivel lingüístico de los participantes, las redes sociales que estos frecuentan y el grado en el que estaban matriculados. Por ello, los estudiantes afirmaron que la actividad les pareció idónea para aprender inglés y ayudar a mejorar sus habilidades lingüísticas y comunicativas. Además, el uso de los dispositivos electrónicos y móviles en el grupo experimental facilitó la interacción entre los participantes en un entorno multimodal, que se produjo de manera efectiva. En cuanto a la segunda pregunta de investigación, los resultados indicaron que un mayor número de estudiantes tienen estilos de aprendizaje múltiples. Es decir, son bimodales o multimodales. Por otra

parte, el uso de las redes sociales empodera los estilos de aprendizaje perceptuales, siendo el kinestésico el más potenciado. Sin embargo, el juego de rol implementado de un modo tradicional (con una grabadora de voz) solo potenció el estilo de aprendizaje auditivo. Por tanto, los datos obtenidos parecen afirmar que la exposición a los dispositivos digitales y, consecuentemente, a entornos multimodales, ha causado un mayor número de estudiantes con estilos de aprendizaje múltiples. Por último, la mayor parte de los participantes se mostraron predispuestos a realizar actividades que incluyen material auténtico y que son interactivas y colaborativas. En concreto, se obtuvieron resultados positivos respecto a los niveles de confianza y motivación, sin diferencias significativas entre ambos grupos.

En conclusión, el estudio implementado ha estado sujeto a algunas limitaciones relacionadas con la cantidad de participantes, la adaptación o el diseño de los cuestionarios o el número de sesiones dedicadas a su implementación. Por tanto, esta tesis doctoral es el primer paso para el diseño de futuros estudios más complejos.