Student-Generated Job-Application Videos in English for Specific Purposes: Effects on Vocational Education and Training Students' Key Competences for Lifelong Learning

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Abbreviations

AR	Action Research
AWL	Academic Word List
CAF	Complexity, Accuracy, Fluency
CAR	Classroom Action Research
CALL	Computer-Assisted Language Learning
CBLT	Content-Based Language Teaching
CEFR	Common European Framework of Reference for Languages
CF	Corrective Feedback
CG	Control Group
CLIL	Content and Language Integrated Learning
DigComp	Digital Competence Framework for Citizens
EFL	English as a Foreign Language
EG	Experimental Group
ESL	English as a Second Language
ESP	English for Specific Purposes
EU	European Union
FL	Foreign Language
GSL	General Service List
HE	Higher Education
L1	Mother tongue/First language
L2	Second language
L3	Third language
LifeComp	Personal, Social and Learning to Learn Competence Framework
ESP	English for Specific Purposes
NS	Native speaker
NNS	Non-native speaker
PBLT	Project-Based Language Teaching
SL	Second Language
SLA	Second Language Acquisition
SLL	Second Language Learning
TR	Task Repetition
TBLT	Task-Based Language Teaching
VET	Vocational Education and Training

Tables

Figures

Abstract

Equipping individuals with relevant lifelong learning competences requires methodologies that involve authentic and cross-curricular learning. We examined the effects of two teaching approaches to a career-oriented English programme on the development of students' key lifelong learning competences, in particular the personal, social and learning to learn, the multilingual and the digital key competences. To this end, we conducted a study with 18 students from two Higher VET groups enrolled in a Professional English module for job search. The experimental group completed a project involving the creation of a job-application video, while the control group continued with regular lessons and a coursebook-based curriculum.

This study used a mixed-method quasi-experimental pre-post-test design with non-equivalent groups. Therefore, before and after the intervention, all participants produced a written and read-aloud self-presentation, sat two tests on language and career management skills and completed a questionnaire on digital skills. The language-specific test assessed students' knowledge of collocations and professional terminology for job search, while the career-related test assessed students' self-awareness, opportunity awareness and job-search skills. The resulting corpus of self-presentations, including 36 texts and 36 voice tracks, was analysed for complexity, accuracy and fluency to assess linguistic competence development, while genre analysis allowed for the assessment of pragmatic competence development.

The job-application video led to improved career management skills, in particular to statistically significant improvements in self-awareness and job-search skills as well as improved opportunity awareness, while the traditional approach failed to develop career management skills, resulting in lower self-awareness, opportunity awareness and job-search skills. In the experimental group, participants' self-presentations successfully combined objective data on qualifications and work experience with subjective but relevant content on transferable skills, goals and interests, which were justified

appropriately. Instead, in the control group, participants' self-presentations lacked adequacy and persuasiveness due to their reliance on objective statements about previous jobs and qualifications without mentioning what they had learnt to do or how this would benefit the employer, thus failing to provide a rounded picture of the candidate and describe a relevant self.

Additionally, in the experimental group, students produced more accurate and fluent written texts and more accurate spoken output. The productions became lexically more complex, sophisticated and varied but syntactically less complex, all values reaching statistical significance, whereas in the control group, students' productions decreased in syntactic complexity and lexical sophistication as well as in written and spoken accuracy, and increased significantly in lexical variation and slightly in fluency. Similarly, the video project led to improved knowledge of collocations and a statistically significant improvement in professional vocabulary, while those aspects remained the same in the traditional approach.

Finally, the experimental group achieved a statistically significant improvement in digital skills, and the students' perceptions regarding the course's effectiveness for digital development were statistically significantly better than the control group's, which revealed slight and statistically non-significant improvements in digital skills.

Keywords: Vocational Education and Training, English for Specific Purposes, key competence, multilingual key competence, career management skills, digital key competence, personal, social and learning to learn key competence, job-application video.

Resumen

Dotar a los individuos de competencias relevantes para el aprendizaje permanente requiere metodologías que impliquen aprendizaje auténtico y transversal. En esta tesis comparamos los efectos que dos enfoques didácticos de un programa de inglés orientado a la búsqueda de empleo muestran en el desarrollo de competencias clave de aprendizaje permanente de alumnado de Formación Profesional, en particular la competencia personal, social y de aprender a aprender, la multilingüe y la digital. Para ello, realizamos un estudio con 18 estudiantes de dos grupos de Grado Superior matriculados en el módulo de Inglés Profesional que incluía un programa de inglés orientado a la búsqueda de empleo. El grupo experimental creó una vídeo-presentación y el grupo de control continuó con el programa habitual del libro de texto.

Este estudio utilizó un método mixto cuasi-experimental con diseño pre-post-test de grupos no equivalentes. Por lo tanto, antes y después de la intervención, todos los participantes redactaron y leyeron en voz alta una presentación profesional, realizaron dos pruebas de contenido lingüístico y profesional y completaron un cuestionario sobre habilidades digitales. La prueba lingüística evaluó su conocimiento de colocaciones y terminología profesional para la búsqueda de empleo, mientras que la prueba profesional evaluó el grado de auto-concepto, conciencia de oportunidades y habilidades de búsqueda de empleo. El corpus de presentaciones de 36 textos y 36 pistas de voz se analizó en cuanto a complejidad, precisión y fluidez para evaluar la competencia lingüística, mientras que la competencia pragmática se determinó mediante análisis de género.

La metodología de la video-presentación resultó en una mejora de las habilidades de gestión profesional, en particular una mejora estadísticamente significativa del auto-concepto y de las habilidades de búsqueda de empleo, así como en una mejora de la conciencia de oportunidades, mientras que la metodología tradicional no logró desarrollar las habilidades de gestión profesional, ya que disminuyó el grado de auto-concepto, de conciencia de oportunidades y de habilidades de búsqueda de empleo. En el grupo

experimental, las presentaciones combinaron con éxito datos objetivos sobre cualificaciones y experiencia laboral con contenidos subjetivos pero relevantes sobre habilidades transferibles, objetivos e intereses justificados adecuadamente. En cambio, en el grupo de control, las presentaciones mostraron falta de adecuación y capacidad de persuasión debido al uso dominante de datos objetivos sobre cualificaciones y experiencia laboral y la ausencia de información sobre habilidades adquiridas y beneficios potenciales para el empleador, por lo que los estudiantes no ofrecieron un perfil completo del candidato ni describieron un yo relevante.

Además, en el grupo experimental, los estudiantes produjeron textos escritos de mayor precisión y fluidez, con un léxico más complejo, sofisticado y diverso, pero de menor complejidad sintáctica, alcanzando todos los valores significación estadística. Sus producciones orales también fueron más precisas. En el grupo de control, las producciones disminuyeron en complejidad sintáctica y sofisticación léxica, así como en precisión escrita y hablada, y aumentaron significativamente en variación léxica y ligeramente en fluidez. Del mismo modo, el proyecto de vídeo dio lugar a una mejora del conocimiento de colocaciones y a un incremento estadísticamente significativo de vocabulario profesional, mientras que el grupo de control aumentó el conocimiento de vocabulario profesional ligeramente y descendió sus resultados en conocimiento de colocaciones.

Por último, el grupo experimental logró una mejora estadísticamente significativa en las competencias digitales, y las percepciones del alumnado respecto a la eficacia del curso para el desarrollo de competencia digital fueron significativamente más positivas que las del grupo de control, que mostró una mejora leve pero estadísticamente no significativa en competencias digitales.

Palabras clave: Inglés para Fines Específicos, Formación Profesional, competencia clave, aprendizaje permanente, multilingüe, digital, vídeo-presentación, búsqueda de empleo.

Introduction

Rapidly changing environments have made lifelong learning fundamental for the future workplace, thus forcing the formal education sector to adopt a suitable learning model. Vocational Education and Training (VET), as a primary source for skilling, upskilling and reskilling the workforce as required to adapt to change, plays an essential role in equipping individuals with the competences they require to get, keep and manage work (European Commission, 2010b). The Framework of Key Competences for Lifelong Learning identified eight key competences required for employability, active citizenship and personal fulfilment (European Commission, 2016), which, according to research, cannot be acquired through curricula that are not based on real life and the demands of the workplace. Instead, they require different methodologies such as cross-curricular or innovative approaches, which imply authentic learning (Boahin & Hofman, 2013).

However, at the VET College where this study was conducted, the Professional English module syllabus adopted a traditional teacher-centred approach that overlooked the development of key competences, thereby failing to embed lifelong learning into formal education. The current study is grounded on Action Research (AR) and seeks to validate student-generated job-application videos as an effective teaching approach to career-oriented English for Specific Purposes (ESP) instruction. This study will examine and compare the effects of a traditional teacher-centred methodology and a student-generated job-application video approach on the development of VET students' key competences for lifelong learning, in particular the personal, social and learning to learn competence and the multilingual and digital competences.

The first key competence analysed in this study will be the personal, social and learning to learn key competence, with a focus on the personal area and, in particular, on career management skills, which involves a four-dimensional cyclical process that consists of (i) raising self-awareness of one's strengths and weaknesses; (ii) raising awareness of educational and job opportunities and requirements; (iii) setting goals and making

decisions; and (iv) developing job-search and self-presentation skills (Sala et al., 2020). It is often erroneously assumed that VET students have already developed career management skills through formal training or work experience (Vuorinen & Watts, 2012). Research indicates, however, that students lack self-awareness of their strengths and weaknesses (Rivers & O'Brien, 2018), effective job interviewing and self-presentation skills and abilities to effectively analyse a job advertisement or create a résumé (Keiper et al., 2019). Employment projects are frequently incorporated into VET courses to help students navigate the job market, and the creation of job-search documents, such as application letters, is a widespread type of project. However, though these documents are critical for developing students' employability skills, to the best of the author's knowledge, there is no research on cross-curricular scenarios embedding career management skills into ESP.

The second key competence analysed in this study will be the multilingual key competence, which is defined as "the ability to communicate effectively and adequately in a variety of languages" (European Council, 2018, p. 8). ESP is frequently criticised for overlooking the communicative nature of language, favouring discipline-specific linguistic repertoires. Language development and proficiency level have been extensively analysed by Second Language Acquisition (SLA) researchers using CAF (complexity, accuracy and fluency) measures (Beers & Nagy, 2009; Blake, 2000; Bygate, 2006; Bygate & Samuda, 2005; Norris & Ortega, 2009; Storch & Tapper, 2009). However, research has shown that a learner's language ability requires not only syntactic sophistication but also discourse and sociolinguistic repertoires to be able to adapt to communicative demands (Ortega, 2003). Communicative adequacy, defined as "the degree to which a learner's performance is more or less successful in effectively achieving the communicative goal" (Pallotti, 2009, p. 596), has also been pointed out as an essential measure of language ability and a key objective in language pedagogy and testing (Council of Europe, 2018), which should be analysed together with CAF (De Jong et al., 2012; Kuiken et al., 2010; Pallotti, 2009;

Vasylets et al., 2020; Young, 2011). While studies on L2 speaking and writing have employed general measures for assessing the complexity, accuracy, and fluency (CAF) of L2 performance, only a few studies in SLA research have reported on the communicative success and adequacy of such L2 output.

The third key competence targeted in this study will be the digital key competence, defined as "the capacity to learn, work and participate in society using digital technologies" (European Council, 2018, pp. 9–10). In the contemporary era, the success of students in becoming engaged citizens and successful future employees has been linked to digital literacy, and it has been argued that without the right set of digital skills, individuals are likely to be left behind in various aspects of life – from employment to social interaction (Pangranzio, 2016). Teachers commonly tend to overestimate students' digital skills (Cunningham, 2011; Green & Crespi, 2012) because the digital generations look comfortable and confident using technology. However, being digitally competent is not about using the latest smartphone but about how these digital technologies are used. The new view of digital competence encompasses a broader set of skills and knowledge, such as information searching, digital communication and collaboration, or digital content creation, and research has shown that students tend to struggle to effectively manage in technology-driven learning environments (Aksel & Gurman-Kahraman, 2014; Green & Crespi, 2012; Khojasteh et al., 2013; Miller et al., 2012; Mohamad et al., 2016). Similarly, recent studies have started to explore the use of video in ESP to promote lifelong learning and have pointed to student-generated video as an instrument for organising and communicating students' experience and building their professional image (Cattaneo, 2019). Therefore, the objective of this study is to investigate and compare the effects of both a traditional teaching methodology and a teaching approach based on student-generated job-application videos on students' career management skills, L2 communicative competence and digital skills development.

This study aims to contribute to the improvement of ESP teaching practices and the integration of lifelong learning. We believe that the findings will aid teachers seeking to implement methodologies that assist students in developing key competences. Additionally, it is an attempt to pave the way for future research, as we will delve into several areas with great potential for ESP instruction, including career management skills, pragmatic competence and digital content creation. To date, only a few studies have used CAF to assess the instructional effectiveness of specific methodologies (Blake, 2000; Bulté & Housen, 2012; Spring, 2020; Storch & Tapper, 2009; Xudong et al., 2010) and only a handful of studies have looked at CAF and communicative adequacy (Kuiken et al., 2010; Vasylets et al., 2020). Comparing the effectiveness of both approaches from three key perspectives on ESP (occupational, linguistic and digital) will provide a holistic and realistic picture of their strengths and weaknesses. Therefore, it is worth investigating whether a job-application video creation project and a traditional teaching approach to career-oriented ESP instruction can help students develop their career management skills, communicative competence and digital skills.

There does not appear to be a single term in the literature for "the video clip in which an applicant makes a self-presentation" (Tseng, 2010). Several authors have referred to it as "video CV" (Andrés, 2019; Cole et al., 2007; Lattanzi et al., 2012); other researchers have used "video résumé" (Derous et al., 2012; Ding & Ding, 2012; Kelly & O'Brien, 1992; Waung et al., 2017), while others have called it an "application video" (Hiemstra et al., 2012; Tseng, 2010). The job-application video is a video-based job application rather than a video-based curriculum vitae, as the "video CV" name implies. Video-based job applications encourage candidates to highlight their identity, their motivation to apply for the position, and the value they can bring to the new employer. Throughout this paper, a "job-application video" or "application video" is the term used to mean a video self-presentation that supplements, rather than replaces, the résumé. The other terms will be used only to describe or refer to a study that makes use of the

particular term. All terms, however, including "video résumé", "video CV", "application video" and "job-application video", should be treated as synonymous.

This dissertation is divided into five chapters. Chapter 1, *Literature Review*, contains a four-section review of previous literature on the topics this thesis deals with. First, employability and key lifelong learning competences are discussed before delving into each of the three key competences examined in the study, the personal, social and learning to learn competence, the multilingual competence and the digital competence. Each section summarises the most recent research on VET and ESP. Chapter 2, *The Study*, begins with an introduction to the rationale of the research and the research questions, followed by a description of the participants, tasks and materials, and concludes with an explanation of the procedure and a breakdown of the data analysis and codification processes. Chapter 3, *Results and Discussion*, presents and elucidates the results based on the research questions included in Chapter 2. The findings are then discussed in order to address the research questions. In Chapter 4, *Conclusions*, the research questions are briefly addressed to then discuss the dissertation's limitations and future research directions, and its conclusions and pedagogical implications. After this chapter there is a reference list, followed by the Appendices.

1. CHAPTER 1 LITERATURE REVIEW

This chapter will examine the theoretical underpinnings of the thesis across four sections. It will briefly address employability and, taking the Recommendation on Key Competences for Lifelong Learning (European Union, 2018) as the basis, will then focus on three key competences. First, the personal, social and learning to learn competence will be described, followed by the multilingual competence and the digital competence. Each of them will be first defined and then their supporting theoretical background and previous literature relevant to this study will be analysed.

1.1 Employability

In today's uncertain labour context, a concept of extreme relevance is employability. Employability – an individual's ability to gain, perform in and hold a job – is strongly related to an individual's skills, continuous improvement and available development opportunities (Andrews & Russell, 2012). Though employability is often used as a synonym for work-readiness, Yorke (2006) drew a clear distinction between work-readiness, which is a set of conditions necessary for gaining initial employment, and employability, which goes beyond that and refers to a skill set, both generic and discipline-specific, as well as personal attributes that are relevant to employment and demanded by the market. Watts (2006) identified three groups of definitions of employability depending on their focus: (i) "immediate employment" refers to first-employment, and it is a standard performance indicator in Higher Education (HE); (ii) "immediate employability" concerns the acquisition of a graduate job and usually focuses on the readiness of students to work; and (iii) "sustainable employability" includes "not only the wider range of attributes for successful employment but also the attributes required to manage career development in ways that sustain employability" (p. 7).

More recently, Holmes (2013) also pointed to the lifelong nature of employability and to the need to move beyond a "possessional" approach, which implies having the skills

and knowledge required to acquire and maintain a job, to a "processual" approach which involves ongoing sense-making, self-discovery and self-construction (p. 540). In fact, identity is key to the processual perspective of employability, with individuals progressively constructing and refining their career and life identities (Bridgestock, 2009; Jackson, 2016; Savickas, 2011; Tomlinson, 2017). Emerging perspectives of employability include a wide range of areas, such as professional identity, skills transfer, networking or career management (Bridgestock, 2009; Jackson 2019; Williams et al., 2016; Wilton, 2014; Zegwaard et al., 2017).

At the European Union (EU) administrative level, employability has also been on the roadmap with the *Europe 2020 Strategy*, which was the EU's agenda for the 2010–2020 decade and aimed to ensure a smart, sustainable and inclusive economic growth through knowledge and innovation (European Commission, 2010a). According to the agenda, higher employability was the precondition for achieving an increased employment rate, and the preconditions for higher employability were (i) enhancing and adapting general and vocational training to new conditions and forms of work; and (ii) implementing lifelong learning principles (Budginaité et al., 2016). Societies will remain competitive if their workforce is equipped with the right skills, and this primarily depends on VET, which plays a vital role in providing young people with skills and is responsible for continuous professional development and learning, essential for upskilling and reskilling. However, fulfilling the demand for skills requires the education system and the institutions to keep pace with change. This is why, from the first days of European cooperation, VET has been at the core of the EU project.

The *Copenhagen Declaration* 2002 launched a European strategy for enhanced VET cooperation, named the *Copenhagen Process*, to improve VET. In 2010, the *Bruges Communiqué* improved the European cooperation on VET further and highlighted the need to enable VET students to acquire knowledge, skills and competences (not purely

occupational but broader competences – called key competences) critical to get, keep and manage jobs (European Commission, 2010b). Likewise, in 2015, the *Riga Conclusions* pushed the strategy further by including five priority areas for 2015–2020. One of these areas focused on strengthening VET curricula further by providing opportunities to acquire or develop key competences through VET (European Commission, 2016). In 2016, the New Skills Agenda for Europe stressed the need for more relevant and efficient abilities to cope with digital and technological progress, global competition and demographic adjustments. The Agenda aimed to equip citizens with the right skills to respond to new labour market requirements and improve employability (Bachmann et al., 2016). In 2020, the COVID-19 pandemic broke out, accelerating digital transformation and underlining the importance of life skills and our capacity to adapt, manage change, and care for each other as a community. In response to the COVID-19 crisis, the Commission set objectives, which built upon the 2016 Skills Agenda, to be achieved by 2025. It underlined the importance of improving and adapting skills, knowledge and competences, and emphasised the need for a paradigm shift on skills (European Commission, 2020).

The New Skills Agenda's first action priority focused on improving skills intelligence for better career choices, and argued that individuals require information about skills and appropriate means to (self-)assess and present their skills and qualifications effectively when looking for a job or considering what and where to learn. The New Skills Agenda's second strand focused on skill acquisition as a lifelong process, both formal and informal. Employers are not only looking for discipline-specific expertise, but also for core competences such as literacy, numeracy, foreign languages and transferable skills such as collaboration, creativity, digital literacy, critical thinking, problem-solving and learning to learn. However, curricula frequently undervalue such abilities and rarely assess them. As a result, the Commission decided to revise the 2006

Key Competences Framework in order to encourage more people to acquire core skills and to participate in education and training (Soldi et al., 2016). The 2006 Recommendation on Key Competences for Lifelong Learning aimed to "identify and define the key competences necessary for personal fulfilment, active citizenship, social cohesion and employability in a knowledge society" (European Council, 2006, p. L 394/13) and defined eight key competences: (1) communication in the mother tongue; (2) communication in foreign languages; (3) mathematical competence and basic competences in science and technology; (4) digital competence; (5) learning to learn competence; (6) social and civic competence; (7) sense of initiative and entrepreneurship; and (8) cultural awareness and expression.

In 2016, the European Commission initiated a consultation process with Member States representatives for school education, VET and Higher Education (HE) to review the 2006 Recommendation. Some of the main findings were the need to strengthen the Framework's relevance for VET, HE, adult and non-formal learning and the presence of personal and social development aspects across education and training levels and sectors. The learning to learn competence had to reflect better adaptability to multiple learning environments, including work-based and workplace contexts. It also needed to accommodate career management-related aspects, including knowledge, skills and attitudes linked to career choices, work–life balance, and life or career stages. The concept of wellbeing partly implied that, but an explicit reference was necessary. As a result, in May 2018, the European Council adopted an updated Recommendation on Key Competences for Lifelong Learning stating that "in a rapidly changing and highly interconnected world, each person will need a wide range of skills and competences and to develop them continually throughout life" (European Council, 2018, p. 7). The Recommendation redefined the previous eight key competences into: (1) literacy; (2) multilingual competence; (3) mathematical competence and competence in science,

technology and engineering; (4) digital competence; (5) personal, social, and learning to learn competence; (6) citizenship; (7) entrepreneurship; and (8) cultural awareness and expression.

To sum up, this section has provided an overview of employability, which refers to the skill set required to perform successfully in the labour market. As such, it is a dynamic concept that is constantly evolving to reflect current labour market requirements. Employability skills are necessary because individuals cannot rely on a set of specialised technical skills to succeed in today's labour market; rather, they require a set of cross-cutting, cross-disciplinary skills that they can apply across contexts. However, emerging conceptualisations of employability suggest that a changing market also entails a changing career path that individuals must navigate. Individuals therefore require a set of personal development and management abilities in addition to technical and transferable skills, specifically career management abilities, which can be used to manage professional development by making appropriate decisions and career choices based on available information and making sense of learning experiences. Lifelong learning is at the core of all employability skills and, in light of the need to provide students, especially in VET contexts, with lifelong learning competences, the purpose of this study is to investigate the effects of a student-generated job-application video approach on three of the key ompetences for lifelong learning: the personal, social and learning to learn competence, the multilingual competence and the digital competence.

1.2   The Personal, Social and Learning to Learn Competence

The Framework of Key Competences for Lifelong Learning provided the following definition of this competence:

> The personal, social and learning to learn key competence refers to the ability to reflect upon oneself, effectively manage time and information, work with others in a constructive way, remain resilient and manage one's own learning and career. It includes the ability to cope with uncertainty and complexity, learn to learn, support one's physical and emotional well-being, to maintain physical and mental health, and to be able to lead a health-conscious, future-oriented life, empathise and manage conflict in an inclusive and supportive context (European Council, 2018, p. 10).

The 2018 Recommendation replaced the 2006 one and resulted in specific changes relevant to this study. The document added personal and social development to the former learning to learn competence (European Council, 2006). Both Recommendations linked autonomy to learning to learn; however, the new competence also linked it to career management (Caena, 2019). Changes in society, technology, and the global job market have made transferable skills like this one key to personal and professional success. Non-cognitive skills are required to adapt to changing employment patterns (Brunello & Schlotter, 2011; Gutman & Schoon, 2013), and research has established that socio-emotional abilities are critical for a successful life and career path, as well as that emotional, social and academic education are interdependent in formal education (Thompson & Lagattuta, 2006). Given these challenges, the personal, social and learning to learn key competence should be viewed as a set of skills that individuals can develop throughout their lives in order to thrive in the modern world.

The *LifeComp* is a conceptual framework for the personal, social and learning to learn key competence developed by the Joint Research Centre (JRC) (Sala et al., 2020) with the aim of systematising how to improve personal and social competences through education and lifelong learning, as well as promoting learning how to learn. The *LifeComp* Framework is not prescriptive, but rather a validated description of the key competence components. Though competences typically include knowledge, skills and attitudes, this framework takes a holistic view of competence interdependence as a complex ecosystem. All these skills are complementary and necessary for the 21st century and are also known as life skills, soft skills, socio-emotional competences, non-cognitive skills, transferable competences, 21st-century competences, or competences for 2030 (European Council, 2018).

The *LifeComp* Framework is structured around three areas (see Figure 1): the Personal Area, the Social Area and the Learning to learn Area, each of them has three competences, and each of those competences has three descriptors.

Figure 1 *The LifeComp Framework*
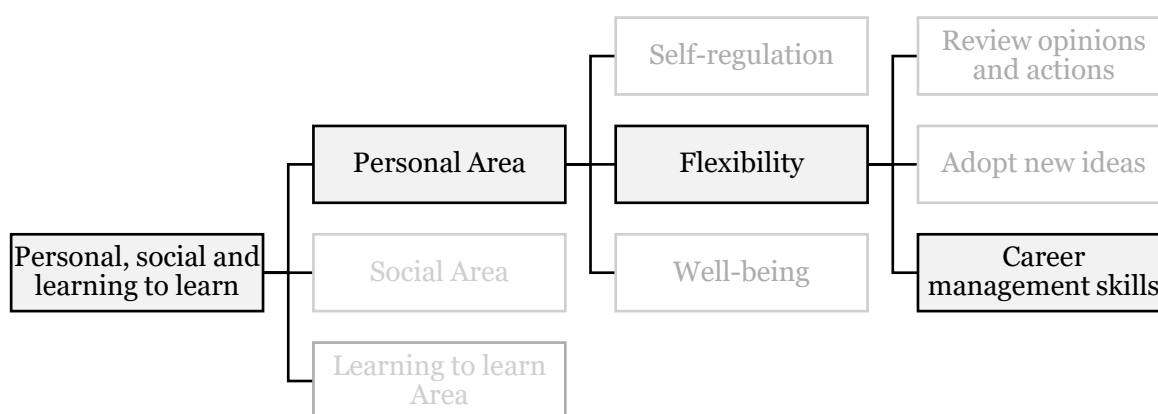
Flexibility is one of the three competences included in the Personal Area and involves having the capacity to adapt to new situations and to adjust to accommodate to changes. Flexibility has three descriptors and the third one deals with career management

skills and the ability to proactively look for opportunities, learn continuously, understand and adapt to different employment contexts at any age, setting meaningful goals and making effective career decisions towards successful transitions.

The European Lifelong Guidance Policy Network (ELGPN, 2007–2015) defined career management skills as follows:

> These are a range of competences that provide structured ways for individuals and groups to gather, analyse, synthesise and organise self, educational and occupational information and the skills to make and implement decisions and transitions. Therefore, they are of value to the individual in constructing and implementing a life project in which work […] occupies a central place (Vourinen & Watts, 2012, p. 21).

The *LifeComp* Framework's notion of career management skills is based on career(s) education as defined by Watts (2006), following Law and Watts' (1977) DOTS model, which includes four key aspects leading to employability: Decisions, Opportunities, Transition and Self. The most likely order of development for students is S-O-D-T, as self-awareness must precede awareness of opportunities, and decision-making needs to be learned to facilitate transitional learning (Young, 2019). Therefore, the *LifeComp* Framework's notion of career management skills is a set of planned experiences designed to facilitate the development of skills in those four dimensions: self-awareness, opportunity awareness, decision learning and transition learning (see Figure 2). Based on the Association of Graduate Careers Advisory Services (Stanbury, 2005), the first dimension, self-awareness, is the ability to be aware of one's personality and skills in order to use those skills better. Students should make realistic self-appraisals with career implications: their actual and potential competence, interests, values, priorities and influences. Self-awareness is based on applied psychology and addresses the subjective question of what an individual wishes to accomplish and is capable of accomplishing. The

second dimension, opportunity awareness, refers to the knowledge of opportunities and requirements. This process allows students to explore the full range of options available and develop their research skills, because they need to retrieve and analyse job information. The third dimension, decision learning, refers to making informed decisions, which is a juxtaposition of self-awareness with opportunity awareness. Finally, the fourth dimension, transition learning, comprises job-search and self-presentation skills. Transition learning deals with the ability to identify and grasp opportunities effectively. This process builds on the previous dimensions and the student's idea of how career and personal priorities could transfer between contexts. Job-search skills are necessary to justify and implement personal choices, and students need to develop their abilities to design a CV and an application letter, cope with interviews or complete an application form effectively. The biggest challenge for learners here is whether they can demonstrate that they are suitable for the job.

Figure 2 *The DOTS Model*
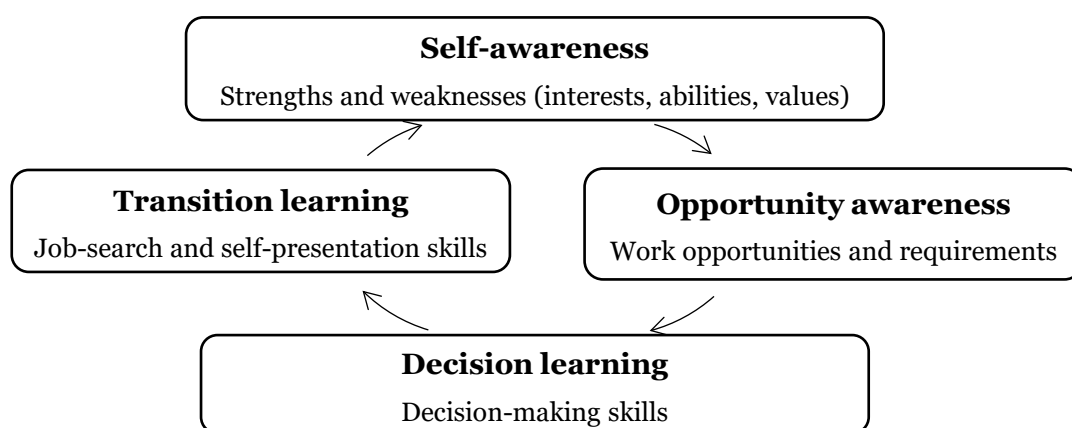
According to research, VET students' overall career management skills are average (Zakaria et al., 2017), as are their abilities to find work, set career goals, write a professional résumé or manage a job interview effectively (Keiper et al., 2019). Along with self-discovery of strengths and interests, and their alignment with potential career paths, students must develop critical job-search skills. For instance, proficiency in professional

communication, both verbal and written, is critical for career preparation and networking (Batistic & Tymon, 2017; De Janasz & Forret, 2008; Gerard, 2012). Employers value candidates who are proficient in written communication (Jaunarajs & McGarry, 2018; Rivers & O'Brien, 2018) and can, for instance, write professional emails (Rivers & O'Brien, 2018; Stevens, 2005). However, research has shown that graduates lacked adequate communication skills, particularly in oral and written communication (Keiper et al., 2019). In particular, non-native speakers seemed to lack vocabulary impression management skills, personal presentation skills and business etiquette (Stevens, 2005). Likewise, according to research, when acting as candidates, students lacked awareness of their strengths and weaknesses (Rivers & O'Brien, 2018) and critical interviewing skills, such as developing a professional attitude or demonstrating position-related knowledge (Keiper et al., 2019).

Research has shown that students find it challenging to obtain a position in their field (Amoroso & Burke, 2018; Helyer & Lee, 2014; Jackson, 2019; Keiper et al., 2019). Similarly, research has reported that guidance and development of career management skills can improve career awareness (Koys, 2017), academic performance (Evans & Burck, 1992), school-to-work transitions (Pinquart et al., 2003), employability success (Eby et al., 2003), general satisfaction and performance levels at work (Judge & Bono, 2001) and even salaries (Day & Allen, 2004). Career management activities seemed to benefit goal identification and action plans (Laker & Laker, 2007), motivation, decision-making (Meijers et al., 2013), written communication (Crowne et al., 2020), confidence and professional skills, such as professional outlook in interviews and résumé building (Crowne et al., 2020). On the other hand, according to research, students thought that career management activities had helped them consider their abilities, interests and values, as well as the skills required for the discipline, and hap helped them improve their skills to fit their personal abilities to those required in the market (Damninger et al.,

2009). Furthermore, some authors reported that making students work on career-related documents improved their understanding of their strengths and weaknesses, developed their self-awareness and generated interest and motivation (Sibson & Reope, 2016). Therefore, it can be argued that VET institutions should help students develop career planning and practical job-search skills and prepare career-related documents such as résumés and application letters (Laker & Laker, 2007).

1.2.1 Documents for Job Search

Indeed, VET courses usually include employment projects to teach students how to create job-search documents such as résumés and application letters. The latter was the first document to be categorised as a promotional genre by Bhatia (1993), who stated that "the genre of job application letter belongs to the larger category of promotional literature and is similar to advertisements, company brochures and leaflets because it is written in an attempt by the candidature to promote himself or herself. The prior intention of job application letter is to convey communicative purpose in a most persuasive manner, so that the particular candidate will achieve to obtain the desired job applied for" (p. 93). Bhatia (1993) identified a structure in seven moves. As can be seen in Figure 3, each of these "moves" represents a functional text unit used to achieve a particular communicative goal that contributes to fulfilling the genre's communicative purpose.

Figure 3 *Move Structure of Job Application Letters*
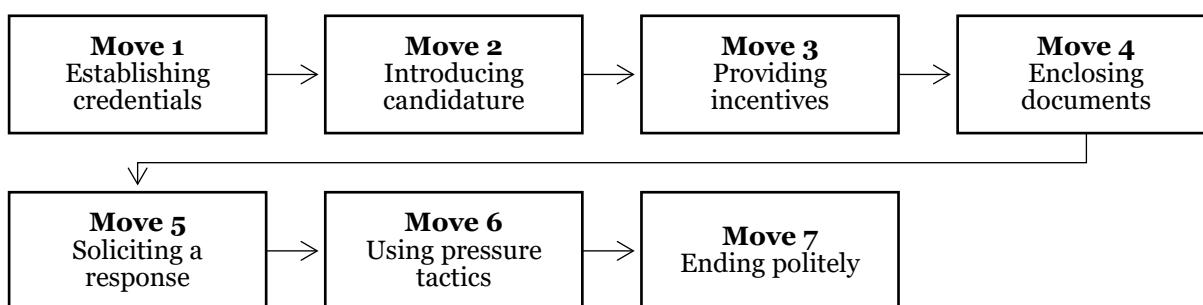
As can be seen in Figure 4, a move is a functional text unit used to achieve a particular communicative goal that contributes to fulfilling the genre's overall communicative purpose. Moves vary in length and size, usually have at least one proposition (Swales, 1990) and consist of specific strategies or steps to accomplish the move communicative goal. These strategies or steps use certain lexico-grammatical/ linguistic features (style, tone, voice, grammar, syntax) (Bhatia, 1997).

Figure 4 *Genre Structure*
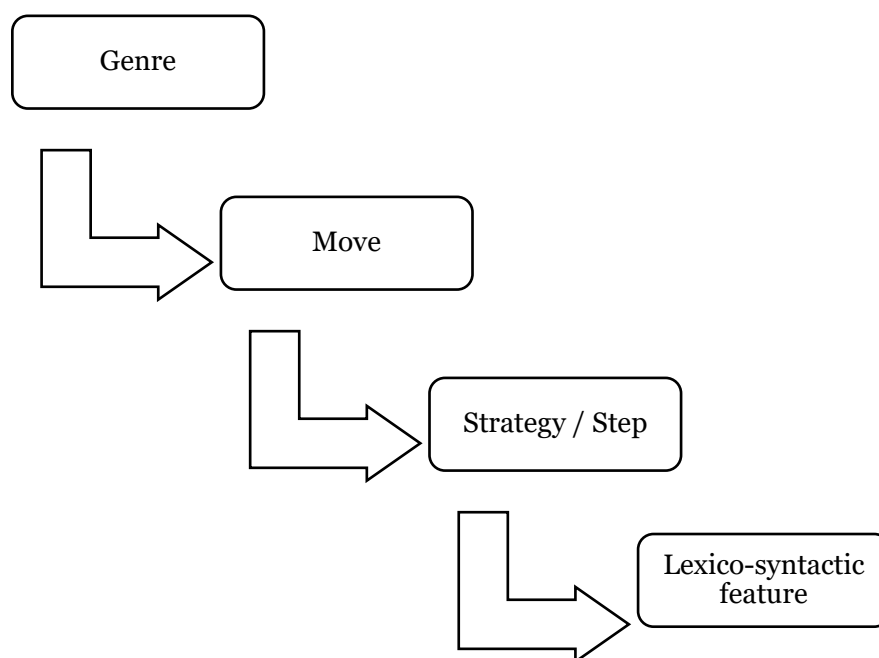
Bhatia's (1993) move structure led to many studies on different aspects of the application letter (Ding, 2007; Henry & Roseberry, 2001; Hou, 2013; Nahar, 2013; Rahim & Arifin, 2014). Henry and Roseberry's (2001) analysis of a corpus of native speakers' application letters examined the move structure, move order and the strategies used to realise the moves, and they identified eleven moves. The "Promotion" move was interpreted as encompassing Bhatia's (1993) "Establishing credentials" and "Offering incentives" moves. They also analysed the syntactic patterns and word collocations of each strategy used to realise the *Promoting the candidate* move and found that the five most

common strategies were "Listing relevant skills and abilities", "Stating how skills, abilities were obtained", "Listing qualifications", "Naming present job" and "Predicting success" (see Figure 5).

Figure 5 *Strategies Used to Accomplish the Promoting the Candidate Move*

Promoting the Candidate
- Listing relevant skills, abilities (34)
- Stating how skills, abilities wer eobtained (21)
- Listing qualifications (12)
- Naming present job (12)
- Predicting success (5)
- Listing publications (2)
- Giving reasons for leaving present job (2)
- Demonstrating knowledge of target position (1)
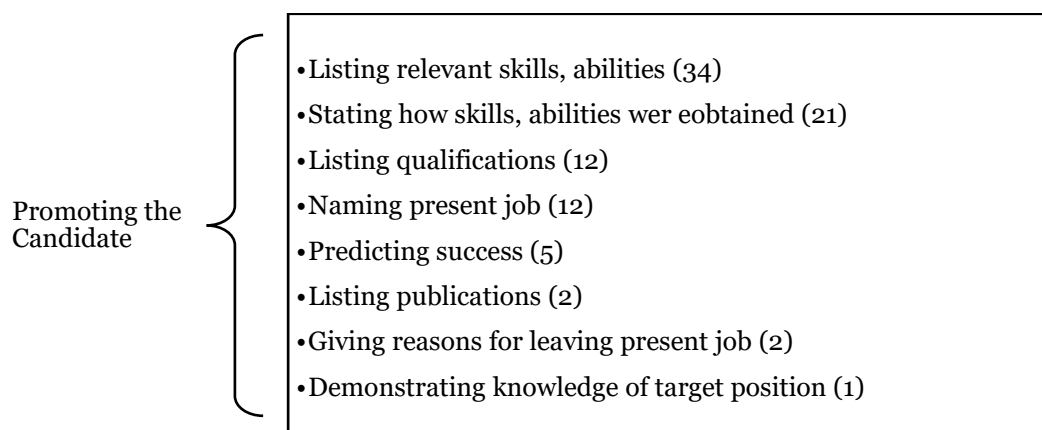
Tongpoon-Patanasorn and Thumnong's (2020) study analysed strategies of other moves and their associated features and synthesised common associated linguistic features from previous research studies (Al-Ali, 2004, 2006; Bhatia, 1993; Henry & Roseberry, 2001; Hou, 2013; Hou & Li, 2011; Hua, 2007; Thumnong & Tongpoon-Patanasorn, 2017; Upton & Connor, 2001; Wang, 2005). In addition, they provided examples from previous studies, thus illustrating how these linguistic features were used in real utterances.

The incorporation and prevalence of technology has resulted in the appearance of new formats of application letters and other texts fulfilling the same function. Innovative types of texts to apply for a job have been explored in an attempt to teach the genre to students through more innovative formats, and to help them improve their job-search skills and other relevant competences. However, although these documents may be more visually appealing and even multimodal, they share the promotional purpose and move structure of the application letter suggested by Bhatia (1993).

For example, social media résumés are entirely online and distributed to employers in the form of a link, but an analysis of the summary section of LinkedIn profiles' rhetorical content reported they shared many moves with Bathia's (1993) move structure o (Bremner & Phung, 2015). However, the study identified an additional move – Move 6 *Personal branding*, which was an attempt by writers to brand themselves by articulating a personal philosophy or distinctive approach to their work. The strategies used to realise the move were: (i) using first-person constructions such as "I believe", "My passion", "I am" and "I was born to" to provide a personal declaration of their beliefs and convictions; and (ii) labelling themselves in creative and distinctive ways, for example as an "information junkie", a "mobile active duty military spouse". Alternatively, writers also highlighted their uniqueness by providing a distinctive personal characteristic such as humorous or caring.

The infographic résumé genre combines a résumé and graphs, which allows the employer to see the candidate's skills and other necessary information creatively. Infographic résumés can offer an outstanding balance between rhetorical and aesthetic effectiveness (Toth, 2013). Using an infographic résumé provides an innovative means for students to stand out from the crowd and gives them active learning opportunities (Lee & Cavanaugh, 2014). Lee and Cavanaugh (2016) examined infographic résumés as tools for individual self-promotion, student reflection and purposeful course curriculum integration. They reported that infographic résumés served to transmit personal information through a visually attractive and engaging format that required students to reflect on their strengths and areas for improvement, thus providing the groundwork for self-analysis and self-branding (Lee & Cavanaugh, 2016). Nevertheless, the study was exploratory and did not collect or analyse any data.

ePortfolios have also been studied and found to be an inventory of acquired knowledge and skills (Munday et al., 2017). The narrative nature of an ePortfolio allows

candidates to imagine a self-constructed identity, to convey and to refine it over time (McAlpine, 2005). ePortfolios encourage skills uptake, such as organising, collecting, classifying evidence; use of tools and reflection; discipline-specific knowledge, learning and tasks; and critical thinking, through synthesis and evaluating information. Students manipulate their learning artefacts to demonstrate achievement in various content areas and develop skills for other areas, such as work readiness and identity development. Another benefit of ePortfolios is that they allow a broad audience to look into the learners' experiences, self-image, personal and social attitudes, values and life circumstances (Porto & Walti, 2010). Self is a crucial element of professional development because self-assessment through self-reflection can benefit self-awareness of personal value, responsibility and contribution, thus making the portfolio suitable for career self-presentation (Gwozdek et al., 2013). Tools such as ePortfolios allow individuals to develop their brand (Cooper, 2014; Lee & Cavanaugh, 2014; Llopis, 2013; Poeppelman & Blacksmith, 2014), which should be drawn from personality, values and interests (Poeppelman & Blacksmith, 2014), and the examination of such characteristics is grounded in individual self-discovery (Toth, 2013), which the ePortfolio can facilitate. The branding process should not be the result of a quick fix but of a strategic process designed to make favourable impressions (Poeppelman & Blacksmith, 2014).

These new formats of documents for job search are a natural adaptation to digital communication requirements. However, though formats have changed, content and purpose remain mostly the same. Indeed, documents for job-search are intended to make the applicant's first positive impression on the future employer and to determine whether the applicant receives an interview request or a job offer, both indicators of success (Soroko, 2012). Research on job application letters has shown that writing a job application letter involves several communicative purposes, namely describing the candidate's qualities, persuading the reader, validating information or expressing

politeness. These purposes help achieve the primary purpose, which is to obtain a job interview (James et al., 1994).

Job applicants need to use impression management techniques (Bright & Hutton, 2000) and employ linguistic or pragmatic tactics to persuade the employer (Gilsdorf, 1986) and be successful. Impression management theory deals with tactics to build and transmit a specific image by controlling the information provided to others (Kacmar & Carlson, 1994). In particular, candidates use these tactics to control the perceived impression about their experience, skills and suitability for a given job (Gilmore & Ferris, 1989; Knouse, 1994). A succinct description of a candidate's knowledge, skills and abilities has been termed a *competency statement* (Bright et al., 1997; Earl et al., 1998) and research has evidenced that impression management using competency statements enhances the reader's perception of an applicant's interpersonal skills and self-confidence (Bright et al., 1997; Knouse, 1994).

Indeed, research has shown that there is a correlation between the candidate's self-presentation and being selected for an interview (Knouse et al., 2007). The applicants must emphasise that their qualifications, relevant expertise, personal attributes and strengths are sufficient to meet those requirements, as Bhatia (1997) claimed. He underlined that establishing the candidate's relevance to the job is the most complex form of self-presentation in written discourse. The candidate has a real self and, based on it, has to create a relevant self that represents the right, positive and convincing choice of the real self, according to Grice's (1975) Maxim of Relevance. The irrelevant, negative and less compelling aspects of the authentic self are skilfully disguised. In addition, self-representation in job application letters must be persuasive, to generate the correct emotional response from the reader, but credible. Self-appraisal is one of the most common strategies used for self-representation in promotional writing. It consists of a

description of the product or service in a relevant, positive and credible way, to indicate its value to the audience (Bhatia, 2014).

On the other hand, research has tried to identify persuasive techniques that could be transferred to students. The analysis of application letters performed by Rafaeli and Harness (2000, 2002) focused on the persuasive techniques candidates used for self-validation, i.e. validating themselves in their self-presentation. According to the researchers, application letters included objective and subjective information. Objective attributes involved accepted conventions of vocabulary and style and writers used accepted terminology ("I have a BA") to introduce themselves in a credible way to a target audience. However, subjective attributes (for example, having initiative) were more difficult because those claims can be challenged cmore quickly. Six self-validation sources used by candidates in their application letters to validate the subjective type of information were identified (see Figure 6).

Figure 6 *Self-Validation Techniques*

•"My claims about merit are true because…

Self–report	•… I say so."
Important others	•… an important person (such as my previous manager) says so."
External indicators	• … an authorisation says so."
Evidence of achievement	• … I have had successful accomplishments in the past."
Previous roles	• … I have performed a particular role."
Performance in similar situations	•… I (successfully) performed in a situation similar to the role."

Soroko (2012) analysed 182 application letters for self-presentation techniques and lexical content using a mixed-method approach to the study. The researcher identified a broad range of self-presentation strategies.

There are other formats which have been used as types of application letters, but one of the most promising ones because of the results and the skills development they can bring about for students are job-application videos.

1.2.2 The Job-Application Video

A job-application video is a short video which a candidate creates with relevant information about their academic background, work experience and extracurricular activities (Cole et al., 2007; Hiemstra et al., 2012). Job-application videos can vary widely in format, from a verbal description of skills and achievements to a format in which the candidate answers a set of questions and shows work samples showing job-relevant skills. Though there is no exact standard length, a job-application video is typically about one to two minutes long, like an elevator pitch. Research has shown that the main advantage of job-application videos over paper-based application letters is easier discrimination between candidates, because their interpersonal skills, personal traits and motivation for the position can be observed (Sas, 2016). As an emerging technology, a job-application video is much less standardised and offers candidates more room for creativity. Likewise, its preparation requires more effort, which can imply stronger interest in the job and commitment to goals. The second advantage of a job-application video is that it presents an in-depth portrayal of the candidate as a person.

Research on job-application videos has explored its effects on communication and professional development. Kelly and O'Brien (1992) researched video CV creation at the National Technical Institute for the Deaf (NTID) in New York. They studied the effects of a communication course on deaf students' communication skills in creating a video CV. The

researchers reported that students were highly motivated, and instructors could indirectly instruct English, speech pronunciation, prosody and sign production. Light et al. (1993) also described the creation of video CV for candidates with disabilities, and Rolls and Strenkowski (1993) studied a video CV project pilot and concluded that it could provide prospective employers with additional nonverbal and interpersonal information that benefited all stakeholders.

There have been several projects promoting video CV for professional development. For example, the EVA project (Lattanzi et al., 2012), run by a partnership of organisations in Italy, Greece, Spain and the UK, aimed to improve users' employability with a video CV. In particular, the EVA pursued the use of the video CV as a routine tool in employment centres and as an easily adaptable tool for unemployed young people, who made up the most affected group by the economic crisis. The results of the research highlighted several advantages. The video CV benefited users by allowing candidates' self-discovery of professional and social skills and abilities, thus allowing them to present who they are, what they can do and how they are. The tool benefited businesses because the video CV was a quick reference tool for filtering requests and lowering costs. Workers and counsellors benefited as well because the video CV was a useful tool for restructuring the process of matching supply with demand. It also benefited employment advisory and access services by increasing the response rate and market dynamism. As a result, the EVA project created a 59-page guide for creating video CV (Lattanzi et al., 2012). CUVID – Curriculum video – is a European initiative that aimed to assist young people in creating video-based curricula vitae. Additionally, it provided them with a platform for directly connecting their video curricula vitae to prospective employers. The CUVID project framework included a guide and toolkit to assist VET teachers, trainers and coaches in supporting their students in job search and application documents preparation (Cattaneo et al., 2019). Similarly, IN PLACE – Innovative Video Presentations for Learning Creative

Entrepreneurship – is a multi-organisational project aimed at fostering long-term, mutually beneficial relationships and collaboration between vocational schools and small and medium-sized business. The project entailed the creation of video podcasts to promote small local businesses (Cattaneo et al., 2019).

The Internet and social media have affected recruitment practices (Roth et al., 2016; Stoughton et al., 2014), and an increasing number of selection processes in Europe and the USA ask applicants to apply via a job-application video (Hiemstra et al., 2012). For example, in 2009 a worldwide recruitment programme was organised by Queensland Tourism in Australia that asked candidates to send a 60-second video message. Over 30,000 applicants worldwide responded to the invitation. More recently, according to the BBC, since Covid-19 struck, hiring managers have been forced to think outside the box about how to streamline their interview processes to attract more qualified candidates. With traditional face-to-face interviews on hold, some applicants have turned to asynchronous video interviews, or AVIs, in which they film themselves answering a predetermined set of questions without the presence of a human interviewer (Rubinstein, 2020).

Other studies have explored the job-application video as a job-search tool and have provided suggestions for supporting students in preparing job-application videos. For example, Sas (2016) interviewed career coaches and human resources staff to explore the value of the video CV for graduate employability, and reported that the video CV provided a "glimpse into who the candidate is like [as a] person" (p. 2) and supported interpersonal skills more effectively. Additionally, the video CV generated enthusiasm and motivation but also implied a risk of inappropriate disclosure, poor performance and unethical discrimination.

Hiemstra et al. (2012) and Gissel et al. (2013) studied applicants' intentions to apply with a video résumé. Other researchers have analysed the employer's perspective by

focusing on age-, attractiveness- (Derous et al., 2012) and gender-related biases (Waung et al., 2017).Waung et al. (2014) also analysed the impact of the résumé format on candidates' evaluation and found that candidates using video résumé were perceived as less extroverted than those based on paper résumés. Derous et al. (2012) conducted field experiments to analyse video versus paper résumés on applicants' personality and job suitability ratings. They did not identify differences in the result of the evaluation of candidates who presented a paper or a video résumé. However, Waung et al. (2017) found differences when they investigated the role of gender in video résumé screening by controlling how often a candidate used self-promotion statements and how intense the statements were. Results showed harsher ratings on social skills, credentials and organisational fit for the females using more intense and more frequent self-promotion and for the males using them less intensely and less frequently. Notably, the researchers found these effects only when evaluators were male. More recent research (Bellemare et al., 2020) evaluated the efficiency of video résumé on the rate of call-back for non-disabled and disabled workers using a large-scale field experiment. They randomly sent applications to 2,021 private firms posting vacancies, and some included a link to a video résumé. Although the results supported there was discrimination in the labour market, they showed that the benefit from video résumés applied to able and disabled applicants similarly. The latter were nevertheless discriminated against, as they were much less likely to be invited to an interview.

Among the very few studies in educational contexts, Andrés (2016) researched creating a video CV in higher education as an effective methodology for embedding employability in language learning. The study participants were Spanish students with a B1 level (CEFR). They followed a three-part process with clearly designed steps (plan, record, reflect) and results indicated that students developed employment skills and self-awareness while practising the language and learning about Spain's labour market. The

researcher noted that creating a video CV was an innovative project that integrated language learning and employability, and equipped students for real-life situations and introduced them to the world of work. Moreover, students learned to provide a positive image of themselves to prospective employers in Spanish while understanding how others saw them, negotiating their image in work environments and collaborating with others. According to students' feedback, the project helped them retain vocabulary, improve their intonation and pronunciation, and develop their interaction strategies with interlocutors. This study covered several key points relevant to this study, such as employability, language and skills development, a positive picture of the self, or authentic learning environments. Nevertheless, the paper presented several key limitations, such as a lack of information on the research methodology used, including participants, data collection and analysis, as well as a lack of detailed evidence of the main results of the study. Additionally, the conclusions were drew based on students' perceptions. On the other hand, the researcher did not analyse the effect of the video project on the development of digital skills, and the three-part process did not include the editing stage, which is a crucial stage when students compile all the elements to create their multimodal text.

Ding and Ding (2013) also explored the effects of a four-component multimodal employment project on 80 undergraduate students' rhetorical skills for self-presentation in employment documents. The study used four types of deliverables, namely a written résumé and application letter, a mock oral interview, a video résumé analysis, and a review of social media profiles, to provide students with a 360-degree understanding of the rhetoric in job-search documents. According to the researchers, students lacked understanding of the rhetorical features of the documents used for job search, and they tended to work at the lexical level under the mistaken belief that vocabulary could help make the document look professional. However, their understanding of the rhetoric behind professional self-presentations was low or non-existent. The idea of using four

components was to focus not only on content, but also on print, oral and in-person delivery.

The project was divided into three stages. The first phase was devoted to the creation of the written documents, specifically a CV and an application letter. The study required the students to analyse a real job offer of interest, mapping qualifications and job requirements, identifying appropriate action verbs, ranking experiences and skills in order of importance, and finally producing the two documents. The second phase focused on oral production in an interview setting and included a mock interview as well as a 30-second presentation of themselves, for which students were asked to dress formally. Finally, the third step involved the rhetorical review of two digital online documents: a video CV and a LinkedIn profile. In the case of the video CV, the analysis included non-verbal communication (gestures, voice, posture, eye contact or clothing), rhetorical effectiveness of the self-presentation, and the communicative adequacy of the content.

In the second phase, witnessing their peers' strengths and weaknesses made students aware of the rhetorical strategies for creating a more effective CV and application letter. In particular, the 30-second presentation appeared to be effective in making students aware of the importance of creating a positive impression during self-presentations and it helped students implement more effective ways of making a good impression in their written documents. Among the changes the students made to the CV and application letter were the use of a personal narrative to highlight skills and qualifications, the use of action verbs and the inclusion of skills and experience ranked according to their relevance.

In the third phase, the researchers' findings indicated that seeing the performance of other people with a greater or lesser degree of success had helped students become aware of different self-presentation styles. Some of the weaknesses the students identified were a lack of self-validation techniques, leading to empty claims of skills without

evidence to support them, inadequate or irrelevant information, and a lack of logical or effective organisation.

1.2.3 Summary

This section has focused on the personal, social and learning to learn key competence and has briefly compared the 2006 and the 2018 Frameworks (European Council, 2006, 2018), pointing to the emphasis the 2018 Framework placed on professional development skills needed to navigate in a constantly changing society. Then, *LifeComp*, the framework developed to foster and systematise the development of the skills covered by this key competence (Sala et al., 2020), has been presented as a conceptual framework that takes a holistic view of competence interdependence as a complex ecosystem. The description of the *LifeComp* structure has helped outline the three main competence areas and then served as a bridge to trace the journey from the personal area to one of its three competences, flexibility, and from flexibility to one of its three descriptors, which encompasses career management skills as a set of skills required for success in both the professional and personal spheres (Law & Watts, 1977; Vourinen & Watts, 2012; Watts, 2006). Then, the DOTS model that describes the four dimensions of career management skills has been outlined (Stanbury, 2005) to then continue with a review of research studies analysing VET students' career management skills (Batistic & Tymon, 2017; De Janasz & Forret, 2008; Gerard, 2012; Jaunarajs & McGarry, 2018; Keiper et al., 2019; Rivers & O'Brien, 2018; Stevens, 2005; Zakaria et al., 2017), in particular studies on the use of career-related documents (Sibson & Reope, 2016), such as résumés and application letters (Laker & Laker, 2007). It has been argued that developing career management skills is vital for students' employability and, therefore, projects are commonly implemented in VET to facilitate school-to-work transitions, particularly to develop students' skills to create effective job-search documents such as application letters (Bhatia, 1993; Ding, 2007; Henry & Roseberry, 2001; Hou, 2013; Nahar, 2013; Tongpoon-

Patanasorn & Thumnong, 2020; Thumnong & Tongpoon-Patanasorn, 2017), résumés and other digital documents, such as ePortfolios (McAlpine, 2005; Munday et al., 2017; Porto & Walti, 2010), video infographic résumés (Cooper, 2014; Gwozdek et al., 2013; Lee & Cavanaugh, 2014, 2016; Llopis, 2013; Poeppelman & Blacksmith, 2014; Toth, 2013), or LinkedIn profiles (Bremner & Phung, 2015).

Self-presentation has been described as an element relevant to the success of candidates and a review of the literature available on self-presentation and other related aspects such as impression management (Gilmore & Ferris, 1989; Gilsdorf, 1986; Knouse, 1994), competency statements (Bright et al., 1997; Knouse, 1994; Knouse et al., 2007), self-appraisal (Bhatia, 2014), self-validation (Rafaeli & Harness, 2000, 2002) and self-presentation techniques (Soroko, 2012) has been described. Finally, despite the paucity of research on the use of video CV as a pedagogical tool (Ding & Ding, 2013), in particular for the FL classroom (Andrés, 2016), research in other fields, such as professional development (Kelly & O'Brien, 1992; Derous et al., 2012; Light et al., 1993; Rolls & Strenkowski, 1993; Sas, 2016; Waung et al., 2017), job search (Bellemare et al., 2020; Cole et al., 2007; Gissel et al., 2013; Hiemstra et al., 2012), or European projects (Cattaneo et al., 2019; Lattanzi et al., 2012) that have used the video CV as a tool for promoting recruitment, has been presented.

1.3   The Multilingual Key Competence

According to the Framework of Key Competences for Lifelong Learning, the multilingual competence is defined as "the ability to use different languages appropriately and effectively for communication" (European Council, 2018, p.8). This competence shares the skill dimensions of literacy and deals with understanding others and expressing oneself in oral and written language in different contexts according to one's needs. It includes using various sources to search for, collect and process information, to use aids and to formulate arguments convincingly. The multilingual competence focuses on improving linguistic competences to help people communicate across borders and use mobility in a globalised economy (European Council, 2019). Learning languages is a key competence for lifelong learning and a critical component of students' continued preparation, since it is the tool that enables students to understand reality, express themselves, create and transmit knowledge or a point of view, understand the world, and interact with others (Esteve et al., 2017).

Plurilingualism is defined as a skill that can be acquired, according to the Council of Europe's *Guide for the Development of Educational Language Policies in Europe* (Beacco & Byram, 2007). All speakers have the potential to be multilingual because they can acquire multiple languages at varying levels of proficiency, and therefore a linguistic repertoire that is not homogeneous. Being plurilingual does not mean being completely fluent in many languages, but instead acquiring the skill to use more than one linguistic variety with varying degrees of expertise and for a variety of purposes.

Plurilingual skills are therefore transferable and extend to all languages acquired or learnt. As reiterated by the CEFR, this skill is not "the result of a superposition or juxtaposition of distinct competences [...] but rather [...] a complex competence" that is not only linguistic but also has an important cultural aspect (Council of Europe, 2001, p. 168). As such, plurilingual education goes further than the teaching of several languages.

It implies that all languages share the same purpose – the development of speakers' communicative competence. Consequently, it is vital to emphasise all the strategies that build linguistic and communicative competence across languages and that facilitate the learning of language structures, genres and text types in all dimensions (oral and written comprehension and production). This is about creating a shared or interdependent space for the promotion of language awareness and cross-language cognitive processing. According to Cummins (2007, p. 233) there are five types of cross-lingual transfer: (i) transfer of conceptual elements; (ii) metacognitive and metalinguistic strategies; (iii) pragmatic aspects of language use; (iv) specific linguistic elements; and (v) phonological awareness. Text linguistics also emphasise that all languages share knowledge of text types and discursive genres, as well as procedural expertise with information structure and organisation.

1.3.1 English for Specific Purposes

Nowadays, in English for Specific Purposes (ESP) contexts, students' ultimate goal is to acquire the ability to successfully communicate with others (professionals) in meaningful and appropriate ways. According to Hutchinson and Waters (1987), "ESP is not a particular kind of language or methodology, nor does it consist of a particular type of teaching material. It is an approach to language learning based on learner needs" (p. 19). The starting point of any ESP course is needs analysis, which refers to the process followed for establishing the "what" and "how" of a course (Dudley-Evans & St John, 1998) or, more explicitly, to the pre-course design process in which the teacher or developer gathers information to determine what to focus on, what content (skills and language) to include and what teaching/learning methodology to use (Basturkmen, 2010). Consequently, in ESP instruction, needs analysis is the main factor in determining course design, methodology and materials (Munby, 1978).

Materials are anything teachers may use in any linguistic, visual, auditory or kinaesthetic form to achieve the teaching and learning purposes (Tomlinson, 2012). They play a significant role in ESP because they may be the only medium of language input for learners and can "present real language, as it is used" in the real world (Dudley-Evans & St John, 1998, p. 171). Previous research on ESP materials design has been extensive, and researchers have suggested that ESP materials need to be challenging and creative, enhance communication and have a clear purpose while matching the course objectives (Vičič, 2011). Materials designers should ensure that materials match real content (Dudley-Evans & St John, 1998), fulfil their pedagogical aims (Basturkmen, 2010), range from fully supported to unsupported tasks (Nunan, 1988), include a variety of skills, activities and interaction types, enhance communication and stimulate curiosity (Vičič, 2011). However, there is evidence that ESP materials do not always meet students' needs. Textbooks may not always provide learners with the necessary linguistic input or skills practice (Harwood, 2005), they may lack essential features, such as organisation (Danaye & Haghighi, 2014), or they may not be updated or may include ineffective exercises and drills (Davari et al., 2013).

Hashmi et al. (2019) explored students' perceptions of their ESP materials and found that, despite students' positive attitudes towards learning ESP, students considered that the materials and content were outdated and inappropriate for ESP, the learning tasks and skill-based activities did not reflect their needs, and that they felt disconnected from the topics. The researchers concluded that these findings reinforced the idea that ESP materials selection needs to be based on the students' work-related needs.

In a more comprehensive study, Batsila (2017) not only explored students' perceptions of the materials used in a Business course but also involved teachers and stakeholders from the business sector to analyse the correspondence between the English language skills developed in Business VET courses and the English language skills

required by the business industry in Greece. Additionally, the researcher used a pre-post-test design to analyse the effectiveness of a newly designed course. The textbook evaluation suggested that there was a lack of authenticity and interactivity, the content was neither motivating nor contemporary, and the communicative tasks did not reflect workplace situations. The findings also highlighted a mismatch between the skills developed in the Business course and the skills required by the business industry, showing a need for more emphasis on speaking and listening skills than writing or reading.

Though authenticity is a crucial feature of ESP materials, there is no general agreement on what "authentic" means. Some definitions emphasise that authenticity relates to a text that reflects what a real speaker or writer said or wrote (Morrow, 1977), addresses a real audience (Wilkins, 1976) or is not produced explicitly for language teaching (Harmer, 1991; Jordan, 1997; Lee, 1995; Nunan, 1988). Other authors prefer to set criteria, and claim that the term "authenticity" is an attribute of language, text and materials (MacDonald et al., 2006) or that authenticity in ESP materials refers to factors such as language users, communicative purposes, context and text (Widodo, 2016).

Despite the variety of definitions, there is agreement and evidence that authenticity positively affects language learning. For instance, Harding (2007) claimed that authentic texts and situations can give learners an idea of the language they need to produce and "get the students doing things that they need to do in their work" (pp. 10–11). Flowerdew and Peacock (2001) stated that authentic audiovisual material could be a means of effective teaching and learning. Fiorito (2005) focused on authentic tasks and argued that they can link the classroom to real life and learners' future working conditions.

Studies comparing authentic and non-authentic texts show considerable disagreement concerning the value of non-authentic texts. Some researchers have defended the validity of non-authentic texts by arguing that their purpose is not interactive but instrumental (Hwang, 2005) and that they are simplified, easy to

understand and, thus, suitable for lower levels and to reinforce language (Velazquez & Redmond, 2007). Other researchers have criticised non-authentic texts for being teacher-centred and less attractive and for not reflecting natural, real-world language (Horwitz, 2010; Su, 2006). Those against non-authentic texts have also argued that they are not motivating, are illogically sequenced, use artificial and unvaried language in dialogues (Shrum & Glisan, 2000) and may include false-text indicators, such as perfectly formed questions followed by complete answers and repeated structures. Nevertheless, some previous research has gone beyond the dichotomy of text authenticity, highlighting that authenticity is not a text feature exclusively, and that teachers need to focus on authentic uses of materials rather than authentic materials per se (Salah, 2008; Velazquez & Redmond, 2007). Authentic texts can bring context into language teaching (Shrum & Glisan, 2000), but authentic tasks are needed to provide authentic contexts (Guariento & Morley, 2001; MacDonald et al., 2006; Velazquez & Redmond, 2007).

Task design is essential to ESP materials design because it determines how students engage with texts and activities, so learning cannot happen without them (Widodo, 2016). According to Nunan (1988), "a communicative task is a piece of classroom work that involves learners in comprehending, manipulating, producing or interacting in the target language while focusing on meaning rather than linguistic structure" (p. 10). When completing authentic tasks, the student and teacher roles are redefined (MacDonald et al., 2006). Learners' roles are similar to those in real-world teamwork, and the teacher's role is that of a facilitator to support students while they accomplish the tasks (Woo et al., 2007). To be authentic, a task must: (i) reflect the communicative purpose of the text; (ii) be suitable for the text; (iii) stimulate response and engagement with the text; (iv) simulate real-life tasks; (v) motivate learners' present knowledge; and (vi) comprise purposeful communication among learners (Alibakshi et al., 2010; Mishan, 2005). Some examples of authentic tasks are letter and report writing

(Gulikers et al., 2005; Jacobson et al., 2003), problem-solving and information gap tasks (Bastola, 2006) or discussions (Oura, 2001).

According to Mishan and Strunz (2003), authentic advertisements, news articles or leaflets have been used in the language classroom, yet they failed to provide authenticity because authenticity is generated by how the students interact with the texts. When a student reads an authentic text to answer multiple-choice or true/false questions aimed at text comprehension, the student's interaction with the text does not develop any real-world competence because the goal of the exercise is text comprehension rather than text use to perform an action. This was referred to as "cosmetic authenticity" and it implies that in real life, we would read or listen to be informed or to use this knowledge to perform another action and not to answer comprehension questions. Therefore, language tasks need to be designed with real-life communicative purposes in mind. In ESP programmes, teachers aim to build content knowledge and skills and develop language as a requirement for speaking and writing skills tasks. Widodo (2016) highlighted three tasks especially suitable for ESP: vocabulary-building tasks, knowledge-building tasks and genre-analysis tasks.

The first type of task, vocational vocabulary-building tasks, allow students to develop the size and depth of their technical vocabulary. In language learning, vocabulary plays a pivotal role in making sense of and producing spoken and written texts. The ESP literature differentiates core vocabulary, technical vocabulary and semi-technical vocabulary. The last, also called academic vocabulary, refers to lexical items relatively frequent across academic texts but infrequent in other genres (Nation, 2001). A study by West (1953) presented the General Service List (GSL), which includes the 2,000 word families most frequently used in English (Tangpijaikul, 2014). Out of the GSL, all discipline-specific word lists follow Coxhead's (2000) methodology that excludes general high-frequency words (Lei & Liu, 2016). Coxhead's Academic Word List (AWL) consists of

570 word families and 3,107 types (individual word forms including the headwords and their inflectional and derivative family members) from the arts, commerce, law and science domains (Mozaffari & Moini, 2014). First, students need to learn the first set of 1,000 high-frequency words of the GSL and then the second set of 1,000 words of the GSL. Next, ESP students need to focus on general academic vocabulary (Lei & Liu, 2016; Valipouri & Nassaji, 2013). Elizondo et al. (2019) integrated Task-Based Language Teaching (TBLT) and studied how tasks that simulated real-life situations could influence students' ESP vocabulary and grammatical structure selection in a discipline-specific presentation during a job interview. They concluded that the TBLT approach had a very positive effect on the students' use of vocabulary, both technical (e.g. drill) and semi-technical vocabulary for self-description (e.g. innovative and enthusiastic), grammar structures (e.g. modal verbs, formulaic expressions), and an improvement in body language. Students' perceptions were very optimistic about the effect of an authentic learning environment in their education and future transition to the job market.

The second type of task, knowledge-building activities, assist students in becoming acquainted with specialised knowledge, social practices, and discourses. Communication is built on knowledge because ideas cannot be presented or generated without sufficient knowledge. Therefore, successful communication requires topical knowledge, which serves as a springboard for the development of speaking and writing skills, as well as the ability to comprehend both spoken and written texts and to make meaning of them. Extensive listening and reading can be used to build knowledge in ESP and students can access a variety of spoken and written texts through online resources, which can provide them with a wide range of options. Alsamani and Daif-Allah (2016) studied the impact of a project-based ESP course on students' development of vocabulary in Computer Science and Information Technology. The research was experimental and used an English vocabulary pre-post-test design. The researchers reported statistically significant

differences in the vocabulary test results at the intragroup and intergroup level. Furthermore, Project-Based Language Teaching (PBLT), as a knowledge-building task, promoted independent and self-directed learning and more out-of-class learning. The environment motivated students because it provided them with a purpose different from passing an exam. Students were active learners rather than passive receivers of knowledge.

The third type of task, genre-analysis tasks, analyses how individuals use language within a particular setting, and serves as a tool to study spoken and written discourse for applied purposes (Swales, 1990). Swales (1990) identified genres as communicative events determined primarily by a common communicative purpose, which determines the genre's rhetorical structure, content and style. Bhatia (1993) used Swales' (1990) techniques to analyse academic texts and applied them in his research on professional settings, mainly business letters and legal documents. He also explored job application letters and sales letters. According to Swales (1990), genre analysis in ESP is a top-down process that identifies a genre within a discourse community and defines its communicative purpose. When it comes to pedagogical materials, genre analysis can result in "genre-driven" pedagogical activities. Considering that ESP includes knowledge of the language, competence to use the language and understanding of the context, genre-based instruction (in this case, the writing of documents for job search) can help students succeed in their writing. Three main ways of approaching writing tasks have been identified: the product approach, the process approach and the genre approach (Raimes, 1983). The product approach focuses on language and vocabulary, syntax and cohesive devices. It starts with analysing a model, and learning to write implies gradually gaining control of complex linguistic knowledge and skills, which students demonstrate in final writing products (Badger & White, 2000). The process approach understands that writing is a complex cognitive process and "involves multiple stages: pre-writing, drafting, revising and

editing" (Zeng, 2005, p. 67). The major elements of the process approach are students' awareness and teacher intervention. It examines how writers create ideas, compose them, and then revise them to generate a text (Zamel, 1983). The genre-based approach focuses on the relationship between the text and context (Hyland, 2004). The teacher explains the interplay between the discourse structures and the linguistic forms that writers might use to achieve their goals in the text (Hyland, 2003). Genre-based language teaching aims to raise learners' awareness of both the organisation and features closely associated with the genre (Bhatia, 1993). A genre-analysis teaching approach should start with identifying a genre in a particular community and finding out the purpose it fulfils. It is a fruitful technique for ESP, as students need to learn the specific genres of their profession and the focus is on the discipline-specific linguistic (structural and lexical) repertoire of students.

1.3.2 Communicative Language Competence

According to the CEFR, communicative competence includes linguistic, sociolinguistic and pragmatic competences, and these are not separate components but always part of language use (Council of Europe, 2001). Linguistic competence includes knowledge of vocabulary and grammar, phonetics and other language dimensions as a system, independent of the sociolinguistic value of its variations and the pragmatic functions of its realisations. The Framework provides descriptors for range and control because the range–control dichotomy reflects the need to consider language complexity rather than just registering mistakes.

Indeed, SLA researchers generally agree that L2 proficiency has multiple components. The CAF triad consisting of measures of complexity, accuracy and fluency has emerged as a complement to other established proficiency models, such as the traditional four-skill model of L2 proficiency. According to Norris and Ortega (2009), L2 CAF measurement enables researchers to explain how and why linguistic competence develops in response to specific tasks, teaching or other incentives. *Complexity* refers to

how elaborated, rich and diverse L2 production is (Housen & Kuiken, 2009), *accuracy* to how correct and error-free it is (Wolfe-Quintero et al., 1998), and *fluency* to how eloquent and smooth L2 speech is (Koponen & Riggenback, 2000).

Linguistic complexity includes lexical and grammatical complexity (Bulté & Housen, 2012). Lexical complexity is divided into several dimensions and, among these, some of the most frequently used metrics are variation (size of lexicon), sophistication (depth of lexis) and density (amount of information in text) (Michel, 2017). Regarding grammatical complexity, a common measure used to analyse L2 development is the T-unit, understood as the main clause plus all subordinate clauses and nonclausal structures attached or embedded in it (Hunt, 1970). An increasing number of research studies have claimed that syntactic complexity is a multidimensional construct (Norris & Ortega, 2009) that encompasses global (mean length of T-unit), clausal (subordinated and coordinated or coordinated clauses per T-unit) and phrasal (mean length of clause, complex nominals per clause) subconstructs (Lu, 2011; Lu & Xu, 2016; Mancilla et al., 2017; Norris & Ortega, 2009). Learners elaborate and increase the complexity of their productions differently according to their development level. At beginning levels, L2 writers complexify their language via coordination (Bardovi-Harlig & Bofman, 1989; Homburg, 1984; Ishikawa, 1995), whereas at intermediate levels, writers complexify it via subordination (Byrnes et al., 2010).

Accuracy is usually regarded as the most straightforward construct of CAF (Housen & Kuiken, 2009; Pallotti, 2009; Wolfe-Quintero et al., 1998) and refers to the extent to which a speaker or writer conforms to particular linguistic conventions. Wolfe-Quintero et al. (1998) mentioned that some of the suitable measures of accuracy are the number of error-free T-units (EFT), error-free T-units per T-unit (EFT/T) and the number of errors per T-unit (E/T). Although the first two measures may be helpful for more advanced learners, it is not always easy to find any error-free units (EFT) in the

performance of beginners and (low) intermediate learners (Ishikawa, 1995). The number of errors per T-unit (E/T) indicates the overall accuracy of the productions.

Complexity and accuracy can measure both spoken and written performance. Instead, fluency is generally associated to spoken language, even though writing research has also used fluency measures, mainly length of texts written in a specific and controlled period of time. Skehan (2009) defined fluency as "the capacity to produce speech at a normal rate and without interruption" (p. 511).

In the past two decades, a considerable number of studies on SLA have used CAF measures in L2 acquisition or performance testing-oriented research. In EAP, Menke and Strawbridge (2019) analysed the development of complexity over time using eight complexity measures based on length, interdependence and phrasal/clausal variety. The researchers reported that length-based measures increased the most and met Ortega's (2003) statistically significant change thresholds for T-unit (2 words/T-unit) and clause (0.2 clauses/T-unit), but did not meet the threshold for clause per T-unit. However, as the researchers pointed out, an important limitation is that the participants in their research wrote about various topics and on different types of task. Hence, it is difficult to determine whether the origin of the increase in production length was increased competence or changes in writing demands. This is why the authors suggested controlling for genre and topic effect variables in future research. They also stressed the importance of inter-learner variability and concluded that students increasingly incorporated relevant academic genre features, such as noun phrases, into their writing. Results showed an increased mean length of noun phrase (MLNP), both as a group and individually; nevertheless, the authors pointed out the mean length of noun phrase might have increased due to the inclusion of unnecessary information as a result of L1 transfer. The researchers did not find statistically significant interclausal complexity changes over time, which confirmed previous research findings (Asencion-Delaney & Collentine, 2011).

Bulté and Housen (2012) analysed the development of English L2 proficiency over an intensive short-term academic programme using syntactic and lexical complexity quantitative measures and equivalent subjective ratings of 45 learners' writings. Results showed that syntactic and lexical complexity developed at different paces, and though some linguistic complexity measures could adequately capture changes in L2 writing in a short-term course, these were not some of the most popular ones. Their results revealed an increase of the T-unit length in around one word per T-unit, a statistically significant rise in clausal coordination and phrasal elaboration but no increase in subordination. These results would suggest that progress in L2 writing would also happen beyond the lower intermediate level through increasing clausal coordination. The researchers pointed to Friginal and Weigle's (2014) dimensions of L2 writing development, characterised by phrasal elaboration, less-frequent words, text length and lexical diversity.

Similarly, this distinction resembled that of Norris and Ortega (2009) and Ortega (2012), who distinguished dynamic and synoptic production styles. The former is typically oral, related to everyday contexts and shows low formality. The latter indicates that high formality is found in specialised contexts and is generally written. Subordination seems essential for the dynamic style but less relevant for the synoptic kind, which requires nominalisation, higher lexical density, and longer mean length of noun phrase by using modifiers and fewer combined clauses. The researchers confirmed the results obtained by Crossley and McNamara (2014) and indicated that, at the end of the study, learners produced more complex and longer sentences (with more modifiers per sentence) but no more, or even fewer, subordinate clauses. Biber et al. (2011) compared the linguistic features of informal speech and academic writing. They found that clausal complexity was a feature of informal conversations, while academic writing was characterised by phrasal complexity, suggesting that the former is inappropriate for measuring L2 writing proficiency. According to the researchers, the development sequence would take the L2

writer from finite dependent clauses to non-finite dependent clauses and dependent phrases. From the perspective of syntactic functions, the development would first be characterised by the addition of clausal constituents and then move to noun-phrase modifiers.

Storch and Tapper (2009) studied the effects of an EAP course drawing on the genre and authentic task-based approaches to teaching writing. The study used a pre-post-test design and analysed a corpus of 49 students' compositions for fluency, linguistic accuracy, academic vocabulary, and overall structure, cohesion and coherence. The researchers found improvements in accuracy, academic language and structure but did not see any statistically significant difference in fluency. In this way, they confirmed Ortega's (2003) results in her meta-analysis that showed that mean differences of fewer than four words per T-unit are not considered statistically significant. There was a statistically significant improvement in academic vocabulary over time. As the researchers reported, they did not study linguistic complexity given the relative brevity of the study (12 weeks) since, as argued by Ortega (2003), linguistic complexity takes longer than 12 weeks to develop.

Based on Storch and Tapper's (2009) research, Xudong et al. (2010) studied the effect of an EAP course on writing development and analysed participants' essays for fluency, accuracy, academic vocabulary and text structure. The study found no change in accuracy, fluency or textual complexity over time. However, content and text organisation improved, the latter significantly. Additionally, they collected qualitative data about students' perceptions. They found that students felt the course had helped them recognise the general characteristics of academic writing, be aware of their discipline-specific grammar and style, present well-organised ideas in formal English, interpret data and academic texts, and write a simple critique, a data commentary and a report. Students found it difficult to generate and organise ideas.

Ortega (2003) stressed that more complex sentences do not necessarily mean good writing. In this sense, Casal and Lee (2019) explored the extent to which five holistic measures of syntactic complexity related to writing quality (graded by an instructor) in four source-based writing productions of L2 students. Results revealed no statistically significant differences in subordination and coordination, and statistically significant lower density of complex nominals, mean clause length, and mean T-unit length in low-rated papers. Overall, these results underscored the importance of syntactic complexity, particularly nominal complexity, in producing successful (high-rated) academic writing, and highlighted the need to pay pedagogical attention to the production and meaning of such structures in writing courses.

There have been studies analysing the effect of some factors on complexity, fluency and accuracy. For example, Beers and Nagy (2009) conducted a study to explore the relationship between school year, genre and linguistic and discursive literacy development. Two groups of students wrote four essays (each of a different genre including narrative, descriptive, argumentative and persuasive) when they were in grades three, five and seven and then wrote them again two years later. A statistical analysis found differences depending on genre, a significantly higher number of clauses per T-unit in persuasive essays than in the other three genres, and a significantly higher number of words per clause, an indicator of a denser syntax, in descriptive texts. Syntactic complexity did not show statistically significant differences across the four genres.

There has also been research on the effects of technology-enhanced learning environments on L2 students' productive performance. For instance, Spring (2020) explored the impact of PBLT, in particular student-generated video, on L2 oral proficiency and analysed students' short speaking tests for fluency, accuracy and complexity. The results showed that using short video creation in a PBL class (i) improved students' general oral proficiency effectively; (ii) improved participants' syntactic complexity and

accuracy significantly and fluency partially; and (iii) increased verb variation. However, the type–token ratio did not improve, and the estimated number of different words declined, leading to no lexical complexity improvement. These results seemed to point to Vecelloti's (2017) claim that lexical complexity does not show linear growth in the same way that accuracy and fluency; instead, lexical complexity dips first and later exhibits a steeper increase.

There is research on the effects of other video-based methodologies, such as video forums and videoconferencing. For example, Blake (2000) examined the use of interactive asynchronous video forums, combined with synchronous tandem learning, on students' fluency and complexity development. According to the results, the synchronous chatting led to an increase of around four words per T-unit, while asynchronous increased by nine words per T-unit. The results suggested that video recordings provided a valuable source of reflection. Participants highlighted this technique as an excellent opportunity to practise and assess their oral performance, leading them to improve spoken production. With the extra planning time granted by the video tool, students could produce more complex linguistic structures.

Likewise, Caicedo et al. (2018) studied the effect of self-evaluation on students' oral grammatical range and accuracy. Participants filmed themselves answering various tasks of the International English Language Testing System (IELTS) four times during six weeks and used an IELTS-like scoring rubric to rate and reflect on their performance. A pre-post-test design allowed researchers to assess the gains in grammatical range and accuracy. The findings evidenced the benefits of using video, self-assessment techniques and a benchmark to determine language accuracy and grammatical range improvement. Participants could detect weaknesses in accuracy more efficiently, which raised their awareness of correct grammar, which in turn helped improve fluency and vocabulary use.

There has also been research on the effects of corrective feedback (CF) on written L2 performance using CAF. Truscott (2007) claimed that error correction might not lead to fewer syntactic errors because they are integral parts of a complex system impermeable to CF. He also suggested that CF is unlikely to be beneficial to morphological features because they require both understanding of the form and significance of other words and parts of the language system. In order for CF to be useful for L2 development, it must be used for "errors involving simple problems in relatively discrete items" like spelling errors, rather than grammar errors. However, research comparing results of groups receiving CF and not receiving any reported that the group receiving CF outperformed the group without CF over a period of three to four weeks (Shintani et al., 2014; Shintani & Ellis, 2013; Stefanou, 2014) and over 12, 10, nine and eight weeks (Bitchener & Knoch, 2008; Ellis et al., 2008; Sheen, 2007; Sheen et al,. 2009).

Schmidt emphasised the importance of attention and noticing in the acquisition of language. He assumed in his Noticing Hypothesis (Schmidt, 1990) that it is attention that enables learners to notice problems in their interlanguages, such as differences between what they need to produce and what they are actually capable of producing, as well as differences between what they can produce and what more proficient users of the language produce. When learners run into difficulties while communicating, they become aware of them, which increases the likelihood that they will pay more attention to subsequent input. Schmidt (1990) identified three distinct levels of awareness: perception, noticing and comprehension. Perception is the conscious or unconscious recognition of a salient form in input; noticing is the conscious focus of attention; and understanding is the conscious comparison of the input with prior knowledge. Learners who can identify a gap in their interlanguage are more receptive to input. As a result, if students pay attention to written feedback, it may become intake, which may be internalised. Additionally, learners must pay attention to feedback in order to identify inconsistencies between their output

and language norms and conventions (noticing the gap). While paying attention, they must also process the information more deeply (awareness at the level of understanding).

Direct and indirect feedback have both been studied as forms of corrective feedback (CF). Direct CF is defined as "a correction that not only calls attention to the error but also provides a specific solution to the problem" (Bitchener & Storch, 2016, p. 148) and indirect CF as the type of feedback that "indicates where an error has occurred through circling, underlining, highlighting, or otherwise marking it at its location in a text, with or without a verbal rule reminder or an error code, and asking students to make corrections themselves" (Ferris, 2002, p. 63). Research analysing the effect of direct and indirect CF have reported both types of CF have similar short-term benefits but only direct CF may have long-term benefits (Bitchener & Knoch, 2010b; Van Beuningan et al. 2008, 2012). Some studies reported that direct CF was less effective than indirect CF (Storch & Wigglesworth, 2010) and others that direct CF outperformed indirect CF (Coyle & de Larios, 2014). Indirect feedback is attributed to be more beneficial to students because it engages them in deeper language processing as they self-edit their writing (Ferris, 1995; Lalande, 1982) and it requires guided learning and problem solving, which promotes long-term acquisition (Bitchener & Knoch, 2008). However, it has been argued that indirect CF may fail because it does not provide learners with enough information to resolve complex linguistic errors (syntactic errors) and may leave students unsure of their own hypothesised corrections (Chandler, 2003). In support of direct CF, it has been claimed that it enables learners to instantly internalise the correct form.

Mercader (2018) analysed the effects of reflecting on the error corrections provided on a piece of writing on written L2 performance using CAF. The hypothesis behind the study was that learners who notice and reflect on the corrections are more likely to acquire the L2 forms. The pre-test involved a narrative text, which was followed by a treatment for which the 38 students were divided into two groups, one was required

to process written feedback and the other one was not. The results indicated that the group which reflected on the error correction improved in terms of accuracy and fluency, but not in terms of syntactic complexity.

Similarly, Sanchez and Manchón (2014) analysed the effects of direct and indirect CF and reported an overall increased accuracy with greater lexical accuracy after receiving direct CF and greater syntactic accuracy for indirect CF. Van Beuningen et al. (2012) studied the effect of CF on the written accuracy of 268 students, divided into four groups to analyse the effects of direct CF, indirect CF, self-correction when repeating the same task and the effects of not receiving any feedback and completing a new task. The results indicated that both direct and indirect CF improved accuracy in comparison to the use of self-correction without CF, and this effect was observed not only during revision but also in new pieces of writing (i.e., texts written during posttest and delayed posttest sessions, one and four weeks after the delivery of CF). Additionally, a separate analysis of grammatical and nongrammatical errors revealed that only direct CF resulted in gains in grammatical accuracy in new writing and that indirect CF benefited pupils' non-grammatical accuracy the most. Furthermore, when structural complexity and lexical diversity in students' new writing were measured, CF did not result in simplified writing.

Other studies, such as López's (2019), examined the effects of written CF and Task Repetition (TR) on CAF development by comparing five groups, one which repeated an oral task and four which repeated a written task and, which (i) did not receive any type of CF; (ii) received direct CF; (iii) received indirect CF; and (iv) used self-correction. Each group was then splitted into two groups to differentiate higher and lower proficiency participants. The results obtained by the groups which repeated a task in writing showed that both high and low proficiency learners in the group which did not receive CF and low proficiency learners in the self-correction group increased fluency. The groups which received direct and indirect CF did not increase fluency but improved accuracy. Low

proficiency learners who received direct and indirect CF improved lexical accuracy, while only those who received indirect CF reduced the amount of morphosyntactic errors significantly. This led to the conclusion that simply repeating a writing task without the availability of CF (and regardless of whether or not writers were asked to self-reflect on their own texts prior to revising them) resulted in increased fluency, and that there was a trade-off effect between fluency and accuracy (Skehan, 1998, 2006) in written performance: learners whose attention was explicitly directed to form through direct CF or indirect CF prioritised accuracy over fluency in their second encounter with the task, while those whose attention was not explicitly directed to form through direct or indirect CF (the group without CF and the group using self-correction) between the two task repetitions, focused on fluency rather than accuracy in the second performance. Finally, the type of CF received showed that direct CF led to improved lexical accuracy and indirect CF led to improvements in morpho-syntactic accuracy.

The task repetition (TR) effect has also been the subject of research both on spoken and written performance. Numerous studies have analysed it either repeating a given task identically or by modifying its content. The results of those studies have demonstrated the beneficial effect of TR, which boosts the language learning process by allowing learners to focus on the language in greater depth (Bygate, 1996, 2001; Bygate & Samuda, 2005; Hidalgo & Lázaro-Ibarrola, 2020). The first encounter with the task has been viewed as a kind of blueprint for language learners, from which they can create a more sophisticated and appropriate performance in the second iteration of the task. As a result, repeating a task should improve fluency, accuracy, and message complexity and sophistication (Ahmadian, 2011; Amiryousefi, 2016; Ellis, 2015). The effects of TR in the oral modality have been attributed to the possibility of influencing Levelt's (1989) Model of Speech Production, which proposed a four-stage speech production process: conceptualisation, formulation, articulation and self-monitoring. Conceptualisation is the process of

developing a message based on prior knowledge of the subject, context and discourse and on experience. Formulation involves choosing the right words, phrases and sentences to convey the message. Articulation is concerned with the speech organs that are used to convey the message. Finally, self-monitoring implies that speakers can monitor and correct their own speech. According to Bygate (2001), when a task is performed for the first time, learners can store information related to conceptualisation, formulation and articulation in their long-term memory, available when the task is repeated. According to Ellis (2015), rehearsal is like planning, and it is relevant to CAF because it shows its influence on three elements of Levelt's (1989) model – conceptualisation, formulation and articulation. In this way, it can improve all three dimensions of L2 production.

While researchers agree that TR improves L2 performance, there is debate over its effect on the complexity, the accuracy and the fluency of that performance (Ellis, 1994, 2008). The Limited Attentional Capacity Hypothesis (Skehan, 2009) proposes that speakers have a limited pool of attentional resources and must divide them among all the processes required by a task, such as input selection, effective information processing and response actions. As complexity, accuracy and fluency are independent dimensions which also compete for attentional resources, they are affected by the limitations of those attentional resources. When task demands exceed available resources, learners will need to choose which of the three dimensions to focus on.

However, while TR in oral language has been extensively studied, research on task repetition in written language is limited. All of the studies examining the effect of TR in writing have shown positive effects, especially regarding fluency. Results on the remaining performance dimensions – accuracy and complexity – appeared to be mixed. Jung (2013) researched written production using repetitive essays and found an increase in fluency and complexity at the expense of accuracy. Larsen-Freeman (2006) noted that when a narrative task was repeated, first in the written mode and then in the oral mode, accuracy,

fluency and complexity increased. Indrarathne (2013) examined the effect of repeated exposure to a written narrative task on accuracy, fluency and complexity, obtaining very positive results in all three areas, but especially in accuracy. Contrarily, Nitta and Baba (2014) claimed that short-term TR effects were limited to fluency, while long-term procedural TR resulted in gradual complexity improvements due to mass repetition. Nitta and Baba (2015) and Amiryousefi (2016) found that exact TR resulted in more fluent and accurate performance.

Indeed, it has been claimed that TR may not work in writing as it does in speaking and that oral language assumptions may not apply to writing (Byrnes & Manchón, 2014). Unlike speaking, which involves conceptualisation, formulation, articulation and self-monitoring and assumes that repetition of a task will facilitate attention to form (i.e., formulation and articulation) once the message has been conceptualised, writing processes may not be linear but recursive and involve continuous interaction among processes. Therefore, there may be more options than those mentioned by Bygate (2001). For instance, instead of focusing on form, students can focus on other aspects of the task, like idea generation or text organisation. The potential differential nature of TR in writing, when compared to oral communication and spoken language, is primarily related to the temporal dimension of written practice and the problem-solving nature of writing practice (Manchón, 2014b).

Chenoweth and Hayes' (2003) model of text production, one of the most influential attempts to model writing, described four different parts or components involved in writing: the *proposer* is responsible for creating conceptual content – learners set goals, generate ideas and organise them. The resulting idea package is sent to the *translator,* which translates the conceptual content into a linguistic form using linguistic knowledge from several grammatical and lexical stores. The resulting string of language is evaluated by the *evaluator/reviser*, which assesses whether their linguistic choices meet

the planned goals and revise accordingly. If the string is acceptable it is passed to the transcriber, which turns it into text. If the string is not acceptable, then the *reviser* can call on the other processes to produce a revised version of the language or idea package, and "this can in principle operate over a number of cycles before text is output" (Galbraith, 2009, p. 16). The individual differences in how these basic processes are combined are attributed to the knowledge stored in long-term memory, which consists of topic knowledge, a model of the audience, the writing plan, rules for grammar production and knowledge of text standards. Expert writers create a more elaborate representation of their goals by developing explicit rhetorical goals for the text and using them to guide content retrieval, whereas novice writers rely on concrete content goals and tend to generate content in response to the topic alone.

This reminds of the distinction between the "knowledge-telling" writing model and the "knowledge-transforming" writing model (Bereiter & Scardamalia, 1987; Scardamalia & Bereiter, 1987). According to this model, the development of ideas during writing depends on the extent to which content retrieval is strategically controlled to satisfy rhetorical goals. The knowledge-telling strategy guides text production by the direct retrieval of content from long-term memory and is organised solely by the associative relationships between content stored in long-term memory. In contrast, the knowledge-transforming strategy involves elaborating a representation of the rhetorical or communicative problem to be solved and using the goals derived from this representation to guide the generation and evaluation of content during writing. When writers tell knowledge, they do not require an overall plan or specific goal-setting procedures because they do not engage in the problem-solving behaviour that characterises expert writing. However, when writers transform knowledge, they engage with problem-solving in two problem spaces: content and rhetorical. The content problem space is the writer's knowledge and beliefs about the topic, while the rhetorical problem space is their views on

the text and task goals. Essentially, this corresponds to writing as a cognitively demanding problem-solving task that requires both strategic attentional resource allocation decisions and, crucially, an intense linguistic activity that Cumming (1990) correctly describes as "reasoning about linguistic choice" in L2 writing (p. 491).

However, some authors have suggested that the CAF construct is insufficient to obtain a valid assessment of how successful a performance is (De Jong et al., 2012). Other authors, such as Pallotti (2009), have proposed using a fourth construct, communicative adequacy, which he defined as "the degree to which a learner's performance is more or less successful in effectively achieving the task's goals" (p. 596). Ortega (2003) also observed that "progress in a learner's language ability for use may include syntactic complexification, but it also entails the development of discourse and sociolinguistic repertoires that the language user can adapt appropriately to particular communication demands" (p. 494). Pallotti (2015) suggested that communicative adequacy should be included both as a separate measure to complement CAF measures, and as a further dimension of CAF.

In their Communicative Adequacy and Linguistic Complexity (CALC) study, Kuiken et al. (2010) investigated the relationship between the communicative adequacy, the linguistic complexity – operationalized as syntactic complexity – the lexical diversity and the accuracy of 103 students' productions. Participants with three different target languages were asked to perform two writing tasks, and their productions were rated both holistically and by means of standardised measures of L2. The main assumption, underlying *CALC*, was that syntactic complexity, lexical diversity and accuracy could not satisfactorily be interpreted without considering the communicative adequacy of the L2 text. Their first research question was about the correlation between linguistic complexity and communicative adequacy, both assessed by individual raters. The results showed that for high-level participants, there was a higher correlation between communicative

adequacy assessed by individual raters and linguistic complexity, and a lower correlation in the case of lower-level participants. The researchers' hypothesis was that raters might have assessed more complex productions (longer sentences) as being more adequate, which would indicate a relationship between adequacy and complexity. The second explanation stated that high-level students may have had more attention and memory resources available, while lower-level students may have had to use their cognitive resources to solve language issues at the expense of communication and performance skills. Their second research question was about the correlation between adequacy assessed by individual raters and syntactic complexity, lexical diversity and accuracy quantifed by automatic measurements. They reported that while lexical variation was associated with communicative adequacy, syntactic complexity was not. Individual raters' assessments correlated with accuracy better than word frequency or syntactic complexity.

In their study, Vasylets et al. (2020) investigated the relationship between adequacy and CAF and the effect that task modality and complexity had on them. A group of intermediate learners carried out an argumentative task at two complexity levels and two modalities, written and oral. The researchers analysed the productions, rated them for adequacy and assessed their CAF (complexity, accuracy and fluency) measures. In both oral and written modes, they found a correlation between communicative success and lexical complexity and fluency while adequacy was associated with accuracy only in speech. Task complexity had no effect on the relationships between communicative adequacy and the CAF dimensions.

As previously stated, communicative competence is comprised of linguistic, sociolinguistic and pragmatic competences. The claim that effective L2 performance analysis requires interpreting complexity, accuracy and fluency, together with communicative adequacy points to the relationship between linguistic and pragmatic competence. Though there is no single definition of pragmatic competence, it refers to the

ability to use language appropriately for particular purposes related to the socio-cultural context. Pragmatic competence refers to the functional use of linguistic resources (production of language functions) and "involves the mastery of discourse, cohesion and coherence, the identification of text types and forms, irony and parody" (Council of Europe, 2001, p. 13). Pragmatics has been described as the study of "how-to-say-what-to-whom-when" (Bardovi-Harlig, 2013, p. 68). Murray (2010) provided a similar definition of pragmatic competence as "the understanding of the relationship between form and context that enables us, accurately and appropriately, to express and interpret intended meaning" (p. 239). Tello Rueda (2006) claimed that pragmatic competence should be part of L2 or FL teaching, and Neddar (2011) argued that language proficiency is vital but not sufficient for communicative competence. Ildiko (2008) analysed four ESP publications for Tourism and Business to assess the presence of pragmatic awareness, emphasising conversation openings and closings. The results showed that the textbooks did not provide formulae for opening and closing conversations and that pragmatic awareness did not receive enough attention in three of the publications. In a similar context, Martinez-Flor and Alcón Soler (2004) investigated pragmatic awareness and production across six ESP disciplines and suggested integrating pragmatics into the teaching of the fields. Likewise, Usó-Juan and Martínez-Flor (2006) analysed learners' requests in two ESP disciplines and proposed integrating pragmatics into the ESP syllabus.

1.3.3 Summary

This section has dealt with the multilingual competence, which emphasises the strategies that build linguistic and communicative competence across languages and facilitates the learning of language structures, genres and text types. Some characteristics of ESP have been described, such as the authenticity of materials, texts, tasks and contexts. Genre analysis has been proposed as a suitable tool for ESP because it allows for multilingual competence development and takes both language and pragmatic

competences into account. This section has also reported that over the last two decades, a substantial amount of research on SLA has used CAF measures to examine L2 acquisition or performance testing with variables such as genre (Beers & Nagy, 2009), productive styles (Biber et al., 2011; Crossley & McNamara, 2014; Norris & Ortega, 2009; Ortega, 2012), technology-enhanced learning environments (Blake, 2017), or specific courses (Bulte & Housen, 2012; Menke & Strawbridge, 2019; Storch & Tapper, 2009; Xudong et al., 2010). Then, research on corrective feedback using CAF has been reviewed (Bitchener & Knoch, 2010b; Coyle & de Larios, 2014; López, 2019; Mercader, 2018; Sánchez & Manchón, 2014; Van Beuningan et al. 2008, 2012), followed by research on task repetition (TR) in spoken performance (Bygate, 1996, 2001; Bygate & Samuda, 2005; Hidalgo & Lázaro-Ibarrola, 2020) and on written L2 performance (Amiryousefi, 2016; Indrarathne, 2013; Jung, 2013; Nitta and Baba, 2014, 2015). A model of the writing process has been described (Chenoweth & Hayes, 2003) and two writing models have been presented, the "knowledge-telling" and "knowledge-transforming" writing models (Bereiter & Scardamalia, 1987; Scardamalia & Bereiter, 1987). Next, it has been suggested that using only the CAF indices to assess L2 performance is not sufficient (De Jong et al., 2012; Ortega, 2003), and it has been argued that communicative adequacy, defined as the ability of a production to accomplish a communication goal, should be included both as a separate measure to complement CAF and as a further dimension of CAF (Pallotti, 2015). Finally, some studies on the adequacy and CAF have been described (Kuiken et al., 2010; Vasylets et al., 2020), which has led to a review of the studies claiming the integration of pragmatics into ESP (Usó-Juan & Martínez-Flor, 2006; Martinez-Flor & Alcón Soler, 2004; Ildiko, 2008; Neddar, 2011; Tello Rueda, 2006).

1.4   The Digital Key Competence

The Framework of Key Competences for Lifelong Learning provides the following definition for digital competence:

Digital competence involves the confident, critical and responsible use of, and engagement with, digital technologies for learning, at work, and for participation in society. It includes information and data literacy, communication and collaboration, media literacy, digital content creation (including programming), safety (including digital well-being and competences related to cybersecurity), intellectual property related questions, problem-solving and critical thinking (European Council, 2018, pp. 9–10).

Aware that many citizens were unable in their everyday lives to take advantage of digital technologies' full potential and that no agreement existed on what digital skills were and how to measure them, the EU Commission developed the Digital Competence Framework for Citizens (*DigComp*) (Carretero et al., 2017), which was first published in 2013 by the European Commission as a reference framework to support individuals' digital competence (Punie & Brecko, 2013). A new version published in 2016, the *DigComp 2.0*, identified 21 competences in five key areas (Figure 7) that described what it means to be digitally savvy (Vuorikari et al., 2016). Areas 1, 2 and 3 deal with specific activities and use of data, information and digital content, whereas Areas 4 and 5 are cross-cutting to any activity carried out through digital means. In particular, problem-solving is implicit in all areas because all digital actions require some kind of problem-solving skills. However, it was also represented explicitly in Area 5 to highlight its relevance (see Appendix A for a complete version of the *DigComp* Framework). Each of the four general proficiency levels mapped out in the *DigComp* (foundation, intermediate, advanced and highly specialised) was divided into two levels, thus, resulting in eight proficiency levels in *DigComp* 2.1 (Carretero et al., 2017). The eight levels provided

enough detail to develop learning materials and assess learning (Panagiotarou et al., 2020) and they described three domains: knowledge acquisition, task complexity and users' autonomy.

Figure 7 *The Digital Competence Framework for Citizens (DigComp)*

Competence Areas				
1 Information and data literacy	2 Communication and collaboration	3 Digital content creation	4 Safety	5 Problem-solving

Proficiency levels			
Foundation	Intermediate	Advanced	Highly specialised

Domains		
Knowledge acquisition	Task complexity	Users' autonomy
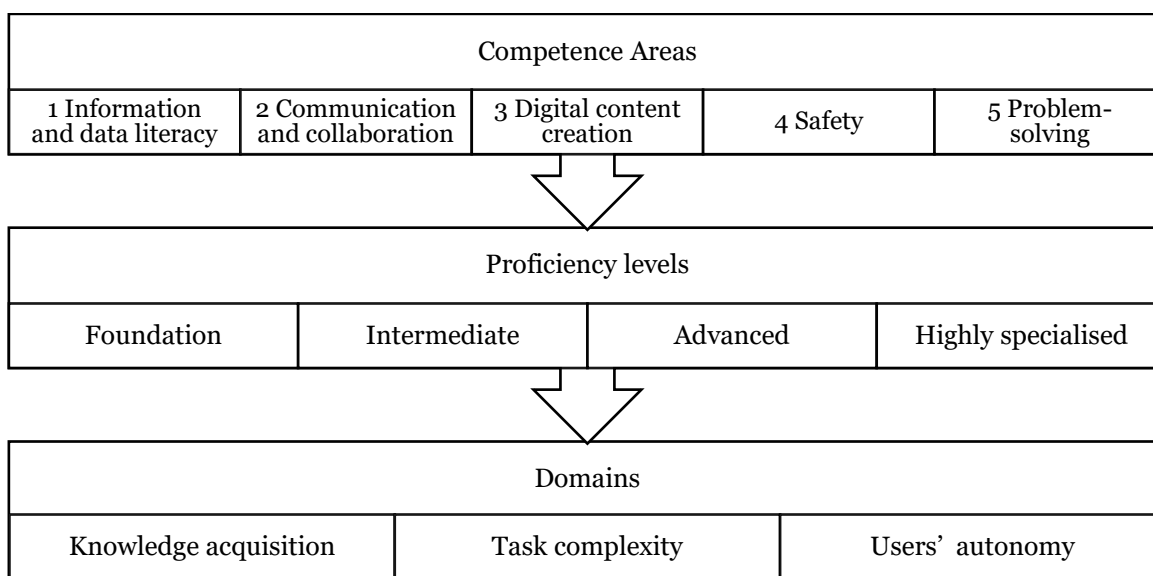
The *DigComp* met a rising need for a common language and a common strategy to foster the digital competence of all citizens and, therefore, it has had multiple purposes, particularly in employment, education, training and lifelong learning. It has played a crucial role in upskilling and re-skilling adults, and it is one of the key competences young people need to develop in formal education (Rainie & Anderson, 2017). The *DigComp* has helped develop other related frameworks for the European Commission, such as: (i) the *DigCompOrg* (2015), the European Framework for Digitally Competent Educational Organisations (Kampylis et al., 2015); (ii) The *DigCompConsumers* (2016), the Digital Competence Framework for Consumers (Brečko et al., 2016); and (iii) The *DigCompEdu* (2017), the European Framework for the Digital Competence of Educators (Redecker, 2017). Additionally, the *DigComp* has become part of the *Europass CV* and it allows jobseekers to evaluate their digital competence and include it in their résumé. Similarly,

employers can map and describe the digital competences required for vacancies. The *DigComp into Action* guide was created to support the implementation of the framework by sharing 38 inspiring practices of *DigComp* implementations including contact details and useful links to case studies and tools. (Kluzer & Pujol, 2018).

Researchers have extensively studied the effectiveness of Information and Communication Tools (ICT) in the SL classroom. One of these studies analysed more than 250 pieces of research comparing teaching with or without ICT, and results revealed that using ICT benefited language learning (Kulik & Kulik, 1991). More recently, Grgurovic et al. (2013) conducted a meta-analysis of 37 studies on the effectiveness of Computer-Assisted Language Learning (CALL) and reported that in studies using rigorous research designs, the CALL groups outperformed the non-CALL groups. The meta-analysis results provided an empirically-based response to whether or not technology-supported pedagogies enhance language learning.

1.4.1   ESP Technology-Enriched Learning Environments

A computer-mediated learning environment that promotes success is critical to 21st century skills research. Incorporating technology into an effective ESP learning environment increases the potential for innovative teaching and learning based on communication, interaction and teamwork (Vygotsky, 1962). Piaget (1970) emphasised the active role of the individual in the learning process and Bruner's (1990) concept of "learning by doing" involved students' active participation within the classroom context. As a result, it is by establishing a constructivist dialogue in the ESP digital classroom that students are inspired to become active, creative and motivated in their activities.

Technologies can contribute to meaningful, authentic, active and interactive learning (Živković, 2016). Hughes (2005) identified the three essential functions that technologies serve in the classroom: (i) replacement; (ii) amplification; and (iii)

transformation. For example, when teachers use *Prezi* presentation software instead of handouts, they are using technology as a replacement. Technology amplifies a task when it makes it easier to do a traditional job, for example editing a document in Google Docs. As a transforming element, technology can offer innovative educational opportunities by reorganising students' learning content, cognitive processes and problem-solving activities. For instance, when technology is used to create students' digital stories, transformative pedagogy is being implemented.

Task-, problem- and content-based approaches, which are in line with theoretical frameworks such as constructivism and socio-cultural theories, and are commonly used in ESP, can easily include online tasks (Marco, 2002; Palalas, 2011). Similarly, researchers have emphasised the importance of technology-based tasks in ESP materials to increase learners' interest, motivation and active participation in the learning process, while also scaffolding their development as autonomous learners and communicators (Bueno-Alastuey, 2006, 2009a, 2009b; Mohamad et al., 2016; Vahabi & Sadeh, 2011). Previous research has provided ample evidence for the benefits that a technology-enhanced learning environment can bring to ESP students. For example, Sokolova et al. (2015) analysed the perceptions and attitudes of 60 students towards the communicative activities within a computer-assisted ESP module on electric systems and networks, and reported positive results. Students found that the communicative activities were meaningful, practical, professional, and involved situations similar to those in real life. They could apply what they had learned and, in doing so, could improve their professional communicative skills. The researchers concluded that computer-assisted ESP resources led to increased motivation in students for self-directed English learning and readiness to work independently, and generated a sense of responsibility in them.

Živković (2016) supported these findings by reporting the positive attitudes and perceptions of 145 ESP students in a study on the impact of implementing modern

technologies. Students were motivated by the digital learning environment and reported feeling responsible for their learning due to the autonomy they had gained in the classroom, and that this sense of control had encouraged them to do more. They felt stimulated to explore their perspective and felt these were skills that would be necessary in their future careers. The participants acknowledged that communication was one of the main challenges in the job market and that communicating and connecting with colleagues was an essential skill in career development. They found technology was effective in facilitating the acquisition and creation of knowledge, and they agreed with the idea that the Internet was a good source of authentic materials.

Bueno-Alastuey and López Pérez (2014) analysed the perceptions of 36 ESP students and 46 ELE students regarding the usefulness of using digital learning environments to develop the four skills and areas of language such as vocabulary and grammar. Students perceived the digital learning environment as very useful, and those who had used it less considered it more useful for developing grammar, pronunciation and receptive skills exclusively, while students who had used the environment more realised its true potential to also develop productive skills. All students expressed positive perceptions regarding the use of a digital environment to learn a foreign language. These findings suggested that technology-enriched learning environments stimulated ESP students' competences and their motivation by engaging them in meaningful interactions. Nevertheless, these studies collected data from questionnaires on students' perceptions. Therefore, there is a need to explore whether triangulating data with a quantitative method to explore linguistic and communicative gains might support students' perceptions.

Technology has also changed the concept of authenticity by opening up unlimited access to authentic texts from the target language culture. Using authentic materials brings numerous advantages but also poses some challenges. Researchers who have

analysed authentic materials have also provided guidelines for their selection, such as ensuring a complexity level slightly higher than the learners' level (Spelleri, 2002); lexical and syntactic simplicity and topic familiarity for lower levels (Guariento & Morley, 2001); appropriate text length (Galloway, 1990); and using enough clues to support meaning (verbal, pictorial, linguistic, verbal, contextual). These clues can be verbal or non-verbal instructional prompts that can guide students to perform learning tasks. These instructional scaffolds "help students manage self-regulated learning, stimulate active processing of the learning materials, direct the attention to central aspects and are a powerful instructional tool" (Schworm & Gruber, 2012, p. 274). Nevertheless, as Garrett (2009) claimed, the mere use of authentic web-based resources does not represent CALL, which requires both authentic material and tasks in order to develop responsibility and autonomy, web literacies and professional skills such as extracting information, analysing websites, producing summaries or reports (Krajka & Grudzinska, 2002).

Researchers have compared the impact of authentic digital materials with printed materials on various skills. Tsai's (2011) research explored the effect of multimedia courseware for oral presentations in a Business self-learning programme. The courseware adopted the teacher's role and provided students with authentic materials for developing their English oral presentation skills. The researcher reported that the authentic multimedia instruction led to a significant improvement in the presentations' opening, writing quality and fluency. The qualitative data revealed that students' perceptions were positive, particularly in terms of language skills development, preparation for the speech and the stress-free environment the course had generated for practising. To support these findings, the researcher carried out another piece of research in an ESP context targeting an international trade fairs discipline. This time, Tsai (2013) analysed and compared the effects of two types of instruction on international trade fairs students' perceptions and attitudes. For this purpose, an experimental group received multimedia instruction, and a

control group received face-to-face, teacher-centred instruction on the same topic. The study used a pre-post-test design and, based on the results, authentic digital materials led to a statistically significant improvement in problem-solving and language skills. Moreover, the experimental group progressed more, generated more positive perceptions and was more satisfied than the control group. Additionally, the multimedia instruction seemed to generate a comfortable, practical, flexible and autonomous learning environment. These findings lead to the conclusion that though the mere use of technology did not develop autonomy, it assisted learners in developing autonomy with the appropriate support and scaffolding, thus supporting other research findings (Arnó-Macià, 2012; Marco, 2002). In a more recent research, Shevchenko (2017) also focused on listening and speaking skills by contrasting digital and printed materials in research with a pre-post-test design. The study supported previous research findings in that digital material led to increased responsiveness, proactivity and involvement. Improved vocabulary, grammar knowledge and listening comprehension were also attributed to the digital material.

The construct of scaffolding has expanded with technology, educational software (Gutiérrez, 2006) and Internet resources (Hughes, 2013), creating a potentially powerful learning environment. In a traditional learning activity, peers and teachers are the sources of scaffolding, but in an Internet-enhanced learning environment, the sources of scaffolding expand to include a wide range of online resources through which learners can obtain assistance (Bull et al., 1999; Hannafin & Land, 1997; Saye & Brush, 2001). In such an environment, Hannafin and Land (1997) claimed that scaffolding is not limited solely to student–student and teacher–student interactions. Instead, technology-enhanced settings enable conceptual scaffolding and resources and tools to enhance reflection.

Hsieh (2016) explored learners' interaction patterns with peers and online resources in an Internet-enhanced, face-to-face collaborative setting with three scaffolding

patterns: peer-to-peer, multi-directional and individual. The results suggested that online resources can facilitate scaffolding to build knowledge, increase autonomy and minimise the effects of differences in proficiency. Stronger learners benefited from including online research in their works, and lower-level learners benefited from the support. Online resources benefited the development of digital skills to search, assess, synthesise and communicate information in multimodal format from multiple resources.

Franca Plastina (2013) conducted qualitative research on the impact of multimodal assignments and artefacts with content-specific language on students' engagement and their awareness of their meaning-making processes. This supported Jewitt's (2006) claim that multimodality involves learners in a "complex sense-making process" (p. 258). The results showed that learners got involved actively due to the intrinsic, extrinsic and achievement motivation that the multimodal environment had generated. Students' ability to create specific content in a specialised field was one of the main results the artefacts evidenced. Students expressed awareness of how multimodality had stimulated their motivation, natural language learning and use of prior discipline-specific knowledge, and developed their decision-making and critical thinking skills. The researcher concluded that a multimodal pedagogy, which is learner-centred, constructivist and social, can benefit ESP development compared to a traditional approach.

Researchers have advocated the need to re-conceptualise ESP through multimodal practice and have claimed that classes need to generate new opportunities for interactive learner engagement (Franca Plastina, 2013) so that students are able to develop the skill set required in a 21st-century work environment (Vaish & Towndrow, 2010). However, researchers such as Prior (2013) have criticised the fact that "multimodality seems to have remained a somewhat peripheral area of ESP research" and that "the dominant research questions continue to be questions of language forms in monomodal frames" (p. 520). Therefore, there is a need for methodologies and academic research to adapt to these new

circumstances and extend the focus from monomodal to multimodal text types, and ESP scholars and researchers need to study how to re-conceptualise the notion of ESP texts in a multimodal world.

According to Franca Plastina (2013), students had the opportunity to create multimodal texts that integrate various media elements, such as graphics, sound, animations. The researcher felt that "web-based authoring tools have changed the traditional ideas of authorship and have blurred the boundaries between speech and writing" and that "developing multimodal communicative competence is becoming a major priority" (p. 379). Videos seem to be a handy tool to express and reflect the author's culture and idiosyncrasy, thus fostering a stronger sense of community (Nicholas et al., 2011), supporting their own culture and developing a strong sense of identity (Reyes & Vallone, 2008).

1.4.2 Student-Generated Video

According to O'Brien (2005), "good films are the direct result of good ideas, good planning and good preparation. Making a film needs to be undertaken over time, as each part of the process plays an integral role in creating a successful end product" (p.87). There are three necessary steps to be followed when creating a film in the classroom: (i) pre-production, which deals with scripting; (ii) production, which consists of preparing for filming and of filming; and (iii) post-production, which includes editing the raw footage and adding titles, subtitles, credits, music, sound effects and visual effects.

The process of video creation in a foreign language diversifies learning activities, enhances student motivation (Yamak, 2008) and offers an exciting and fun learning experience (Coleman et al., 2004). Sildus (2006) noted that "real-life language always happens in a context, and it would be logical to design classroom activities to resemble real language use" (p. 55). With a good pedagogical foundation, film-making gives

excellent opportunities to use real-world language in real-life situations (Secules et al., 1992), thus creating a perfect opportunity for authentic communication in the target language (Gareis, 2000). Vocabulary and grammar reactivate (while scriptwriting) and oral skills improve (while recording), leading to better vocabulary retention (Sildus, 2006) and making learning especially relevant for the development of production skills (Schuck & Kearney, 2006). The use of student-generated video requires concretising the information and the script, which helps develop written skills. It also improves pronunciation and the classroom atmosphere (Cabero, 2014). Using video tasks as vehicles for language instruction allows learners to engage in language learning within an environment that lowers the affective filter and anxiety (Reyes & Vallone, 2008). These positive effects may be because students can practise their storytelling and narrations several times to address pronunciation or grammar (Hur & Suh, 2012). Goulah (2007) investigated how digital video use affected language learning and found that, though students struggled to speak a second language, they managed to transfer their vocabulary development into their videos.

Computer technology can motivate students, increase their interest and, hence, help them become involved in the learning situation (Lowenthal, 2010; Lowenthal & Dunlap, 2010; Reitmaier et al., 2010; Stacey & Hardy, 2011). It is not about learning technology but about learning how to use technology to solve problems, answer questions, present ideas and communicate (Andrés, 2016). Thus, it is not about having resources and equipment available but about students exploring ideas and using this technology to express their learning (Theodosakis, 2001). Students can develop a sense of empowerment by having the opportunity to express their ideas creatively using technology.

Apart from developing students' digital skills, video creation projects establish a relationship between author and audience that also has a crucial influence on improving motivation (Barab et al., 2000). This motivation seems to derive from a sense of

authorship and ownership, which students develop towards their audiovisual creations when they reach an audience (Lomicka & Lord, 2016). Several authors have reported that sharing the final product or reaching a genuine audience was pivotal to motivation (Coleman et al., 2004). Creating a joint video viewing session or sharing the videos on the Internet or at school motivated students to make better-quality and more creative recordings (Nikitina, 2009, 2011; Schuck & Kearney, 2006). In a qualitative exploratory case study, Dumova (2008) found that when students took ownership of their work, their motivation and self-esteem increased.

In this type of project, the relationship between teacher and student changes (Cabero, 2007). Hur and Suh (2012) claimed that creating a digital story allowed students to change their roles from passive information receivers to active knowledge developers. Students assume the role of active subjects with the intention of learning and are involved in activities of a significant, dynamic, reflexive and collaborative nature, so that instead of remaining seated, students think, debate, act and communicate (Goldfarb, 2002). The teacher becomes a facilitator who provides coaching and scaffolding in the critical moments of learning to guide the process, promote autonomy and transfer to the students themselves the responsibility for learning (Franca Plastina, 2013). Students need to create knowledge, communicate competently and productively, collaborate successfully, think independently and creatively, solve problems and become career experts; therefore, educational institutions need to transform the way they do things to allow students to become more creative and innovative, think critically and be able to solve real-world problems (Živković, 2014). Film-making helps develop one's creativity, critical thinking, collaboration skills and problem-solving skills and improves language, organisational, research, writing and presentation skills (O'Brien, 2005). Research has also shown that embedding video creation projects into PBLT (Hung et al., 2004), drama pedagogy (Hakkarainen & Vapalahti, 2011) or case-based teaching (Hakkarainen et al., 2007)

generates meaningful learning and enhances students' dynamic, collaborative, contextual and creative characteristics (Hakkarainen & Vapalahti, 2011).

Cattaneo et al. (2019) researched the use of videos for lifelong VET and identified four primary instructional modalities. The first two modalities, Modality 1 *Using videos as a teacher's instructional support* and Modality 2 *Using videos as an individual learning material* to learn declarative and procedural knowledge, are not relevant to this study because they do not involve student-generated video. In Modality 3 *Using videos in a learning-by-design approach*, the learner – or, more commonly, a group of learners – is given the task of designing and producing a video (Cavanagh & Peté, 2017). Promoters of this modality emphasise that this task not only develops knowledge and know-how in terms of the specific content but also develops cross-cutting skills such as negotiation, organisation, work-division and decision-making (Stahl et al., 2006; Zahn et al., 2010). Green and Crespi (2012) investigated the perceived value of college student-created videos as a tool for enhancing the student learning experience. The researchers examined two business courses: an accounting course, whose students created a video on an accounting topic, and a marketing course, whose students created an advertisement. The researchers concluded that students had enjoyed student-generated video projects in business courses and considered them as entertaining and educational. Overall, students believed the video assignment was practical and offered a pleasant teaching experience. Both groups reported positive experiences such as more active and experiential learning approaches and having the opportunity to be autonomous. Nevertheless, the marketing group provided contrasting ratings to several questions, with some students providing very high ratings and others very low ones. The researchers justified this divergence by the lack of technical "know-how". Teachers had expected students to be familiar with video equipment and editing software, which was not as widespread as assumed.

These findings supported previous findings such as Cunningham's (2011), who also carried out a commercial video creation project focused on advertising and reported increased interest, motivation and autonomy in decision-making. Students became more autonomous when brainstorming and planning, organising and negotiating steps and responsibilities, as work had to be collected, synthesised and assessed in portfolios, thus requiring efficient management of time. According to the researcher, students felt successful and took ownership of their final artefacts, where they had integrated explicit and implicit advertising messages. In terms of language development, students stated that deprioritising enunciation, grammar or vocabulary resulted in more confidence during delivery and that listening to themselves had made them aware that they had to improve intonation and voice volume. According to the researcher, some students seemed to enjoy being a person who could speak English and felt pride, so it would seem that the project allowed students to envisage a new English speaker's identity.

Research in HE has shown that students' videography can heighten their excitement, surprise, interest and challenge (Hakkarainen, 2009; Hakkarainen & Vapalahti, 2011; Willmot et al., 2011). Allowing students to use non-conventional tools such as videos to prepare their assignments can promote learning and students' creative attitudes (Nordstrom & Korpelainen, 2011). It can also boost emotions such as joy, anticipation and curiosity, which play a significant role in students' motivation to learn, as well as in their academic achievement (Op't Eynde & Turner, 2006; Pekrun et al., 2002), as positive emotions predict high achievement, and negative emotions low achievement (Pekrun et al., 2002). The effects of instructional video creation on HE students' emotions and perceptions about learning have been reported to be very positive emotionally and motivating (Pirhonen & Rasi, 2017). Cavanagah and Pete (2017) analysed the effects of student-generated video tutorial on the ability of fashion students to apply and transfer knowledge. The findings suggested that students learned more in the same period by

creating their practice-based content than previous groups had learned using a conventional approach. Students used this information in other projects and were able to transfer the knowledge to different environments. Active participation in the learning process increased performance.

Effective computer-based instruction and learning should generate an environment where technology allows learners to reflect and collaborate in authentic tasks (Liaw, 2010). Indeed, several research studies have highlighted the benefits of video creation for improving students' reflection, increasing the awareness of their strengths and weaknesses and allowing repetition, which results in better performance. For example, Miller et al. (2012) explored the creation of scientific documentary videos by EAP students and analysed their perceptions. Students found that creating multimodal presentations was engaging, and that filming themselves allowed them to check their work and reflect on the weaknesses and strengths of their language and presentation skills. They considered they had improved their English skills, particularly their oral skills, including presentation skills and pronunciation. Students reported having reviewed their videos several times to assess their performance and having recorded several new takes until their productions were satisfactory.

Kern (2015) reported on a study conducted with advertising students on the effects of commercial video creation on students' language skills. A blog served as a publishing platform and portfolio. The findings showed that audio and video significantly impacted language learning, especially in enhancing students' oral and communicative competence through digitally documented authentic language production. Students enjoyed learning something new and creating a short film with easy-to-use technologies. Likewise, they highlighted that the scripting stage had stimulated their writing skills and creativeness, and practising voice-over had improved their fluency. Gimeno-Sanz (2015) also studied students' perceptions about language acquisition in a digital video creation project in a

Business ESP course. The project involved multiple tasks and required learners' skills to process input, select, organise and produce content, and create a multimodal message. Data were gathered by means of observation questionnaires, field journals and interviews to analyse a set of variables, i.e. project interest and motivation, anxiety, English skills, digital skills, collaborative skills, learning to learn competence and fulfilment of expectations. The results showed that students assessed all variables positively, and statistically significant differences were found in interest and motivation, learning English, ICT literacy, anxiety and collaborative learning competence.

The use of technology as a communication tool also allows students to become active participants in the research, analysis, organisation and representation of the information collected for their work (Theodosakis, 2001). Sevilla-Pavon et al. (2012) explored students' perceptions of a video creation project for ESP that required them to choose the topic, script the plot, film and edit the video, present the artefact and the making of it to the class, as well as providing peer-feedback on others' works and presentations. According to the results, students reported having developed a series of skills, such as linguistic, research, writing, organisation, digital presentation, interpersonal, problem-solving and critical thinking abilities.

Nevertheless, producing a video is a complex task that takes time to complete the final product. The choice of a place, acting or shooting the video are some of the challenges students have to face. Research has studied the challenges derived from digital video creation projects. For instance, Mohamad et al. (2016) explored the challenges faced by ESP students and the strategies used to solve problems during a web-based video production project. The project aimed to promote autonomous learning and, therefore, expected students to be independent and creative in exploring solutions. According to the results, students faced various difficulties before, during and after the production stage, but two seemed to be the most challenging ones, namely time constraints and lack of

digital skills for filming and editing. This supported previous studies (Khojasteh et al., 2013), which had suggested that good modelling in the classroom could help minimise the difficulties. Students applied strategies to learn and asked for help on how to use the editing software, just as other students had done in previous research projects (Aksel & Gurman-Kahraman, 2014).

Time management and a lack of technology skills have also been identified as issues by other researchers as collateral effects of projects that did not explicitly address the challenges of video projects. For example, Miller et al. (2012) reported time management and technology as the main problems for students, who mentioned that learning to use the pieces of software was difficult and that they did not have time to finish the project as they would have expected. Likewise, Cunningham (2011) reported that the technical aspects of video creation could become overwhelming for some learners and that teachers should be aware of the differences between the ideal and actual practice of a video project. The researcher also suggested that students sometimes spend too much time tossing around initial ideas or filming long scenes, which might result in time management problems. Similarly, Mohamad et al. (2016) conducted a video creation project within a course designed to improve communication skills, particularly fluency, clarity and confidence. The study revealed that students' main challenges were time constraints, communication problems, technical difficulties and a lack of creativity and confidence. However, the researchers reported that participants managed to employ several strategies such as brainstorming sessions, group discussions, work distributions, Internet use and new technical skills to overcome these challenges. Finally, Green and Crespi (2006) found that students did not have appropriate equipment, enough experience with editing software or enough time. Researchers have pointed to the challenges associated with video creation projects less explicitly; for instance, Wang and Zhan (2010) stated that incorporating storytelling into learning and assessment processes

had helped students learn the subject and develop technology skills and problem-solving skills. Conversely, in Sevilla-Pavon et al.'s (2012) study, students mentioned having found difficulties to overcome them easily.

Self-efficacy means believing one can complete a task or meet a goal. More recent research has explored the use of student-generated video to improve students' self-efficacy beliefs. For example, previous studies examined video self-modelling effectiveness for English language learners with diverse educational backgrounds and levels of English language proficiency (Boisvert & Rao, 2015). In the self-modelling process, individuals observed themselves successfully performing skills and behaviours that they might not yet be able to do independently. According to Dowrick (2012), observing oneself in a successful mode may produce "rapid changes of behaviours and improvement of performance" (p. 216). There are two types of video self-modelling: the first is feedforward, or constructive modelling, in which the learner gets support during the filming of the video and edits it out, leaving a final version depicting the mode of success, and the second positive self-review or reconstructive modelling, by which the filming shows the learner practising the target skills or behaviours and the video editing retains the best performance. Boisvert and Rao (2015) researched the effects of video self-modelling on reading skills development and reported an increased reading rate, engagement and active participation.

Finally, the last modality of Cattaneo et al.'s study (2019), Modality 4 *Using videos to organise and communicate one's experience or expertise,* is the one used to create a (professional) portfolio or videos for professional development, such as the job-application video or the video CV used to build one's professional image. Hung (2011) examined the effects of a vlog project in an ESP course on students' opportunities to use the target language, their perceptions of vlogs, and the advantages and disadvantages identified. Students reacted very positively to the vlog project, supporting previous vlog-

related studies (Hung, 2006, 2009; Liou, 2007). The findings showed benefits in that students believed that constructing vlogs had helped them enhance their professional development by allowing them to display their learning to their future employers. Students argued that the vlog had increased their competitiveness in job-hunting. It became clear that vlogs in this ESP course had served as a collection of their learning and created a link to their future job search. Besides, since vlogs were publicly accessible, the increased audiences helped the participants take greater pride and responsibility in improving their vlogging tasks. Vlogs allowed students to monitor their progress, reflect on their oral performance, and become aware of their strengths and weaknesses, as indicated in previous studies (Chang & Tsend, 2009) and ultimately let them assume greater control over their learning. Zhabo et al. (2018) studied the impact of video creation on ESP students' professional curiosity and employability skills, and reported that creating digital videos increased students' motivation for learning, particularly in ESP. Choosing the theme, scripting, filming and editing, selecting the music independently or with friends or other support made students feel they were in a professional situation. In particular, the authors argued that using video creation tasks in ESP learning focused students on their future professional needs.

Given the benefits of using video and the fact that research studies have shown that creating a video can help develop a wide range of professional skills, student-generated video was used with VET students in a career-oriented ESP classroom for job search. The purpose of this study was to determine whether all of these benefits and the reported development of language, digital, and professional skills were observed when compared to students receiving regular classroom instruction.

1.4.3 Summary

This section has provided an overview of the Digital Competence Framework for Citizens (*DigComp*) (Carretero et al., 2017), which the EU Commission developed to

enable digital skills classification and assessment. Then, a literature review on constructivist technology-enhanced learning environments has been presented, including research conducted on scaffolding (Gutiérrez, 2006; Hannafin & Land, 1997; Hsieh, 2016; Hughes, 2013; Saye & Brush, 2001) and authenticity (Galloway, 1990; Guariento & Morley, 2001; Spelleri, 2002) in digital ESP environments. It has been argued that research has claimed that the mere use of authentic we-based resources does not represent CALL (Garret, 2009; Krajka & Grudzinska, 2002). Research has shown that though multimodal texts are part of everyday life (Franca Plastina, 2013; Jewitt, 2006; Vaish & Towndrow, 2010), they do not seem to be part of the ESP classroom. As some research studies on multimodality in VET contexts have shown, despite the positive and promising results multimodality seems to offer, ESP still seems to be monomodal (Prior, 2013). A considerable amount of research has been examined, in particular the benefits of authenticity (Gareis, 2000; Goulah, 2007; Hur & Suh, 2012; Secules et al., 1992), language skills development (Schuck & Kerney, 2006; Cabero, 2014; Sildus, 2006), motivation (Barab et al., 2000; Coleman et al., 2004; Lomicka & Lord, 2016; Lowenthal, 2010; Lowenthal & Dunlap, 2010; Nikitina, 2009, 2011; Reitmaier et al., 2010; Stacey & Hardy, 2011), change in the teacher and learner roles (Cabero, 2007; Goldfarb, 2002; Hur & Suh, 201) or the skills and strategies promoted by digital storytelling such as critical thinking through searching and organising data and problem-solving (O'Brien, 2005; Živković, 2014).

Then, two instructional modalities of student-generated video in VET contexts have been presented (Cattaneo et al., 2019). An overview of research studies in different disciplines, such as Business, Advertising, Fashion, or Administration (Cunningham, 2011; Gimeno-Sanz, 2015; Green & Crespi, 2012; Kern, 2015; Sevilla-Pavon et al., 2012) has been provided for instructional modality 3, followed by a review of the challenges and difficulties of video creation projects in VET contexts (Aksel & Gurman-Kahraman, 2014;

Khojasteh et al., 2013; Miller et al., 2012; Mohamad et al., 2016). Then, instructional

modality 4 has been discussed and it has been stated that video is used to organise,

communicate, and build one's professional image such as vlogs (Chang & Tsend, 2009;

Hung, 2006, 2009; Liou, 2007), videos to create one's own (professional) portfolio or

videos for professional development, such as the job-application video.

1.5   Chapter Summary

This literature review aimed to narrow the field of research of this study, which stems from a genuine need for VET students to develop the learning to learn, the multilingual and the digital key competences across the curriculum.

First, the personal, social and learning to learn key competence has been defined and the *LifeComp* Framework and its three main areas of competence presented. In the personal area, career management skills have been reviewed, and the DOTS Framework described. Then, the focus has moved to self-presentation in job-search documents and several studies on letters of application have been presented, particularly research studies that have studied self-presentation, self-validation, self-appraisal or self-identity. Other documents, such as the résumé, infographic résumé and social network résumé have been described before focusing on the literature on job-application videos, which has been primarily done outside FL and ESP. Then, the only research study, to the best of the author's knowledge, on the use of video CV in an FL classroom has been described.

Next, a definition of the multilingual competence has been provided, followed by an overview of ESP and the critical role that authenticity plays in course design, particularly in terms of textual, contextual and task authenticity. Three types of tasks focusing on vocabulary learning, knowledge building and genre analysis (Widodo, 2016) have been presented, with genre analysis serving as a link between ESP features and tasks and communicative competence development. In particular, the chapter has provided an overview of research on language competence assessment using the CAF construct (complexity, accuracy and fluency) and has finally focused on the importance of considering adequacy along with CAF, thereby linking language and pragmatic competences. Linguistic competence is inherent to languages and therefore essential in ESP settings, and pragmatic competence is vital for two reasons: first, because of the professional context in which this study took place and, secondly, because this study is

dealing with a specific genre relevant to job-search where contextual elements and discourse are essential.

Finally, the digital competence has been defined using the *DigComp* Framework. Some emerging trends that use technology-enriched learning environments to enable constructivist innovations in the ESP classroom have been explored. Finally, video creation and, more particularly, student-generated video and digital storytelling in FL, on the one hand, and video creation in ESP settings, on the other hand, have been dealt with. Two instructional modalities involving student-generated video in ESP have been analysed: the first one involving the use of videos as part of a learning-by-design approach and a second modality involving the use of videos to organise and communicate experience or expertise in HE or VET contexts, which is this study's primary focus. The research on both modalities has been reviewed, including objectives, participants, data collection instruments, major findings, and challenges. The findings of those studies have shown that foreign language competence, soft skills, motivation and positive feelings all improved or developed. However, it has been demonstrated that while the instructional modality involving the use of videos as part of a learning-by design approach has been extensively researched, the modality involving the use of videos to organise and communicate experience or expertise has received little attention, and as a result, additional research on it should be conducted.

2. CHAPTER 2 THE STUDY

This chapter will outline the research methodology and contextualise the problem before presenting the research questions. The research design, including the context, stages, and participants, as well as the materials and procedures used, will then be described in detail. Finally, the instruments and the criteria applied for data collection, analysis and coding will be discussed.

2.1 Research Methodology

Action Research (AR) bridges the gap between the ideal (the most effective approach) and the real (the actual approach) (Burns, 2009). Classroom Action Research (CAR), in particular, aims to improve the teaching-learning process (Fraenkel & Wallen, 2007). In the field of Second Language Acquisition (SLA), CAR has focused on areas such as classroom management, materials, technology, skills or motivation (Wallace, 1998). Teachers have addressed many different issues in a variety of teaching and learning contexts (Edge, 2001), including researching curriculum innovation (Hadley, 2003), bridging the gap between academic research and classroom application (Sayer, 2005) or promoting professional development (Coles & Quirke, 2001; Kitchen & Jeurissen, 2004). The AR process represents a spiral movement between action and research (Burns, 1999) and in CAR, several steps to carry out that spiral have been identified (Nunan, 1993): 1) identify a problem in the classroom; 2) gather data around the issue; 3) postulate a hypothesis about an eventual solution; 4) implement the strategy to solve the problem; 5) evaluate the effectiveness of the strategy; 6) disseminate the findings; and 7) revise and improve the strategy.

2.2 Research Rationale and Research Questions

This study is set in the context of a career-oriented ESP programme of a core Professional English module in VET. The curriculum of the core Professional English

module set out to develop students' communicative competence in real ordinary and professional situations and stressed the importance of fostering authentic tasks based on students' interests and needs and the use of technologies for (a)synchronous communication (Decreto Foral 92/2013, 2012). However, at the college where the study was conducted, a teacher-centred approach to ESP instruction failed to create such a learning environment, thereby preventing students from developing key competences. Consequently, a student-centred approach based on generating job-application videos was implemented and its effects were analysed and compared to those of the traditional teacher-centred approach. According to the literature review described in the previous chapter, the job-application video is a digital multimodal genre for job search with a high potential for career-oriented ESP training because it combines authentic communication in English for job-search purposes using asynchronous communication tools.

There is ample evidence that authenticity is key to ESP material design (Widodo, 2016) in that it requires students to do things they will do at work (Harding, 2007) and links the classroom to real-life and learners' future working conditions (Fiorito, 2005). As a considerable amount of research has shown, ESP textbooks do not always meet students' needs, due to outdated contents (Davari et al., 2013) or a lack of skills practice (Harwood, 2015; Danaye et al., 2014) and real-world application (Horwitz, 2008). However, technology-based tasks in ESP materials are claimed to engage students in real communication and meaningful interactions (Grgurovic et al., 2013). For example, video creation simulates real-life situations which require real-world language (Secules et al., 1992) and allows for authentic communication (Gareis, 2000). Additionally, recent research has started to investigate the use of student-generated videos to communicate expertise and experience. Indeed, employment projects are often used in VET courses to allow students to learn how to create effective documents for job search. These documents help potential employers form first impressions of applicants and are, therefore, critical

for job transition success (Bhatia, 1993; Sokoro, 2012). However, it is claimed that establishing the candidate's relevance is one of the most challenging aspects of self-presentation in written discourse (Bhatia, 1997) and generating a job-application video would allow us to give students a better understanding of the rhetorical, persuasive and sociolinguistic techniques that contribute to effective self-presentation. Furthermore, there are – to the best of the author's knowledge – no studies on the job-application video from a genre-analytical approach, and there is scarce literature on innovative multimodal formats used in career-oriented ESP instruction that are appropriate to match the current job market needs and the educational paradigm shift.

With these objectives in mind, we carried out a study with two Higher VET groups enrolled in a Professional English module and taking a programme for job search: an experimental group (EG) and a control group (CG). The EG followed a student-centred teaching methodology and created a job-application video, and the CG continued with the regular lessons and used the coursebook set in the syllabus. Both groups worked on the same or similar contents, and all participants wrote and read aloud a self-presentation, sat two tests on language and career management, and filled out a questionnaire on digital skills. All students took the three tests and the questionnaire before and after the intervention. Pre- and post-tests and questionnaires were analysed in order to document improvements (or lack thereof) in L2 performance, career management skills and digital skills. Likewise, at the end of the intervention, all students took a questionnaire on students' perceptions of the effectiveness of each teaching methodology for developing communicative, career management and digital skills. Accordingly, this dissertation is based on the following research questions:

1. Research Question 1: Do students in the EG develop their career management skills? Do students in the EG improve their career management skills more than those in the CG?

2. Research Question 2: Do students in the EG develop their communicative competence? Do students in the EG improve their L2 communicative competence more than those in the CG?

3. Research Question 3: Do students in the EG develop their digital skills? Do students in the EG improve their digital skills more than those in the CG?

While this study cannot formulate specific hypotheses due to the scarcity of prior research on the topic, based on the theoretical foundation described in Chapter 1, it is assumed that the experimental group will demonstrate improvement in the three research variables. The hypothesis is that the job-application video project will favour a genre-based approach that will allow students to associate the linguistic and pragmatic aspects of communication more easily, thus leading to improved students' L2 performance. Additionally, it is expected that the self-centred nature of the process required to create a job-application video will be more effective than the traditional methodology for developing students' career management skills, defined as students' ability to self-present in a job-search context. As for the development of digital skills, it is expected that using video as a tool for personal expression and multimodal content creation will allow for digital skills development to a greater extent than the traditional methodology. According to the literature on challenges related to video projects, students may develop cross-disciplinary skills such as problem-solving as a result of their shift from passive consumers to active meaning creators responsible for their learning process.

2.3 Context

This study was conducted at a state, bilingual (Spanish and Basque) Polytechnic Integrated Centre for VET in Northern Spain which offered Basic, Intermediate and Higher VET programmes on a full-time (2 years) and part-time (3 years) modular basis. Higher VET programmes consisted of 2,000 hours of training and led to a Higher

Technician diploma (Sancha & Gutierrez, 2016) (see Table 1). They included a core 60-hour Professional English module, English I, which granted 6 European Credit Transfer and Accumulation System (ECTS).

Table 1 *Higher VET Programmes and Professional English module*

		Higher VET programme
	Duration (hours)	2,000
	Dedication	Full-time (2 years)
English Module		
	Name	English I
	Duration	60 hours
	Course	1
	Sessions/week	2
	Session length	50 minutes
	Material	Student's Book
	Level	B1

2.4   Participants and Stages

The job-application video project was conducted with three consecutive Higher VET groups, one per year. As a result, the overall research consisted of three stages: pilot one, pilot two, and this study, which included an experimental group and a control group. This thesis will analyse the primary study. The study followed a pre-post-test quasi-experimental design with non-equivalent groups, and it had three stages: pre-instruction (S1), instruction (S2) and post-instruction (S3). The independent variables were the two teaching methodologies: the experimental group (EG) created a job-application video, and the control group (CG) followed a traditional teaching approach for 13 weeks. The dependent variables were the L2 performance, career management skills and digital skills. Two groups of 18 ESP students (two females and 16 males) took part in the study (see Table 2). Both groups were enrolled in the first year of a technical Higher VET programme

and participated in the core Professional English module. The average age of participants in the two groups was similar (EG = 24; CG = 23) but the EG had a wider age range than the CG (18–32 > 21–24). Likewise, the EG's education background level was higher than the CG's, with four students holding a Higher VET diploma. The number of students combining work and studies was higher in the CG (75%) than in the EG (50%). Both groups had mixed English Proficiency levels, ranging from A1 to C1 (EG) and from A2 to B2 (CG), according to the Common European Framework of Reference for Languages (CEFR) (Council of Europe, 2001).

Table 2 *Sample Description*

	EG		CG	
	n	%	*n*	%
Students	10		8	
Female	2	20	8	100
Male	8	80	0	0
Average age	24	–	23	–
Age range	18–32	–	21–24	–
Students working	5	50	6	75
Education background				
Higher VET	4	40	1	12.5
Intermediate VET	0	0	1	12.5
Upper Secondary	5	5	4	50
Secondary	1	10	2	25
English Proficiency Level				
A1	3	30	0	0
A2	2	20	3	37.5
B1	2	20	4	50
B2	2	20	1	12.5
C1	1	10	0	0

2.5 Materials

An ad-hoc wiki was created to host all the content required for the project, which was structured into nine main sections, one per week. There were two sessions each week. Each of the nine main sections had its own page on the wiki, with instructions for the tasks students had to complete during the two weekly sessions. The tasks included all resources

students would need such as videos, links to external websites or texts. Additionally, the wiki included links to the questionnaires and a "Resources" section with links to dictionaries and ad-hoc tutorials. Finally, the "Your pages" section included the students' names, each name linked to the student's own page, where they tracked the work and content generated throughout the project (see Appendix B for a detailed view of the wiki). Computers were required during the pre-production and post-production stages. A tripod and a video camera with an external microphone were used for filming during the production stage. The *Animoto* software program was used for video editing and students were provided access to the software through an education classroom account.

2.6 Instruments

Four questionnaires and three tests were used to collect the data (see Table 3). The three tests and the first questionnaire (DIG) were administered before (S1) and after (S3) the intervention. Two of the other questionnaires (SCRIPT and FILM) were applied during the instruction stage (S2) and only students in the EG took them. The fourth questionnaire (FINAL) was completed at the end of the project (S3). See Appendix C for a detailed view of all questionnaires and tests.

Table 3 *Instruments for Data Collection*

Name	Group	RQ	Data	Rating	Stage	Description
Questionnaires						
DIG	EG, CG	RQ3	Quant	Likert	S1, S3	Digital skills
SCRIPT	EG	All	Qual	-	S2	Perceptions on scripting
FILM	EG	All	Qual	-	S2	Perceptions on filming
FINAL	EG, CG	All	Qual	Likert	S3	Perceptions on course
Tests						
Test 1	EG, CG	RQ1, RQ2	Quant, qual	Ad-hoc	S1, S3	Productive skills
Test 2	EG, CG	RQ2	Qual	Ad-hoc	S1, S3	Professional language
Test 3	EG, CG	RQ1	Qual	Ad-hoc	S1, S3	Career management

2.6.1   Questionnaire on Digital Skills (DIG)

The first questionnaire (DIG) was an adaptation of an existing questionnaire developed by Carrera et al. (2011) on digital skills for young people. The original questionnaire consisted of 205 items and considered a wide range of digital competences in four sections: (i) use of digital devices; (ii) use of multi-platform apps; (iii) digital information and communication; and (iv) attitudes towards technologies. A panel of 14 experts and a sample of young people validated it.

The questionnaire was chosen because it included a wide variety of digital actions that are commonly performed in schools and because it seemed to accommodate the diversity of VET groups. As the questionnaire was too long, the items relevant to this study were selected and grouped together according to the *DigComp* Framework (See Appendix A for a detailed view). The final DIG questionnaire consisted of 37 five-point Likert scale items distributed across just three of the competence areas of the *DigComp* Framework (Carretero et al., 2017): Area 1 *Information and data literacy* (20 items), Area 2 *Communication and collaboration* (6 items), and Area 3 *Digital content creation* (11 items). Area 4 *Safety* and Area 5 *Problem-solving* were not included in the questionnaire but will be analysed using the responses to the FILM and FINAL questionnaires.

2.6.2 Students' Perceptions Questionnaire: Scripting (SCRIPT)

This questionnaire was part of the job-application video programme, and only participants in the EG used it at the end of the pre-production stage in order to reflect on the writing process. It consisted of five dichotomous (Yes/No) questions about the strategies used to script the video, including (i) the use of translation; (ii) the use of dictionaries; (iii) asking for support; and (iv) looking for online examples, each followed by an additional question elaborating on the strategy used. Additionally, it included an open-ended question about the distinctions students found between the first drafts and

the final scripts. The questionnaire contained 20 additional dichotomous (Yes/No) questions about the content included in the video script.

2.6.3 Students' Perceptions Questionnaire: Filming (FILM)

This questionnaire was part of the job-application video project, and only participants in the EG took it at the end of the production stage in order to reflect on the filming process. It included nine items on a five-point Likert scale and four open questions about (i) preparing for filming; (ii) the coaching session; (iii) script changes; and (iv) the production challenges.

2.6.4 Students' Perceptions Questionnaire: Project (FINAL)

This questionnaire contained 24 items divided in three categories: (i) 17 questions on a five-point Likert scale to assess the professional, language and digital skills gained from the course; (ii) three open-ended questions to assess the positive and negative aspects of the course as well as students' general satisfaction; (iii) three questions on a five-point Likert scale to assess how useful, satisfactory, and difficult the course was, and (iv) a single answer multiple-choice item about the most challenging aspect of the course; finally, (v) one additional question for the EG consisting of four dichotomous (Yes/No) questions about the use of a graphic introduction, on-screen text, music and transitions in the final videos.

2.6.5 Test 1

This consisted of two productive tests: Test 1a consisted of a written self-presentation for a prospective employer, which students produced before and after the intervention as a pre-test and a post-test respectively. This written corpus included 20 written texts produced by the EG (10 pre-tests and 10 post-tests) and 16 texts written by the CG (eight pre-tests and eight post-tests). Test 1b required students to read aloud the

self-presentation they produced in the pre-test (Test 1a). Students read aloud the same text in the pre- and the post-test. This oral corpus included 20 voice tracks produced by the EG (10 pre-tests and 10 post-tests) and 16 voice tracks produced by the CG (eight pre-tests and eight post-tests). Therefore, students wrote about the same topic in the pre- and the post-test and read aloud the same text in the pre- and the post-test. Pre-post-test research designs have frequently used the same topic to avoid the possible effect of various topics on the quality of writing (Storch & Tapper, 2009; Storch & Wigglesworth, 2007).

2.6.6 Test 2

This consisted of 42 items across two sections: Test 2a included 25 "fill in the blank" statements that were completed by choosing the right option from a pool of nine prepositions. Test 2b was a reverse translation of 17 terms used in documents for job search. Both teaching methodologies addressed these contents explicitly in their programmes.

2.6.7 Test 3

This consisted of 38 items across two sections and was based on the DOTS Framework (see Appendix A for a detailed view). Test 3a presented open-ended questions about employability, professional skills and self-knowledge of strengths and weaknesses, as well as the meaning of specific professional skills. Test 3b encompassed open-ended questions about communication, mainly non-verbal communication, content appropriateness, and tone adequacy in the context of CV writing and job interview. Both teaching methodologies addressed this content explicitly in their programmes.

2.6.8 Reliability

The job-application video project was piloted twice in previous courses, which allowed the researcher to strengthen weak areas and refine data collection and

interpretation based on the knowledge acquired from earlier AR cycles. As shown in Table 4, the internal consistency estimates, based on Cronbach's alpha, showed very high consistency ratings.

Table 4 *Instrument Reliability based on Cronbach's alpha*

	Cronbach's alpha	No. of Items
Digital Skills (DIG)	0.974	74
Career Management Skills (Test 3a)	0.910	78

2.7 Procedure

The study was implemented in the last term of the academic year, i.e. from 4th April to 3rd June 2016. The overall study consisted of three stages: pre-instruction (S1), instruction (S2) and post-instruction (S3), which were completed by both groups in their English lessons. S1 and S3 were the same for both groups, and S2, as the instructional stage, was different. Both teaching methodologies addressed the same syllabus.

2.7.1 Pre-Instruction (S1)

This stage lasted for three sessions, and participants from both groups completed a series of pre-tests and pre-questionnaires (see Table 5). In the first session, students took Test 1, which consisted of a written self-presentation for a prospective employer. Then, students were recorded reading their self-presentation aloud. The written task was untimed to eliminate pressure for lower-level students. In the second session, students took Tests 2 and 3 and the questionnaire on digital skills (DIG). In the last session, students were introduced to their respective programmes.

Table 5 *Pre-Instruction (S1)*

Stage	Sessions	EG	Sessions	CG
S1	3	Test 1	3	Test 1
		Test 2, Test 3		Test 2, Test 3
		DIG		DIG
		Course presentation		Course presentation

2.7.2 Instruction (S2)

This stage was different for both groups, the S2 lasted for 12 sessions (see Table 6). During this stage, the CG followed a coursebook programme divided into two units on job search with tasks to work on four tools for job search: a CV, an application letter, a video CV and a job interview. Each unit included sections on vocabulary (V), grammar (G), reading (R), listening (L), writing (W) and speaking (S). The EG created a job-application video in three stages: pre-production, production and post-production, as outlined in the project programme (see Appendix B).

Table 6 *Instruction (S2)*

Stage	Sessions	EG	Stage	Sessions	CG
Pre-production	5	Vacancy analysis	Lesson 1	6	V: Jobs in IT
		Guided writing:			R: Job adverts
		Content (genre)			G: Reported speech
		Discourse (process)			L: Describing a company
		SCRIPT questionnaire			W: Writing a CV
Production	4	Coaching session			S: A video CV
		Rehearsal	Lesson 2	6	V: Personal qualities
		Filming			R: Working in Europe
		FILM checklist			G: Tense review
Post-production	3	Post-production			L and S: A job interview
		Viewing			W: A application letter

The S2 consisted of three sub-stages. The first one was the *Pre-production* stage, which lasted for five sessions and included a series of wiki-based tasks aimed to script the job-application video. In the first session students analysed a series of job adverts that had been pre-selected and that students checked online in order to choose one to apply for using their job-application video. Following that, students completed a series of tasks that guided them through a genre-based writing process structured in areas related to different strategies used for promoting the candidate, including objective, skills, interests and hobbies, linguistic and digital skills. The skills section included tasks to help students learn how to compensate for a lack of work experience. Tasks to identify students' skills, weaknesses and strengths were also included such as the DISC Personality Test (see Appendix B). Then, the students were guided through a series of tasks including indirect corrective feedback to revise the script, this time focusing on lexico-syntactic and discursive aspects of persuasion, such as the use of action verbs, as well as ensuring the script was suitable for oral delivery. Students completed a questionnaire at the end of the stage to evaluate their own scripting process (SCRIPT).

The second stage was the Production stage and it aimed to prepare for filming and to film. This four-session stage involved a group session with a professional coach, who supported students in preparing for filming by addressing a variety of queries, including how to stand in front of the camera, how to use body language appropriately, what to wear to look professional or how to manage stress during filming. Upon request, students were provided with a recording of their script as a model for rehearsing. Throughout the filming process, students received support with pronunciation, non-verbal communication and changes in the scripts. Following the session, the footage was distributed to students, who took a questionnaire to evaluate their own filming performance (FILM).

The third and last stage was the *Post-production* stage. It lasted for three sessions and aimed to edit the raw footage by adding titles, subtitles, credits, music, sound effects

and visual effects. Animoto was used because it was considered to be a user-friendly tool and previous studies had described similar procedures; for example, Franca Plastina (2013) used *GoAnimate* to avoid interfering with learning processes and supported the idea that "good tools become invisible once users understand their basic operation" (Selber & Selber, 2004, p. 36). Additionally, a screencast of the video editing software in Spanish was included. The final session included a viewing of the videos.

2.7.3   Post-Instruction (S3)

This stage lasted for three sessions. In the first session, students produced the same self-presentation they produced for the pre-test 1 in S1. Then, students were recorded reading the pre-test self-presentation aloud. In the second session, students took Tests 2 and 3 and the questionnaire on digital skills (DIG). Finally, in the last session, students took the FINAL questionnaire on students' perceptions (Table 7).

Table 7 *Post-Instruction (S3)*

Stage	Sessions	EG	Sessions	CG
S3	3	Test 1	3	Test 1
		Test 2, Test 3, DIG		Test 2, Test 3, DIG
		FINAL		FINAL

2.8 Data Collection, Analysis and Coding

This study used a mixed-methodology approach, primarily based on quantitative data and complemented with qualitative data. Quantitative data were collected from the Test 1 oral and written corpora, Test 2 on collocations and academic language and Test 3 on career management skills. Qualitative data were collected from the FINAL questionnaire on students' perceptions, the DIG questionnaire on digital skills, and the SCRIPT and FILM questionnaires. Next, the data analysis and coding process is described.

2.8.1 Questionnaires

Participants' responses to the DIG questionnaire were transferred to Excel and each participant's total ratings in each of the main sections were calculated according to the rating scheme of the DIG questionnaire, with a highest possible score of 185 (100 for Area 1, 30 for Area 2 and 55 for Area 3). Finally, descriptive statistics (means and standard deviations) were carried out. The responses to the FINAL questionnaire were based on a five-point Likert scale or were open-ended questions.

2.8.2 Tests 2 and 3

Test 2 and Test 3 were administered online using Google Forms. Participants' responses were transferred to Excel and rated manually. Then, each participant's total ratings in each test were calculated. Finally, descriptive statistics were run to calculate the means and standard deviations. Test 2 was rated manually according to its rating schema and ad-hoc scoring rubric (see Table 8), with a maximum possible score was 59 (25 in collocations and 34 in professional terminology).

Table 8 *Test 2 Rating Schema*

	No. items	Rating scale		Max.
2a Collocations				
	25	0	The answer is blank or incorrect.	25
		1	The answer is correct.	
2b Professional terminology				
	17	0	The answer blank or incorrect.	34
		1	Answer is partially correct due to spelling errors.	
		2	The answer is correct.	
Total	42			59

Test 3 was rated according to its rating schema and ad-hoc scoring rubric (see Table 9), with a maximum score of 36 (18 in Test 3a and 18 in Test 3b).

Table 9 *Test 3 Scoring Rubric and Schema*

	Item no.	No. items	Rating scale		Max.
3a Self- and Opportunity Awareness					
Discipline-specific skills	1–3	3	0	The answer is blank or wrong.	6
			1	One to three keywords/skills are included.	
			2	Three or more keywords/skills are included.	
Self-knowlege	4–6	3	0	The answer is blank or wrong.	6
			1	One or two skills are included (item 4). Skill is not desirable in the market (item 5). The skill has negative connotations (item 6).	
			2	Three or more skills are included (item 4). The skill is desirable in the market (item 5). The skills has positive connotations (item 6).	
Skills meaning	7–25	18	0	The answer is blank.	6
			0.157894	The answer is wrong, or the explanation/definition is partially exact.	
			0.315789	The answer is correct, or cause or description is accurate.	
Total		25			18
3b Transition Learning					
Non-verbal communication	26–28	2	0	The answer is blank or wrong.	6
			1	One to three keywords are included (item 26). One to two aspects are included (item 27). The suggestion is not /suitable (item 28).	
			2	Four or more keywords are included (item 26). Three or more aspects are included (item 27). The suggestion is suitable (item 28).	
CV	29–30	3	0	The answer is blank or incorrect.	6
			1.5	Answers Yes/No and does not justify the	
			3	Answers Yes/No and justifies the answer.	
Rhetoric	31–39	9	0	The answer is blank.	6
			0.333	The answer provided is incomplete: it mentions whether the statement is correct or not but does not reformulate it.	
			0.666	The answer is correct (the statement is appropriate) or complete (the statement is inappropriate, and reformulation is correct).	
Total		14	13		18
Total		39			36

2.8.3 Test 1 Written Corpus

Thirty-six manuscripts (Test 1a) were collected from Test 1. The written responses were transformed into plain text files to create a corpus for further digital processing.

2.8.3.1   *Complexity, Accuracy and Fluency (CAF)*

The written corpus was analysed for complexity, accuracy and fluency to determine students' L2 language performance. For this purpose, various software programs were used. Syntactic complexity and fluency were analysed with the L2 Syntactic Complexity Analyser (L2SCA) and lexical complexity was analysed with the L2 Lexical Analyser (LCA) and with AntWordProfiler. Finally, accuracy was analysed with the Atlas.ti data analysis program.

Syntactic Complexity. Syntactic complexity was analysed using Lu's (2010) L2 Syntactic Complexity Analyser (L2SCA). Previous research studies have reported using the tool (Alghizzi, 2017; Long & Tabuki, 2014; Wind, 2012) due to its analytical effectiveness. The analysis was carried out with a batch mode of the original software developed by Haiyang Ai, accessible online (http://aihaiyang.com/software/l2sca/batch/) (Ai & Lu, 2013; Lu, 2010; Lu, 2011; Lu & Ai, 2015). The punctuation errors in the plain-text files that could interfere with the analysis were corrected. Then the texts were imported into the L2SCA program and the test run. The tool output was in CSV files that were transferred to Excel. Then, each participant's total ratings in each test were calculated. Finally, descriptive statistics were run to calculate the means and standard deviations.

The corpus syntactic complexity analysis included four measures of syntactical complexity put forward by Lu (2010) using research by Wolfe-Quintero et al. (1998) and Ortega (2003), which included length of the production unit, subordination, coordination, and particular structures. As can be seen in Table 10, length of production unit included mean length clause (MLC) and mean T-unit length (MLT). Subordination included T-unit

complexity ratio (C/T), complex T-unit ratio (CT/T), dependent clause ratio (DC/C), and dependent clauses per T-unit (DC/T). Coordination included coordinated phrases per clause (CP/C) and per T-unit (CP/T). Finally, particular structures included complex nominals per clause (CN/C), complex nominals per T-unit (CN/T), and verb phrases per T-unit (VP/T).

Table 10 *L2 Syntactic Complexity Measures*

Measure	Code	Definition
Type 1: Length of a production unit		
Mean length of clause	MLC	# words / # clauses
Mean length of T-unit	MLT	# words / # T-units
Type 2: Subordination		
T-unit complexity ratio	C/T	# clauses / # T-units
Complex T-unit ratio	CT/T	# complex T-units / # T-units
Dependent clause ratio	DC/C	# dependent clauses / # clauses
Dependent clauses per T-unit	DC/T	# dependent clauses / # T-units
Type 3: Coordination		
Coordinate phrases per clause	CP/C	# coordinate phrases / # clauses
Coordinate phrases per T-unit	CP/T	# coordinate phrases / # T-units
Type 4: Particular structures		
Complex nominals per clause	CN/C	# complex nominals / # clauses
Complex nominals per T-unit	CN/T	# complex nominals / # T-units
Verb phrases per T-unit	VP/T	# verb phrases / # T-units

Lexical Complexity. In this study, lexical complexity was analysed using Lu's (2010) *L2 Lexical Complexity Analyser* (LCA). Previous research studies have reported using the tool (Alghizzi, 2017; Tsai, 2013) for its analytical efficiency. The LCA uses built-in wordlists for American and British English, i.e. the American National Corpus and the British National Corpus (Ai, 2016b). In this study, the latter was used. The analysis was carried out with a batch mode of the original software developed by Haiyang Ai, which can be accessed online (http://aihaiyang.com/software/lca/batch/) (Ai & Lu, 2010; Lu, 2012).

The texts were imported into the LCA program and the test run. The tool output was in CSV files that were transferred to Excel. Then, each participant's total ratings in each test were calculated and descriptive statistics were run to calculate the means and standard deviations.

As can be seen in Table 11, 25 lexical complexity metrics were computed and analysed across three lexical dimensions: density, sophistication and variation. Lexical density (LD) provided a measure of the proportion of lexical items (nouns, verbs, adjectives, adverbs) in the texts and consisted of a single measure that was lexical density. Lexical sophistication (LS) offered a measure of the proportion of advanced words in the texts and included lexical sophistication 1 (LS1) and 2 (LS2), verb sophistication 1 (VS1) and 2 (VS2) and corrected verb sophistication 1 (CVS1). Finally, lexical variation (LV) provided a measure of the proportion of different words in the texts and included three sets of measures: first, the number of different words (NDW) and three additional related measures for first 50 words (NDWZ), expected random 50 (NDWERZ), and expected sequence 50 (NDWESZ). Secondly, the type token ratio (TTR), and five additional measures for mean segmental TTR 50 words (MSTTR), corrected TTR (CTTR), root TTR (RTTR), bilogarithmic TTR (LogTTR) and Uber Index (UBER). Finally, a set of measures related to variation of lexical word (LV), verb 1 (VV1) and 2 (VV2), squared VV1 (SVV1), corrected VV1 (CVV1), noun (NV), adjective (AdjV), adverb (AdvV), and modifier (ModV).

Table 11 *Lexical Complexity Measures*

Measure	Code	Definition
Lexical density		
Lexical density	LD	# lexical word tokens / # word tokens
Lexical sophistication		
Lexical sophistication I	LS1	# sophisticated lexical word tokens / # lexical word tokens
Lexical sophistication II	LS2	# sophisticated word types / # word types
Verb sophistication I	VS1	# sophisticated verb types / # verb tokens

Measure	Code	Definition
Corrected VS1	CVS1	# sophisticated verb type /square root two times # verb token
Verb sophistication II	VS2	# two times sophisticated verb types / # verb tokens
Lexical variation		
Number different words	NDW	# word types
NDW (First 50 words)	NDW	# types of words T in the first 50 words of sample
Expected random 50	NDWZERZ	Mean T of 10 random 50-word samples
Expected sequence 50	NDWESZ	Mean T of 10 random 50-word sequences
Type Token Ratio	TTR	# word types / # word tokens
Mean segmental TTR50	MSTTR	Mean TTR of all 50-word segments
Corrected TTR	CTTR	# word types / square root of two times # word tokens
Root TTR	RTTR	# word types / square root of the # word tokens
Bilogarithmic TTR	LOGT	log # types / log # tokens
Uber Index	UBER	log twice # word type / log (# word token/# word type)
Lexical Word variation	LV	# lexical word types/ # lexical word tokens
Verb variation – I	VV1	# verb types / # verb tokens
Squared VV1	SVV1	# two times verb types / # verb tokens
Corrected VV1	CVV1	# verb types / square root of two times # verb tokens
Verb variation – II	VV2	# verb types / # lexical word tokens
Noun variation	NV	# noun types / # lexical word tokens
Adjective variation	AdjV	# adjective types / # lexical word tokens
Adverb variation	AdvV	# adverb types / # lexical word tokens
Modifier variation	ModV	# adjective types + # adverb types/# lexical word token

As a complementary measure of lexical complexity, the overall academic vocabulary load of the corpus was analysed with the *AntWordProfiler* tool, which is a freeware, multiplatform tool for carrying out corpus linguistics research on vocabulary profiling (Anthony, 2014). By default, AntWordProfiler (available at http://www.antlab.sci.waseda.ac.jp) is preloaded with the first and second thousand-level wordlists of the GSL, as well as the 570 AWL word families (Coxhead, 2000). The texts were imported to the AntWordProfiler program and were compared with the three wordlists included to find the word family levels of the texts based on their frequency in

the lists, and to find the percentage of the words in the texts that are covered by these established wordlists, that is, lexical coverage.

Accuracy. The written corpus was analysed for accuracy using the *Atlas.ti* software program. The productions were analysed manually and then several accuracy measures were calculated. As illustrated in Table 12, the measures included the number of error-free T-units (EFT), error-free T-units per T-unit (EFT/T), and errors per T-unit (E/T) (Wolfe-Quintero et al., 1998) in order to make results comparable to those of previous studies on accuracy (Dobao, 2012; Storch, 2009; Storch & Tapper, 2007).

Furthermore, accuracy was analysed by scrutinising the texts for three types of error: grammatical errors (GE), lexical errors (LE) and mechanical errors (ME) (Dobao, 2012; Storch. 2009; Wigglesworth & Storch, 2009). The total number of errors was tallied for each type and the means and standard deviations were calculated.

Table 12 *Accuracy Measures*

Measure	Code	Definition
Accuracy measures		
Error-free T-units	EFT	# of error-free T-units
Error-free T-unit ratio	EFT/T	# of error-free T-units / # of T-units
Errors per T-unit	E/T	# of errors / # of T-units
Error type measures		
Grammar error	GE	# of grammar errors
Grammar error ratio	GE/W	# of grammar errors / # of words
Lexical error	LE	# of lexical errors
Lexical error ratio	LE/W	# of lexical errors / # of words
Mechanical error	ME	# of mechanical errors
Mechanical error ratio	ME/W	# of mechanical errors / # of words
Total errors	TE	# of total errors
Total error ratio	TE/W	# of total errors / # of words

Ratio-based measures were calculated for grammar errors (GE/W), lexical errors (LE/W), mechanical errors (ME/W) and for the total number of errors (TE/W). The TE/W measure addressed researchers' claim that accuracy analysis should not just use ratio scores that do not distinguish between T-units or clauses containing multiple errors and those containing only a single error (Bardovi-Harlig & Bofman, 1989).

As shown in Table 13 and based on Bardovi–Harlig and Bofman's (1989) taxonomy, grammatical errors (GE) included syntactical errors such as word order, noun/verb agreement, articles or prepositions, as well as morphological errors such as those related to tense and form and verb/subject agreement. Lexical errors (LE) consisted of errors in word choice or collocations; finally, mechanical errors (ME) included errors in spelling, punctuation and capitalisation.

Table 13 *Types of Accuracy Error*

Error type	Examples
Grammatical error	
Syntactical	
Word order	*"I'm a person patient."*
Articles	*"Also, I worked the last year."*
Morphological	
Tense and form	*"I have work for different companies."*
Lexical errors	
Word choice	*"Actuality, I live in Pamplona."*
Using Spanish words	*"I've worked in a taller."*
Collocations	*"I gained experience on this field."*
Mechanical errors	
Spelling	*"I worked in a company colled x."*
Punctuation	*"I worked at laundry, for two months, I think it's good expiriance."*
Capitalisation	*"I speak three languages, spanish, euskera and inglish."*

Fluency. Finally, the written corpus was analysed for fluency using text length (W), which was analysed using the L2SCA software (see Table 14).

Table 14 *Fluency Measure*

Measure	Code	Definition
Text length	W	# of words

2.8.3.2   *Move Analysis*

In addition to the CAF analysis, a move analysis of the written corpus was also done. In this study, the term "move" refers to a text segment serving a communicative (semantic) function (Upton & Cohen, 2009) and consist of "steps" or "strategies", which refer to functional units that contribute to realise the move using specific lexico-grammatical features (style, tone, voice, grammar, syntax) (Bhatia, 1997). Two levels of analysis were conducted: (i) the strategies used for the *Promoting the candidate* move in the pre- and the post-tests; and (ii) the associated linguistic features of the strategies in the post-test.

At the first level, the EG's and CG'S pre- and post-test productions were analysed for strategies adopted for the *Promoting the candidate* move. Following Tongpoon–Patanasorn and Thumnong (2020), and as can be seen in Table 15, the coding scheme for the analysis consisted of strategies for the *Promoting the candidate* move synthesised from previous related studies (Al-Ali, 2004, 2006; Bhatia, 1993; Hou, 2013; Hou & Li, 2011; Hua, 2007; Upton & Connor, 2001; Wang, 2005).

Table 15 *Strategies for* Promoting the Candidate *Move*

Code	Strategy
1	Listing relevant skills, abilities
2	Listing qualifications
3	Stating how skills, abilities were obtained
4	Predicting the employer's success
5	Naming present work experience
6	Listing personality and attitude
7	Naming past work experience
8	Expressing a positive attitude towards a job opportunity
9	Naming achievement
10	Adversary glorification
11	Stating professional affiliation
12	Predicting the applicant's success
13	Stating personal interest and objective
14	Stating personal information
15	Stating personal hobbies

The corpus was analysed for the presence of these strategies, and the resulting list of identified strategies was recoded to meet the requirements of the current study. The aim of this study was to identify the type of information that participants provided for promoting the candidate. As a result, the following changes were made to code again the strategies found in the corpus:

(i)   the strategy "1 List relevant skills and abilities" was divided into two strategies: Step 1 *Listing hard skills and knowledge* and Step 3 *Listing transferable skills*. Language competence was regarded as belonging to Step 1, and soft skills to Step 3.

(ii)   the strategies of "5 Naming present work experience" and "7 Naming past work experience" were merged into a single strategy called Step 5 *Stating work experience*.

(iii)   the strategy of "13 Stating personal interest and objective" was divided into two

strategies: Step 6 *Stating objectives* and Step 7 *Stating personal interests*.

(iv)   the strategies of "14 Stating personal hobbies", and "15 Stating personal

information" were merged into Step 7 *Stating personal interests*.

Thirty-six files were imported into *Atlas.ti* and coded using the developed coding

scheme. As can be seen in Table 16, the coding scheme consisted of nine steps for the

Promoting the candidate move. After the strategies that realised the move were identified,

the occurrences of strategies were calculated and presented as percentages to determine

the most-used strategies by each group in each of both pre-test and post-test.

Table 16 *Coding Scheme for Promoting the Candidate Move*

Code	Step
S1	Step 1 Listing hard skills and knowledge
S2	Step 2 Listing qualifications
S3	Step 3 Listing transferable skills
S4	Step 4 Stating how skills were obtained
S5	Step 5 Stating work experience
S6	Step 6 Stating objectives
S7	Step 7 Stating personal interests
S8	Step 8 Expressing positive self-evaluation – personality and attitude
S9	Step 9 Predicting success

At the second level, the post-test productions were analysed further for key

associated linguistic features. The coding scheme for this analysis consisted of the nine

steps for the *Promoting the candidate* move and the common associated linguistic

features that were synthesised from two main referential studies (Henry & Roseberry,

2001; Tongpoon-Patanasorn & Thumnong, 2020). As can be seen in Table 17, examples

derived from the previous and the current studies are provided in order to illustrate how

the linguistic features were used in real utterances.

Table 17 *Associated Linguistic Features*

Code	Common linguistic features	Examples
Step 1 Listing hard skills and knowledge		
S1.1	I speak + NP	*"I speak English and Basque."*
S1.2	I have + (adjective) level + PP	*"I have a B1 level of English."*
Step 2 Listing qualifications		
S2.1	I have/hold + NP (qualification)	*"I have a Technician Diploma."*
S2.2	I + graduated + PP (place/time) with NP	*"I graduated from X in 1995 with a degree in X."*
S2.3	I completed + NP + PP (time) + at + NP	*"I completed a degree in Sound in 2012 at x."*
S2.4	I am a graduate of + NP (Course)	*"I am a graduate of (College) / Electronics."*
Step 3 Listing transferable skills		
S3.1	I have (adjective) skills + PP	*"I have good skills at communication…"*
S3.2	I am (adjective) + PP	*"I am self-motivated and can organise work…"*
Step 4 Stating how skills were obtained		
S4.1	Action verbs (past): acquired, learned	*"I acquired valuable experience…"*
S4.2	+ PP (time) at the beginning or end	*"During my internship, I learned how to…"*
Step 5 Stating work experience		
S5.1	I have + experience in + NP (and NP)	*"I also have experience in image and design."*
S5.2	Adverb (time) + I + verb (present) + NP	*"Currently, I am working as x…"*
Step 6 Stating objectives		
S6.1	Hope to + verb + NP	*"I hope to obtain work in summer."*
S6.2	I'd (also) like to + verb + NP	*"I would also like to learn Italian because…"*
Step 7 Stating personal hobbies, interests		
S7.1	I + verb + prep + VP (ing)	*"I am interested in… / I am keen on…"*
Step 8 Expressing positive self-evaluation		
S8.1	I + consider + NP + (to be + NP)	*"I consider myself hardworking."*
Step 9 Predicting success		
S9.1	I believe that + NP + modal + verb + NP	*"I believe that I can deliver good results."*

Note. PP = prepositional phrase. NP = noun phrase. VP = verb phrase

The post-test written corpus was analysed to identify the use of validation tactics

and self-presentation techniques, based on Rafaeli and Harness's (2002) taxonomy of

validation tactics and on Soroko's (2012) taxonomy of self-presentation techniques. This was intended for data triangulation given that by using multiple qualitative data analysis techniques, the integrity of the inferences drawn is assessed and the rigour of the analysis is improved. In this study, triangulation was approached from the "soft" intent of providing a picture as complete as possible to better understand the data obtained from the genre analysis (Turner & Turner, 2009). A within-methodology triangulation was applied by seeking corroboration of results from different analytical methodology on the same data (Leech & Onwuegbuzie, 2007).

As illustrated in Table 18, examples are provided for each tactic included in the taxonomy: self-report, important others, external indicators, evidence of achievement, previous roles, and performance in similar situations.

Table 18 *Self-Presentation Validation Tactics*

Code	Tactic	Claim	Example
		"My claims about merit are true because	
V1	Self–report	… I say so."	*"I am also able to solve problems and make decisions on my own."*
V2	Important others	… an important person (such as my previous manager) says so."	*"My references can provide information about my ability and motivation."*
V3	External indicators	… an authorisation says so."	*"I approved Peru's National Exam for mathematics."*
V4	Evidence of achievement	… I have had successful accomplishments in the past."	*"'I obtained a scholarship and spent a year at a high school in the US."*
V5	Previous roles	… I have performed a particular role."	*"There I learnt a lot about work dynamics, and I gained a lot of experience in this field."*
V6	Performance in similar situations	… I (successfully) performed in a situation similar to the role."	*"Combining studies and work requires me to be organised and manage time efficiently."*

Similarly, the post-test productions were also analysed for presentation strategies based on Soroko's (2012) taxonomy of self-presentation strategies (see Table 19).

Table 19 *Self-Presentation Strategies*

Code	Description	Example
Validating by expressing own opinion		
P1	self-reflection: without justification	*"I think that I have the skills for this job."*
P2	self-reflection: validating desired qualities	*"I think I'm a good candidate because…"*
Validating by giving details		
P3	time	*"From [time 1] to [time 2], I managed…"*
P4	proper names (of firms, places, institutions)	*"In [firm], I was responsible for the…."*
P5	specification (personal quality, job description)	*"… where I have learned to…"*
Emphasis, manifestation of merit		
P6	desired by the employer: development	*"I learn easily…"*
P7	desired by the employer: independence	*"I had to organise my work on my own."*
P8	desired by the employer: availability	*"I am ready to start immediately."*

2.8.4 Test 1 Oral Corpus

The oral corpus consisted of 36 voice tracks collected from Test 1. They included 10 pre-tests and 10 post-tests produced by the EG and eight pre-tests and eight post-tests produced by the CG (Test 1b). The corpus was analysed for oral accuracy using the *Atlas.ti* software program. The productions were analysed manually and scrutinised for errors impeding intelligibility. The total number of errors (TPE) was tallied and then the errors identified were grouped into four categories of error type: consonant errors (CE), diphthong errors (DE), suffix errors (SE) and vowel errors (VE). Then, the means, ratios per word and standard deviations were calculated (see Table 20).

Table 20 *Spoken Accuracy*

Measure	Code	Definition
Consonant errors per word	CE/W	# of consonant errors / # of words
Diphthong errors per word	DE/W	# of diphthong errors / # of words
Suffix errors per word	SE/W	# of suffix errors / # of words
Vowel errors per word	VE/W	# of vowel errors / # of words
Total errors per word	TPE/W	# of total errors / # of words

As shown in Table 21, the four types of pronunciation error that were coded were consonants, vowels, diphthongs and suffixes.

Table 21 *Types of Spoken Accuracy Errors*

Type		Examples
Consonants		
	/z/	facilities
	/ʃ/	machine
	/tʃ/	actually
Diphthongs		
	/e/	education
	/aɪ/	higher, title
	/aʊ/	sound
	/eə/	repair, prepare
	/ɪə/	realise
Vowels		
	/e/	bread
	/ɒ/	knowledge
	/ə/	maintenance
	/ɪ/	skill, live
	/iː/	these
	/ʊ/	could
	/ʌ/	study
	/æ/	satisfaction
Suffixes		
	/əbəl/	comfortable
	/ɪz	residences
	/t/	worked
	/ɪd/	called; finished

2.8.5 Data Analysis

Research question 1 (RQ1) asked whether students in the EG improved their career management skills and whether they improved them more than those in the CG. To answer RQ1, the results of Test 3 will be analysed to assess knowledge of career management-related content. The Test 1 corpus of self-presentations will also be analysed to determine performance in achieving the communicative goal. In this case, a genre analysis of the post-test corpus of Test 1 will be carried out. The resulting data will also be used in research question 2 to describe the communicative adequacy of the corpus.

Research question 2 (RQ2) asked whether students in the EG improved their communicative competence and whether they improved it more than those in the CG. To answer RQ2, the Test 1 corpus of written self-presentations will be analysed for accuracy, fluency, syntactic complexity, lexical complexity and academic vocabulary to determine students' L2 performance. The Test 1 corpus of voice recordings of self-presentations will be analysed for spoken accuracy. Finally, the Test 2 answers will be analysed to assess gains in knowledge of collocations and professional vocabulary.

Research question 3 (RQ3) asked whether students in the EG improved their digital skills and whether they improved them more than those in the CG. To answer RQ3, participants' responses to the DIG questionnaire on digital skills will be analysed. The data from the analysis of the pre-and post-test of Test 1, Test 2 and Test 3 and the DIG questionnaire will be complemented with qualitative data from the questionnaires.

2.8.6 Statistical Analysis

Due to the small sample sizes and the lack of normality of the data, non-parametric tests were applied. The Mann-Whitney U-test (a non-parametric equivalent of the student's t-test) was applied when comparing the EG and the CG, while the Wilcoxon signed-rank test (a non-parametric equivalent alternative to the matched-pairs t-test)

served to analyse differences within the same group between the pre-tests and the post-tests. The statistical significance level was set at $p = 0.05$ and statistically significant differences within the tables of results were marked with one asterisk ($p = 0.05$), two asterisks ($p = 0.01$) or three asterisks ($p = 0.001$) depending on the degree. In figures, statistical significance was marked with a single asterisk next to the statistically significant value. All quantitative analyses used SPSS Version 24.

3 CHAPTER 3 RESULTS AND DISCUSSION

This chapter will present the results and the discussion of the study, which have been merged to facilitate readers' understanding given the variety of variables involved. There are three sections, one per key competence and research question. The first section will deal with research question 1 (RQ1) related to career management skills, the second section will focus on research question 2 (RQ2) related to L2 communicative competence, and the last section will address research question 3 (RQ3) related to digital skills. All three research questions will present first the results obtained, followed by a discussion and a summary of the main findings. For reasons of space, the standard deviation was not provided in the tables of results included in this chapter. Each research question has a dedicated appendix where the tables of results include the standard deviation (see Appendix D for RQ1, Appendix E for RQ2 and Appendix F for RQ3).

3.2 Research Question 1

The first research question explored whether the EG students improved career management skills more than the CG students, based on the analysis of the following quantitative and qualitative data:

- Quantitative and qualitative data on L2 communicative adequacy from the Test 1 written corpus move analysis.

- Quantitative data on self- and opportunity awareness and job-search skills collected from Test 3.

- Qualitative data on students' perceptions regarding the effectiveness of the teaching methodology to develop professional skills from the FINAL questionnaire.

- Qualitative data on students' perceptions regarding the effectiveness of the coaching session from the FILM questionnaire offered.

3.2.1   Results

3.2.1.1   Test 1 Move Analysis

As shown in Figure 8, the EG's pre-test move analysis showed that Step 5 *Stating work experience* was the step they used the most (M = 1.3), followed by Step 2 *Listing qualifications* (1). The group used Step 4 *Stating how skills were obtained* to only a limited extent (0.8) and used Step 3 *Listing transferable skills* (0.2) very acarcely. As for the CG, the pre-test analysis showed they mostly addressed Step 5 *Stating work experience* (2.5) and Step 2 *Listing qualifications* (1.5), followed by Step 9 *Predicting success* (1). The group almost did not use Step 3 *Listing transferable skills* (0.25). In the pre-test, the CG included more content than the EG in Step 5 *Stating work experience* (1.3 < 2.5 = −1.2), Step 9 *Predicting success* (0.13 > 0.1 = −0.87), Step 2 *Listing qualifications* (1.0 < 1.5 = −0.5), Step 3 *Listing transferable skills* (0.2 < 0.25 = −0.05) and Step 8 *Expressing positive self-evaluation* (0.6 < 0.63 = −0.03). On the contrary, the EG included more content than the CG in Step 4 *Stating how skills were obtained* (0.8 > 0.25 = 0.55), Step 6 *Stating objectives (*0.5 > 0.13 = 0.37), Step 1 *Listing hard skills and knowledge* (0.3 > 0.13 = 0.17), and Step 7 *Stating personal interests* (0.5 > 0.38 = 0.12).

Figure 8 *EG's and CG's Pre-Test Move Analysis*

	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7	Step 8	Step 9
EG's Pre-Test	0.3	1	0.2	0.8	1.3	0.5	0.5	0.6	0.13
CG's Pre-Test	0.13	1.5	0.25	0.25	2.5	0.13	0.38	0.63	1

■ EG's Pre-Test   ● CG's Pre-Test
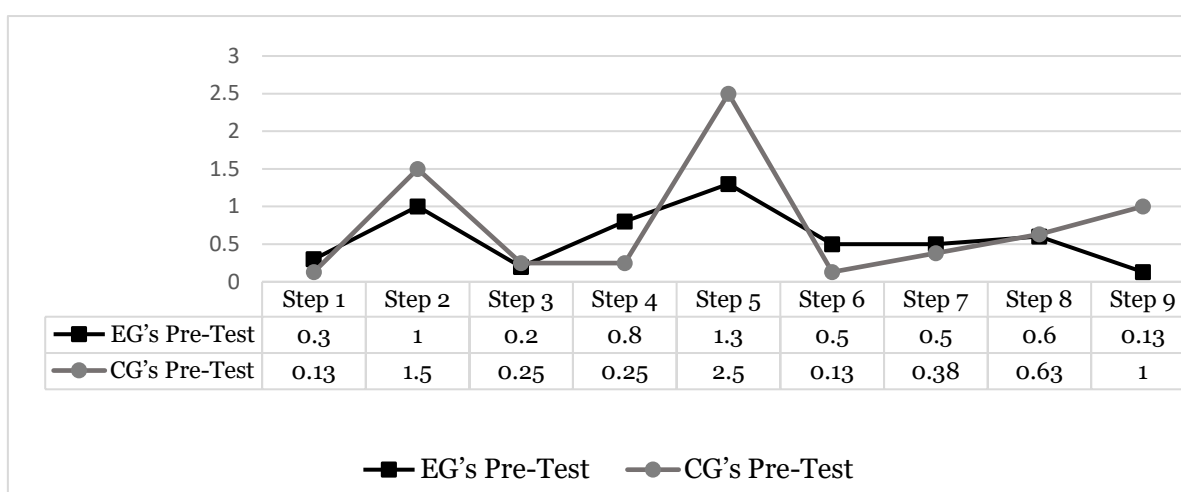
In the post-test (see Figure 9), the CG's results remained higher than the EG's only in Step 5 *Stating work experience* (2.25 > 0.9 = −1.35) and Step 2 *Listing qualifications* (1.5 > 0.1 = −0.5). The former reached statistical significance (U = 10.000, p = 0.006). The EG's results remained higher than the CG's in Step 4 *Stating how skills were obtained* (1.8 > 0 = 1.8), Step 3 *Listing transferable skills* (1.2 > 0 = 1.2), Step 7 *Stating personal interests* (1.4 > 0.38 = 1.02), and Step 8 *Expressing positive self-evaluation* (1.1 > 0.38 = 0.72), Step 6 *Stating objectives (*0.8 > 0.25 = 0.55), Step 1 *Listing hard skills and knowledge* (0.6 > 0.13 = 0.47) and Step 9 *Predicting success* (0.13 > 0.1 = 0.03). The difference was statistically significant for Step 4 (U = 16.000, p =0.011) and Step 7 (U = 11.500, p = 0.008).

Figure 9 *EG's and CG's Post-Test Move Analysis*

	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7	Step 8	Step 9
■— EG's Post-Test	0.6	1	1.2	1.8 *	0.9 *	0.8	1.4 *	1.1	0.13
●— CG's Post-Test	0.13	1.5	0	0	2.25	0.25	0.38	0.38	0.1

■—EG's Post-Test   ●—CG's Post-Test
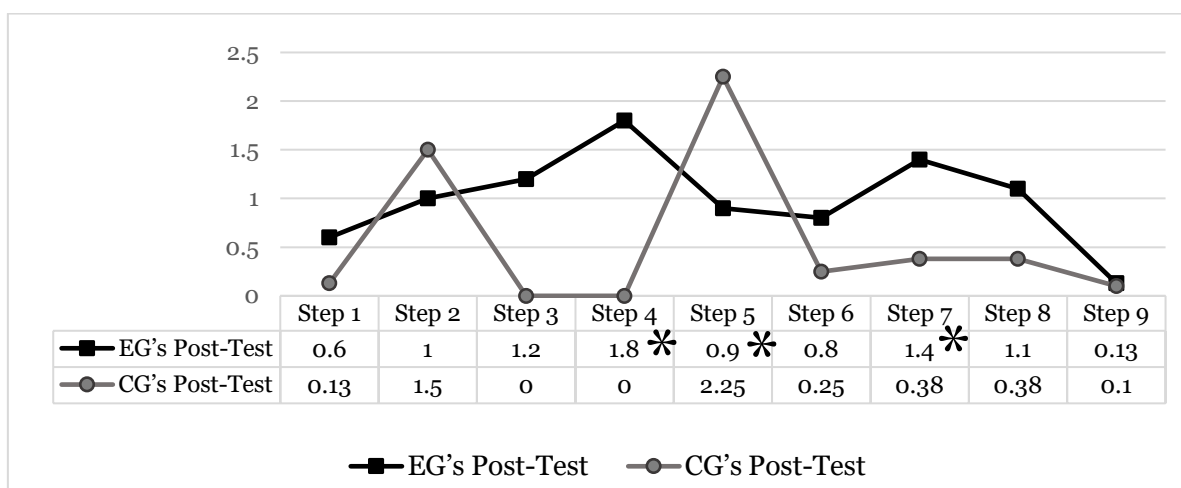
The EG's progression from pre-test to post-test was positive and stable. As shown in Figure 10, all metrics showed gains except for Step 5 *Stating work experience*, which dropped (1.3 < 0.9 = 0.4) and Step 9 *Predicting success*, which remained the same (0.13 = 0.13 = 0). The highest increases in number of instances happened in Step 3 *Listing transferable skills* (0.2 < 1.2 = 1) and Step 4 *Stating how skills were obtained* (0.8 < 10.8 = 1), followed by Step 7 *Stating personal interests* (0.5 < 1.4 = 0.9), which reached statistical significance (Z = −2.373, p = 0.018).

Figure 10 *EG's Pre- and Post-Test Move Analysis*

	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7	Step 8	Step 9
EG's Pre-Test	0.3	1	0.2	0.8	1.3	0.5	0.5	0.6	0.13
EG's Post-Test	0.6	1	1.2	1.8	0.9	0.8	1.4	1.1	0.13

━━■━━ EG's Pre-Test   ╌╌■╌╌ EG's Post-Test
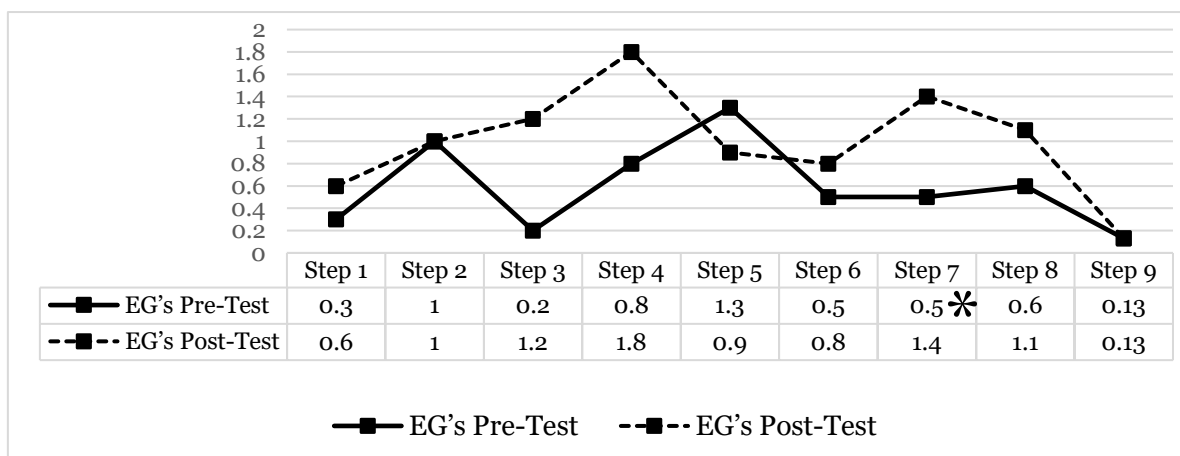
Over time, the CG increased Step 5 *Stating work experience* (2.25 > 2.5 = 0.25) and slightly Step 6 *Stating objectives* (0.13 > 0.25 = 0.12) (see Figure 11). The group's progression remained the same for Step 1 *Listing hard skills and knowledge* (0.13 = 0.13 = 0), Step 2 *Listing qualifications* (1.5 = 1.5 = 0) and Step 7 *Stating personal interests* (0.38 = 0.38 = 0), decreased in Step 9 *Predicting success* (1 > 0.1 = −0.9) and dropped to null in Step 3 *Listing transferable skills* (0.25 > 0 = −0.25) and Step 4 *Stating how skills were obtained* (0.25 > 0 = −0.25).

Figure 11 *CG's Pre- and Post-Test Move Analysis*

	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7	Step 8	Step 9
CG's Pre-Test	0.13	1.5	0.25	0.25	2.5	0.13	0.38	0.63	1
CG's Post-Test	0.13	1.5	0	0	2.25	0.25	0.38	0.38	0.1

━━●━━ CG's Pre-Test   ╌╌●╌╌ CG's Post-Test
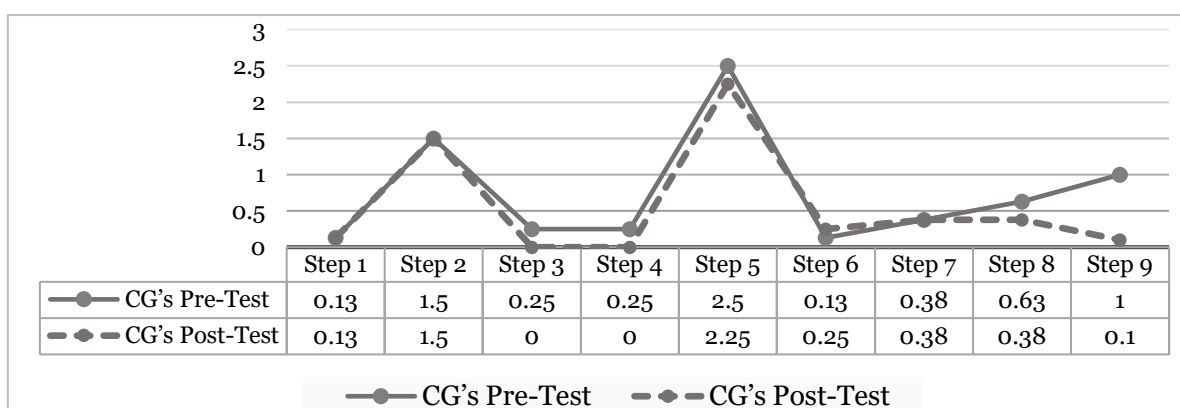
Regarding the distribution of content among the different steps, the EG's distribution in the pre-test was more balanced than the CG's. As shown in Figure 12, there

was a similar predominance of Step 4 *Stating how skills were obtained* (21%), Step 5 *Stating work experience* (20%) and Step 2 *Listing qualifications* (17%), followed by Step 8 *Expressing positive self-evaluation* (12%), Step 6 *Stating objectives* (10%), Step 3 *Listing transferable skills* (9%) and Step 7 *Stating personal interests* (6%), which had a higher presence than the remaining Step 1 *Listing hard skills and knowledge* (3%) and Step 9 *Predicting success* (2%).

In contrast, the step distribution in the CG's pre-test showed a prevalence of Step 5 *Stating work experience* (41%), followed by Step 2 *Listing qualifications* (26%). The next largest contributor to students' presentations was Step 8 *Expressing positive self-evaluation* (11%), followed by a similar percentage set for Step 7 *Stating personal interests* (7%), Step 6 *Stating objectives*, Step 3 *Listing transferable skills* and Step 4 *Stating how skills were obtained* (4%) and, finally, followed by Step 9 *Predicting success* (1%).

Figure 12 *EG's and CG's Pre-Test Move Analysis*
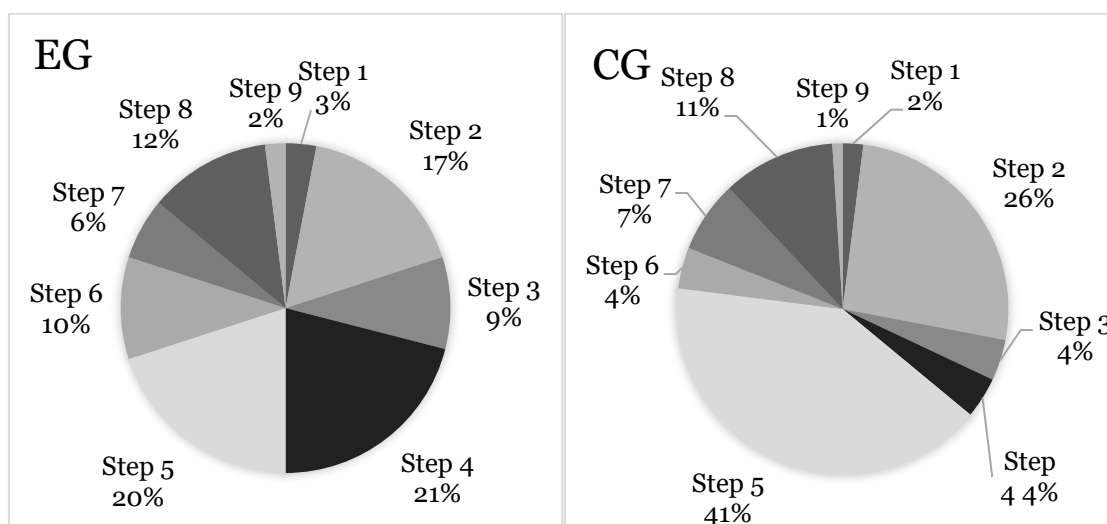
In the post-test, a similar pattern was observed (see Figure 13). The EG's self-presentations included content for all nine steps, with an even more balanced distribution than in the pre-test. There was still a slight predominance of Step 4 *Stating how skills*

were obtained (21%) and Step 2 *Listing qualifications* (19%), but with a 12% decrease in Step 5 *Stating work experience*, which fell to 9%.

In contrast, the CG omitted Step 3 *Listing transferable skills*, Step 4 *Stating how skills were obtained* and Step 9 *Predicting success*, and increased the content of the two steps that already dominated the pre-test, Step 5 *Stating work experience* (46%) and Step 2 *Listing qualifications* (29%). The remaining steps had very similar percentages, ranging from 5% to 7%. Step 8 *Expressing positive self-evaluation* and Step 6 *Stating objectives* were the next largest contributors to students' self-presentations (7%), followed by Step 1 *Listing hard skills and knowledge* (6%) and Step 7 *Stating personal interests* (5%).

Figure 13 *EG's and CG's Post-Test Move Analysis*
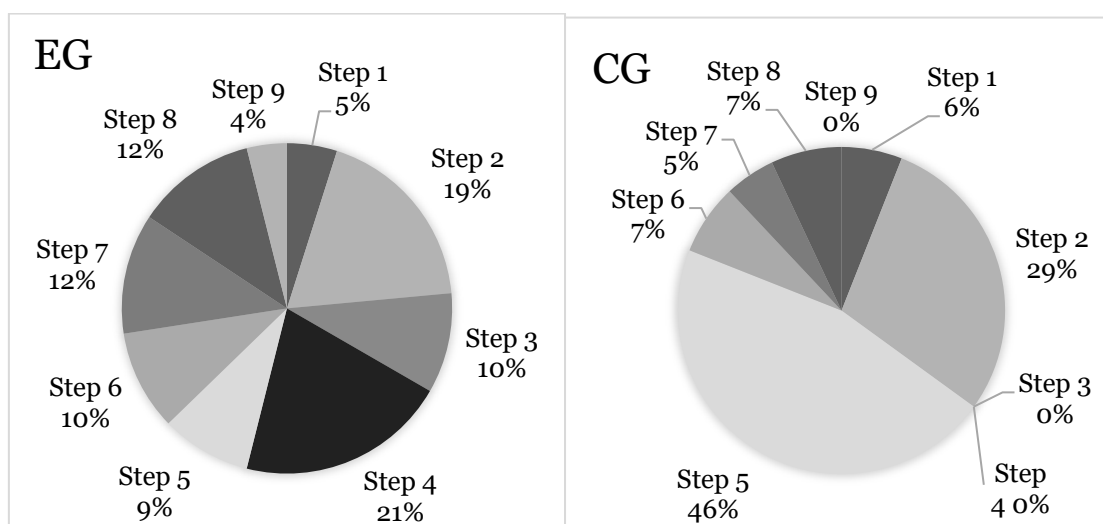
The lexico-grammatical analysis of the post-test corpus indicated that, as far as Step 1 *Listing hard skills and knowledge* was concerned, both groups realised the step, but the EG provided more content than the CG to support this strategy (0.6 > 0.13 = 0.7). Though the primary type of information students included was related to foreign language ability, it is worth noting that there were three different ways in which two students from the EG approached the step. The first one was by including information about their knowledge of English for IT; the second one was by expressing and proving their

knowledge of other second and foreign languages using them to describe their competence level; and the third way to make their descriptions richer was by including prepositional phrases (time) or adverbs of time, which supported previous research findings that reported the use of adverbials of time (Henry & Roseberry, 2001) to realise the step. As a result, these two students differentiated themselves from more standard realisations of the strategy, thus standing out from the group.

1) Including English for IT.

> *"I speak English since I started school and this year I have studied English for IT."*
> *(Student 2)*

2) Expressing content about specific languages in those languages.

- *"Ich kann ein bisschen Deutsch. Ich habe die Sprache zwei Jahre lang gelernt und möchte sie weiterlernen." (Student 9)*

- *"Hablo Español porque es mi lengua materna." (Student 9)*

- *"Euskera hitz egiten dut eskolan ikasi nuen eta." (Student 9)*

3) Including prepositional phrases (time) or adverbs of time.

- *"Also I speak Euskara since I have 4 years and I practise it every summer."*
  (Student 2)

- *"Finally, I speak Castellano because my parents taught me since I born." (Student 2)*

Both groups included other knowledge such as repairing cars, computers or devices.

- *"I like computer science and repair devices in my free time."*

Both groups approached Step 2 *Listing qualifications* in a similar way, and both groups' results remained the same throughout the study (EG = 1 = 1; CG = 1.5 = 1.5). A further analysis of the EG's strategies showed that the group used a variety of structures:

1) *I + study:*

- *"I'm studying higher degree in Telecommunications."*

2) *I did/have a degree in + NP*

- *"I have a degree in Industrial Electricity."*

3) *I finished + NP + Prep Phrase (time/place)*

- *"I finished my studies in Peru."*

4) *I'm in my first year of + NP*

- *"At the moment I am in my first year of Vocational Training in Telecom and IT Systems."*

5) *I completed + NP*

- *"I completed high school."*

6) *I'm certified in + NP*

- *"I am also a certified technician in Renewable Energies."*

Likewise, the EG used a variety of adverbs of time, namely *at the moment, nowadays, today, currently, now*; the group also used prepositional phrases of time, such as *two years ago, after the intermediate degree.*

- *"At this moment, I'm getting a Degree in Telecommunication."*

- *"After the intermediate grade, I started studying a higher degree."*

- *"Two years ago, I finished High Secondary Education."*

Instead, the CG used only two of the syntactic structures above, which resulted in more repetitive and monotonous productions.

1) *I + study (present continuous, simple, perfect) + NP (degree)*

  - *"I study electronic maintenance in this moment."*

  - *"I'm studying electronic maintenance."*

  - *"I have study two training courses."*

2) *I have a grade/degree in + (NP)*

  - *"I have a degree in welding."*

In particular, the CG used (1) in different tenses (*I am studying, I have studied, I studied)*, and they also used adverbs of time. In particular, *I am studying* was primarily used with *nowadays, now*. Though both groups used the same syntactic structures identified in the corpus written by native speakers (Henry & Roseberry, 2001), the EG showed a greater variety and accuracy. The EG also used a higher quantity and more varied adverbials of time before or after the structure to mention the date when the qualifications had been obtained. This finding supported previous research results (Henry & Roseberry, 2001; Tongpoon-Patanasorn & Thumnong, 2020).

As regards Step 3 *Listing transferable skills*, students in the CG reduced the amount of information related to transferable skills throughout the study and did not include any skills in their post-test productions (0.25 > 0 = −0.25). Conversely, the EG increased the references to transferable skills throughout the study (0.2 > 1.20 = 1) and

included a variety of skills, such as *teamwork, active listening, adaptability, autonomy, responsibility, commitment* or *initiative*:

- *"I would like to point out my ability to manage myself in teamwork, to assume responsibilities and to be organised."*

- *"I'm also able to solve problems and make decisions on my own."*

- *"I can work in a team but I can also work alone, as I have the things very clear."*

- *"I'm responsibility in my work."*

- *"I am a person who likes listening to people, promoting dialogue and making decisions taking everybody's opinion into consideration."*

- *"I work well under pressure and remain calm in different situations, which is important when there are deadlines to fulfil."*

Similarly, the CG did not include any content to support Step 4 *Stating how skills were obtained*. The EG linked the acquisition of skills and abilities to their interests, personal qualities, work experience and educational background to state how skills and abilities were gained. Creating a job-application video benefited this particular strategy, and students established a cause-and-effect relationship between the ideas provided in several strategies of their productions:

- *"All of these experiences abroad have made me a more independent person…"*

- *"Also, I am a horse ridder and this sport has helped me to develop some of these skills."*

- *"I helped my father in his business and learnt to be responsible in my work."*

- *"… but when I have obtained more skills is being a referee. There I learnt to be polite, patient, good listener."*

- *"My work experience has taught me to work as part of a team."*

The following common linguistic structures were identified in the step:

1) NP + has helped/taught me + to + VP

2) NP + has made me + NP

3) NP + has required me + to + VP

Previous research findings did not identify these structures. Instead, they highlighted the use of prepositional phrases of time placed in front or at the end of the phrase to complete the information provided (Henry & Roseberry, 2001; Tongpoon-Patanasorn & Thumnong, 2020), which was not identified in the corpus of this study. This may be because the EG tended to separate the main action and the consequence of the action using an anaphoric reference at the beginning of the second sentence:

- *"I've lived in different countries. These experiences have made me a flexible person."*

The sample below is a sentence from a previous study that reported the use of prepositional phrases (Tongpoon-Patanasorn & Thumnong, 2020, p. 114). As can be seen, there is a single sentence that starts with the consequence of the action (*I acquired experience*), and then it is linked to the main action, which is introduced using an adverbial of time (*during*):

- *"I acquired valuable experienced of independent living and cultural immersion through global interaction during my 6-month Student Exchange Program […]"*

The EG's productions showed other linguistic and discourse features that supported previous research findings, such as using a past tense narrative discourse mode instead of the expository mode used in various strategies and activity verbs (Henry & Roseberry, 2001). The following verbs used by students in the simple past to describe actions and participation were identified:

- *"I participated in several exchanges …"*

- *"I practiced every summer…"*

- *"I developed some skills …"*

- *"I passed the exam …"*

- *"I helped my father …"*

- *"I learnt …"*

The results were also in line with previous research findings based on the move analysis of the application letter (Tongpoon-Patanasorn & Thumnong, 2020), which reported that "acquire" and "learn" were the two most common action verbs in this step. Several instances of "obtain" and "learn" were identified:

- *"I obtained experience, …"*

- *"I learnt new things."*

- *"I obtained different skills."*

- *"I learnt a lot about work dynamics."*

- *"I learnt how to be polite."*

Both groups' productions showed a very similar approach to Step 5 *Stating work experience.* The EG included less information than the CG in the pre-test (1.3 < 2.5 = −1.20), and both groups reduced the amount of content throughout the study, so in the post-test, the EG still used less content than the CG (0.9 < 2.25 = −1.35). Both groups used the following syntactic structures to achieve the communicative purpose:

1) *I (also) have + experience/work experience in + NP*

2) *I work in/on (x5)*

3) *I worked as*

4) *I work like** (only used by the CG)

For (1), there was no evidence of adjective use before "experience", as reported by previous studies (Wang, 2005). In (2), the verb was expressed in different tenses (*I am working, I have worked, I worked).* There were verb structures such as *I had to work* and *I started working.* These results evidenced that both groups realised the strategy as in Henry and Roseberry's (2001) analysis of native speaker corpus, namely through three present tenses accompanied by specific adverbials of time:

1) Present continuous mainly used with "currently": *"Currently, I am working as X."*

2) Present simple: *"Presently, I am employed as x."*

3) Present perfect: *"For the past two years, I have held the post of X."*

The EG increased the amount of content used to realise Step 6 *Stating objectives* throughout the study (0.5 > 0.8 = 0.3). Participants in the EG expressed goals related to various aspects of the learning process and the professional career:

1) Learning:

- *"I always want to learn more and more so hope I can continue learning and advance in the life doing what I like."*

- *"I'd also like to learn Italian because I like to know different cultures."*

- *"I have much interest in learning."*

- *"I want to continue studying until I get a bachelor's Degree in IT or Computers."*

2) Professional career:

- *"I want to work in computer technician because I would obtain experience."*

- *"I hope to obtain a work in summer."*

The CG's results showed a slight increase in the content aimed at realising this strategy during the study (0.13 > 0.25 = 0.12). However, from the three instances identified, two of them lacked adequacy because they were either too general or not relevant:

- *"In the future, I would like to find a job in Pamplona or near of the city because I spend much money in Petrol." (not relevant)*

- *"In the future, I would like to work in a team in my job." (too general)*

The EG increased the content to realise Step 7 *Stating personal interests* (0.5 > 1.4 = 0.9) and included interests relevant to the vacancy (computer science, physics, electricity, electronics, computers). They also used interests highlighting a positive quality in the candidate. Some examples were (i) working out daily or taking part in competitions as a horse rider, which reflected responsibility and commitment; (ii) coaching a kids' football team, which signalled teamwork; or (iii) working as a football referee, which reflected active listening or conflict resolution.

- *"I'm keen on football, not only as player but also as coach."*

- *"I like to read because I learn new things and new cultures."*

- *"I love cars and engines."*

Conversely, the CG's results remained the same throughout the study (0.38). Two instances of strategies stating personal interests were identified, but they lacked adequacy because either they were not related to the field of specialisation or they lacked an explanation to link them to the vacancy or interest of the employer:

- *"I like electronics and basketball."*

- *"I also played the bass and guitar at a band the last 3 years."*

The results obtained in Step 8 *Expressing positive self-evaluation* showed that the EG increased content about personal interests to support the strategy (0.6 > 1.1 = 0.5), and they did it through qualities such as *friendly, charismatic, ambitious, responsible, committed to work, calm, peaceful, confident, happy, open-minded, curious, hardworking, independent, polite, patient, good listener*. Henry and Roseberry's (2001) native speakers' corpus showed that this strategy was realised by using the following structures:

1) I + consider + NP (myself) + (Adj) + (to be + NP)

2) I + feel + that + clause

The students' productions showed that they also used similar structures:

- *"I consider myself as a friendly, charismatic and funny guy."*

- *"I consider myself a good listener."*

- *"I consider myself a responsible worker."*

- *"About myself I can say that I am a very ambitious person…"*

- *"I am a boy very nice, I like speak with the persons of anything."*

- *"I like to be responsible and have commitment to my work."*

The CG produced less content to support this strategy (0.63 > 0.38 = −0.25) in the post-test and only two instances of positive self-evaluation were identified. Nevertheless, though the CG's results decreased, it is worth mentioning that both groups expressed lexico-syntactic features aligned with Henry and Roseberry's (2001) reported features.

- *"I defined myself a person patient and hard work."*

- *"I consider myself a hardworking and sociable."*

Several instances of Step 9 *Predicting success* were identified. According to previous research findings (Henry & Roseberry, 2001; Hua, 2007; Tongpoon-Patanasorn & Thumnong, 2020), this step is realised by using the following linguistic feature:

1) *I verb + that + I + modal + verb + NP + (adj)*

Two instances were found in two productions by students in the EG with a higher proficiency level in English:

- *"I think I could take the job."*

- *"I think I meet the requirements for the internship."*

Likewise, we found other instances which did not follow that structure but were clearly used with the same purpose:

- *"I would like you to give me a chance to prove how efficient I am."*

- *"I can as well contribute the knowledge I have already gained, so I could perform all the required duties effectively."*

Frequent Words. Based on Henry and Roseberry's (2001) corpus analysis of letters of application written by native speakers, the most frequent words were analysed in this study to provide further evidence of the communicative adequacy of students' productions. According to the researchers, native writers used the connector "and" in binary phrases, mainly with two nouns and two verbs and occasionally with two adjectives, as a strategy to list skills, experience and abilities; on many occasions, both words are near-synonyms. This is the kind of language used in advertisement slogans with persuasive purposes, as the expression is more comprehensive and provides promotional opportunity. The EG showed "and" as the second most frequent word (f 76) after "I" (f 172). In the CG's list of most frequent words "and" was in third position (f 31), after "I" (f 72) and "in" (f 54). Nine instances of the same binary structure were found. An analysis of the collocations of "and" showed the use of binary expressions in 40 cases (see Table 22).

Table 22 *Binary Expressions from Test 1a Corpus*

Step	EG	CG
Step 1	*English and French*	*Euskera and English*
Step 2	*Image and Sound* *telecommunication and IT System*	
Step 3	*promoting dialogue and making decisions* *work well under pressure and remain calm*	
Step 4	*to be organised and manage time* *to manage time and resources*	
Step 5	*automatic and electric installations* *hydraulics and robotic systems*	*I worked in x and x shops.* *Telecom and electronic area*
Step 6	*A step in my development and learning* *I can continue learning and advancing in life*	
Step 7	*I have time to work and train* *I'm a boy who loves peace and relax*	*I played the bass and guitar* *I like electronics and basketball*
Step 8	*Patience and confidence* *I'm responsible and committed*	*I'm patient and hardworking* *Hardworking and sociable*
Step 9	*to develop professionally and learn*	

There were several differences in how the groups used this lexico-grammatical feature, which also impacted its persuasive effectiveness and, therefore, the productions' overall communicative adequacy. First, the EG used more binary expressions per word than the CG on average (0.45 > 0.31 = 0.14). Secondly, the EG used it in all strategies within the *Promoting the candidate* move, while the CG used them to support only four steps (Steps 1, 5, 7 and 8). Previous research findings had reported that this lexico-grammatical feature was common in all moves (Henry & Roseberry, 2001; Tongpoon-Patanasorn & Thumnong, 2020).

3.2.1.2 Test 3 Career Management Skills

This study used the *LifeComp* Framework's notion of career management skills, which is based on career(s) education as defined by Watts (2006), i.e. a set of planned experiences designed to facilitate the development of (1) self-awareness, (2) opportunity awareness, (3) decision learning and (4) transition learning. This framework comes from the dynamic relationship between Self, Opportunities, Decisions and Transition, known as the DOTS model (Law & Watts, 1977) (see Appendix A).

As can be seen in Table 23, the EG increased the overall output (4.58) throughout the study while the CG reduced it (−1.2).

Table 23 *Test 3 Career Management Skills (Max = 36; Test 3a = 18; Test 3b = 18)*

	Pre-Test			Post-Test			Pre-/Post-Test	
	EG	CG	Diff.	EG	CG	Diff.	EG	CG
Test 3a	9.09	8.95	0.14	11.17	8.65	2.52**	2.08**	−0.30
Test 3b	9.42	10.33	−0.91	11.92	9.44	2.48	2.50**	−0.90
Total	18.51	19.8	−1.29	23.09	18.09	5	4.58	−1.2

At the beginning of the study, the EG's overall results were lower than the CG's (18.51 < 19.8 = −1.29) whereas at the end of the study, the EG outperformed the CG in the

overall Test 3 (23.09 > 18.09 = 5), in Test 3a (11.17 > 8.65= 2.52), in Test 3b (11.92 > 9.44 = 2.48) and in the overall gain from pre-test to post-test (4.58 > −1.2). There was a statistically significant difference between both groups' results in the post-test, favouring the EG (U = 13.000, p = 0.016). Similarly, the results revealed a statistically significant gain by the EG in Test 3a Self- and opportunity awareness (Z = −2.675, p = 0.007) and Test 3b Transition (Z = −2.805, p = 0.005).

Test 3a Self- and opportunity awareness consisted of sections focused on (i) students' knowledge of their strengths and weaknesses; (ii) their awareness of the skills required in the market; and (iii) their understanding of skills meaning. As shown in Table 24, in the pre-test, although both the EG's and the CG's results were similar, the EG had slightly higher scores (9.09 > 8.95 = 0.14). In the post-test, the EG's total result was higher than the CG's (11.17 > 8.65 = 2.52) and the difference reached statistical significance (U = 13.000, p = 0.016). The EG's gain in the overall Test 3a over time was statistically significant (Z = −2.191, p = 0.028), while the CG's dropped (−0.38).

Table 24 *Test 3a Self- and Opportunity Awareness (Max = 18)*

	Pre-Test Mean			Post-Test Mean			Pre-/Post-Test	
	EG	CG	Diff.	EG	CG	Diff.	EG	CG
Self	3.80	3.75	0.05	4.80	3.38	1.42**	1.00	−0.38
Opp1	3.10	3.25	−0.15	3.50	3.13	0.37*	0.40	−0.13
Opp2	2.19	1.95	0.24	2.87	2.15	0.72	0.68	0.20
Total	9.09	8.95	0.14	11.17	8.65	2.52*	2.08*	−0.30

In the post-test, the EG increased their scores in the three subareas (Self = 1; Opp1 = 0.4; Opp2 = 0.68), while the CG increased their understanding of skills slightly (Opp2 = 0.2) but decreased their results in self-knowledge (Self = −0.38) and in discipline-specific skills (Opp1 = −0.13). In the post-test, the EG outperformed the CG in self-knowledge (Self

= 4.80 > 3.38 = 1.42) and in knowledge of discipline-specific skills (Opp1 = 3.50 > 3.13 = 0.37) and the differences were statistically significant in self-knowledge (U = 12.500, p = 0.012) and in discipline-specific skills (U = 12.500; p = 0.012).

Test 3b Transition learning consisted of sections focused on students' understanding of (i) non-verbal communication in job-search settings; (ii) CV design; and (iii) rhetorical aspects related to negative and positive formulations. As Table 25 shows, in the pre-test the CG obtained a higher total result than the EG (9.42 < 10.33 = −0.91) while in the post-test the EG's result was higher than the CG's (11.92 > 9.44 = 2.48) and the difference reached statistical significance (U = 17.000, p = 0.041). The EG's increase in the total result over time reached a high level of statistical significance (Z = −2.803, p = 0.005), while the CG's overall result dropped (−0.90).

Table 25 *Test 3b Transition Learning (Max = 18)*

	Pre-Test Mean			Post-Test Mean			Pre-/Post-Test	
	EG	CG	Diff.	EG	CG	Diff.	EG	CG
Job	3.15	3.38	−0.23	4.35	2.06	2.29	1.20*	−1.31
CV	4.10	4.63	−0.53	4.40	4.75	−0.35	0.30	0.13
Rhetoric	2.17	2.33	−0.16	3.17	2.62	0.55	1.00**	0.29
Total	9.42	10.33	−0.91	11.92	9.44	2.48*	2.50**	−0.90

The EG increased the results in the three subareas (Job = 1.2; CV = 0.3; Rhetoric = 1), and the gains were statistically significant in job interview (Z = −2.271, p = 0.028) and rhetorical strategies (Z = −2.352, p = 0.019). The CG's results also increased in CV (0.13) and Rhetoric (0.29, with no statistical significance, and dropped in Job (−1.31).

3.2.1.3   SCRIPT Questionnaire

As indicated in Figure 14, the job-application video project included a questionnaire the EG students completed after the scripting stage. When asked about the type of

information students included, 100% of students confirmed having introduced themselves and thanked the viewer at the end. Ninety percent of students included an objective and mentioned their current studies and 80% included information about previous work experience or qualifications. Seventy percent of the students mentioned interests and hobbies. As for skills, all students mentioned problem-solving skills (100%), followed by language skills (90%), computer and decision-making skills (70%), communication skills (50%) and organisational skills (30%). Motivation was a quality included by 80% of the students, followed by responsibility (70%) and autonomy (60%). Eighty percent of the students suggested their interest in having an interview and 60% mentioned their contact details explicitly.

Figure 14 *SCRIPT Questionnaire Details*
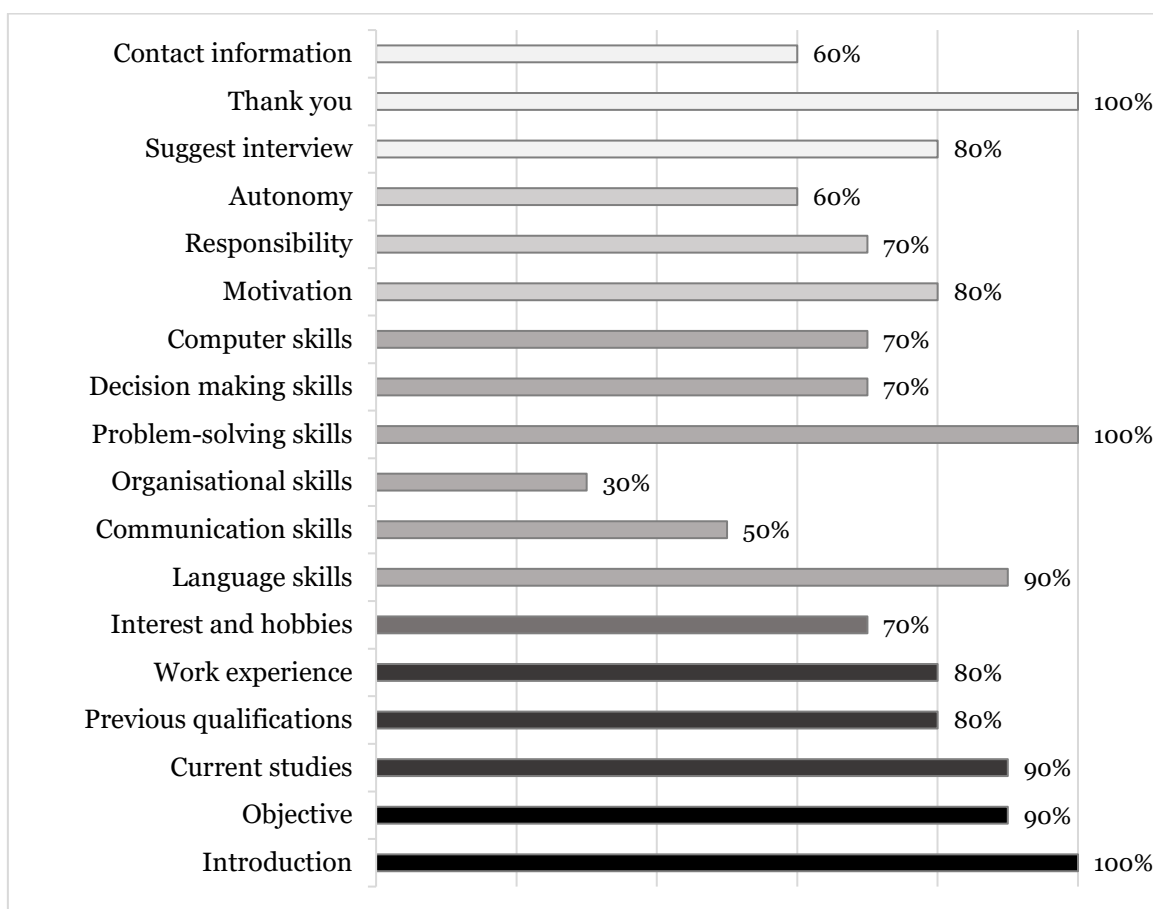
3.2.1.4   FILM Questionnaire: Coaching Session

The FILM questionnaire included three open-ended questions to gather students' perceptions of the two-hour coaching session students attended at the end of the pre-production stage, just before the filming session. The answers revealed that students felt that the topics were interesting and useful, both for the project and for their professional development. The students highlighted the relevance of having learned about professional outfit, stress management, hand gestures, posture, self-description, body language and impression management:

- *"The coach was clear about the subject and presented it in an interactive way and listening to us and solving queries."*

- *"I found interesting the hand gestures; I did not think they were so important."*

- *"The activity to note down positive qualities of classmates to motivate."*

- *"The motivation tips, the fact that it was dynamic, and I did not lose interest."*

- *"That she solved our queries about going out into the world of work."*

- *"The explanations about body language."*

- *"The advice she gave us on the job-application video."*

- *"I liked the closeness to the group and her objections regarding our linguistic expressions towards us."*

- *"The motivation she transmitted about each topic discussed."*

3.2.1.5   FINAL Questionnaire: Professional Skills Development

As can be seen in Figure 15, there seemed to be a drastic difference in students' perception of the teaching methodologies in terms of their efficiency in developing

professional skills. The EG scored all items higher than the CG, and all differences were statistically significant: employability (U = 6.000, p = 0.002), creativity (U = 18.000, p = 0.035), autonomy (U= 18.500, p = 0.034), responsibility (U = 6.000, p = 0.001), problem-solving (U = 15.000, p = 0.022), and self-knowledge (U = 16.500, p = 0.027).

As shown in Figure 15, the EG considered that the job-application video project had developed responsibility (4.6) and problem-solving skills (4.2) the most effectively and autonomy (3.4) and employability (3.5) the least. The CG considered that the traditional teaching methodology had been the most effective to develop responsibility, problem-solving and self-knowledge (3), and the least effective to develop employability (2) and autonomy (2.63). `

Figure 15 *FINAL Questionnaire: Professional Skills Development*
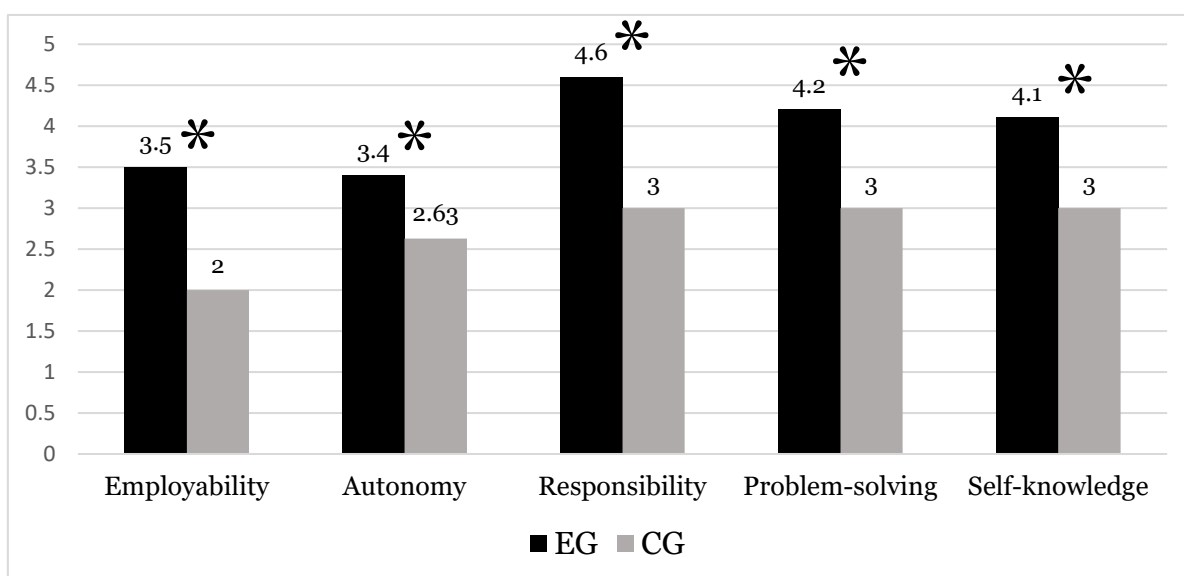
Furthermore, to triangulate the quantitative study findings, students' responses to the three open-ended questions were analysed to identify the recurrent themes. The first question asked students to name a positive aspect, benefit or something they had particularly enjoyed or liked. In the CG's responses, no references to professional skills

were made. In contrast, the EG mentioned as positive aspects professional skills development, such as employability, responsibility or self-knowledge:

- *"I have a creative way to be a candidate above all if English is required."*

- *"To face a new situation successfully."*

- *"To be able to speak about myself."*

- *"To be able to define myself."*

The second open-ended question dealt with the challenges or difficulties in each teaching methodology. The CG only mentioned the lack of real-life application, while the EG students referred to aspects related to autonomy, responsibility and time management:

- *"When we had a deadline to meet, and I didn't have much time to complete the work. I'd liked to do things better."*

- *"The tight deadlines and lack of time to complete tasks more carefully."*

The third and last open-ended question asked students to score the overall project and to justify the answer. In particular, the EG students mentioned employability, job search, autonomy, self-confidence, responsibility and problem-solving:

- *"I've had to face a challenge that has made me leave the monotony of the classes and work aside and, of course, the satisfaction of having done something so helpful in my professional life."*

- *"It's going to be useful to find a job this summer."*

- *"I've enjoyed this project because it's going to be useful in the near future when I look for a job and, above all, to be able to have the opportunity to go to an interview more calmly."*

- *"I've enjoyed doing something different and having the opportunity to do a project individually from scratch and learning how to do it step by step."*

Meanwhile, the CG referred to self-awareness, but the statement did not refer to the teaching methodology but to the topic of job search:

- *"The book is difficult and not challenging. The CV topic is important to our future."*

- *"The topic of the book to learn to design a cv is useful."*

- *"The topic of the CV is useful to learn to define ourselves."*

3.2.2   Discussion

In this study, career management skills were interpreted according to the idea of the *LifeComp* Framework, which is based on the DOTS model (Law & Watts, 1977), consisting of Self, Opportunity, Decision and Transition. In the literature reviewed, there is an agreement that any programme aiming to develop career management skills has to integrate all four elements of the model to a greater or lesser extent (Stanbury, 2005; Watts, 2006). Evidence in this study suggests that creating a job-application video can incorporate the dimensions to different degrees. In particular, self-awareness and transition learning were the most relevant ones to this study, followed by opportunity awareness and decision learning.

3.2.2.1   *Self-Awareness*

Self-awareness is the ability to be aware of one's personality and skills with the aim of using those skills better. Self-awareness captures values, skills and attributes developed from extra-curricular experience and helps determine how these might transfer into different contexts and occupations (Stanbury, 2005). The cyclical nature of career management makes developing the ability to identify skill transfers between contexts and professions vital for employability. Therefore, self-awareness is a skill relevant to any candidate, regardless of their work experience, and particularly important for young candidates, as they are likely to need to compensate for their lack of work experience with a greater focus on other qualities.

Based on the EG's results in Test 3a, the EG students increased self-awareness over time, suggesting that the job-application video allowed students to unlock self-knowledge. Additionally, in Test 1, students' self-presentations accounted for a wide range of personal attributes, skills, competences, interests, goals and experiences, as suggested by Stanbury (2005), resulting in realistic self-appraisals with career implications.

The statistically significant development of students' self-awareness may be attributed to the use of reflective checklists, a psychometric questionnaire, feedback and a group discussion, supporting Stanbury's (2005) claim that these are ideal tasks to develop self-awareness. Feedback was a continuum during the project, and reflective audits or checklists were included at the end of each main stage of the project. Students took the DISC psychometric test on personality dimensions to help them gain self-knowledge and took part in a group discussion with a professional coach.

The perceptions of students in both groups showed significant differences regarding the effectiveness of both teaching approaches for developing self-awareness, and the video-based teaching methodology was considered more effective than the

traditional one. The self-centred nature of the job-application video seemed to have allowed students to explore and get to know themselves better, pointing to similar findings reported by Sibson and Roepen (2016) in their study on the effects of ePortfolios on students' perceptions of professional identity development, according to which short biographies and requiring students to evidence skills improved students' understanding of their strengths and weaknesses in terms of employability, developed their self-awareness, and generated interest and motivation.

Students found it positive to learn about themselves and to be able to define themselves from a professional perspective (*"To be able to speak about me"*, *"That I have a creative way to try to be a candidate above all if English is a requirement"*, *"To be able to define me"*). This supports Andrés' (2016) findings in a study on student-generated video CV in FL, which reported that students learned how to present a positive and wholesome image of themselves to prospective employers while also understanding how others perceived them.

The EG students found it difficult to script the job-application video and to decide what to include (*"To write the script, I had to think a lot about what to include"*), which implied that the students engaged in self-discovery, thereby developing their self-awareness. The students' initial lack of self-awareness made the writing task even more difficult (*"The most challenging aspect has been to learn how to gather all the ideas in my script"*), corroborating previous research that examined the effects of creating a video CV on students' communicative abilities (Kelly & O'Brien, 1992) and documented students' difficulties in selecting, organising and presenting information about themselves, all of which are critical for employability.

Similarly, another positive perception of students was related to self-efficacy, understood as the belief that one can complete a task and meet a goal successfully. Indeed, students who created the job-application video highlighted the benefits of the video-based

teaching methodology in this respect (*"What I liked the most was to see myself in the video talking in English"*; *"Above all, I think it can be beneficial to learn how to stand in front of a camera"*). This lends support to previous research findings according to which video self-modelling enable students to view themselves as capable of learning and achieving a learning goal (Boisvert & Rao, 2015) and that the observation of the self in a successful mode that goes beyond the present level of capabilities may produce "rapid changes of behaviours and improvement of performance" (Dowrick, 2012, p. 216). According to these studies, the student-generated job-application video may have acted as the video self-modelling known as "feedforward or constructive modelling", where support is provided during video production, allowing the individual to achieve target skills or behaviours. After the filming, the video is edited to leave out the footage where the support was given, and the final self-modelled video showed the individual attaining the goal independently and, therefore, depicted a model of success (Dowrick, 2012).

As for the traditional methodology, results showed that it failed to develop students' self-awareness. According to the results in Test 3a, the CG's self-awareness decreased over time. Similarly, in Test 1, the corpus analysis showed that students did not include information about their strengths, skills or competences; instead, their self-presentations mainly consisted of a description of educational background and work experience.

The coursebook programme that the CG followed was somewhat reminiscent of Ding and Ding's (2013) project in that it presented a four-component instruction that included a résumé, a video résumé, an application letter and a job interview. Ding and Ding's (2013) project included four deliverables of written résumé and application letter, mock oral interview and video résumé analysis and review of social media profiles. Despite the fact that both programmes included very similar components, the general approach they used was entirely different. In the traditional methodology, each of the four

documents or tools for job search was presented as the final task of a coursebook section, whereas the four documents or tools in Ding and Ding's (2013) study were the main artefacts the project was built around. Indeed, each new component in Ding and Ding's project was considered to bring new knowledge and students were expected to revisit previous components to edit them and implement the new knowledge acquired in the new components. Their initial written documents were also revised, demonstrating their ability to improve them by applying new knowledge about effective rhetoric gained from other components such as the video CV or the 30-second presentation in the job interview.

Similarly, another key difference between them was the relevance that reflection had throughout Ding and Ding's (2013) study, as it was essential as a driving force that enabled students to apply new learning and knowledge. Each component built on the previous one, and students went back to the first text they had produced, the application letter, and updated it based on rhetorical aspects they had learnt from the mock interview or the 30-second self-presentation. However, in the traditional methodology, each component did not build on the previous one, but rather the components were separate from each other. The lack of connection seemed to compartmentalise the knowledge gained in each component, thereby preventing students from transferring it to previous productions, thus losing the cyclical approach to career management.

3.2.2.2   *Opportunity Awareness and Decision-Making*

Though these two areas of the DOTS model of career management skills were the least explored in this study, their role in the overall picture of career management skills development is essential because programmes need to integrate all four elements (Watts, 2006; Stanbury, 2005).

Opportunity awareness is about demonstrating knowledge of general trends in graduate employment and opportunities in one's discipline. It means understanding the

requirements of recruiters and demonstrating an understanding of standard degree-related career options in which one is interested. In this study, opportunity awareness was embedded in both teaching methodologies through job vacancy adverts used for analytical purposes. Indeed, a major difference between the video-based and the traditional methodologies was the use of authentic and non-authentic job adverts, respectively. The job-application video project used authentic job vacancies, which were active during the project and students could check online. The job advert authenticity may have allowed students to develop opportunity awareness by providing them with a real-world picture of discipline-specific and generic requirements and competences. Additionally, it fostered students' decision-making skills around their career objective or interest by offering a wide range of job adverts to choose from. Authentic job adverts also allowed students to carry out an authentic task in an authentic environment that they would go through soon after finishing their studies. The students had to check the vacancy, identify requirements, reflect on their own strengths, match requirements with competences and skills, and build the self-presentation with the primary purpose of being invited to an interview.

The CG's results in Test 3a suggested that the approach failed to develop students' opportunity awareness. This may be due to the use of non-authentic texts and non-authentic tasks. The eventual relationship between the lack of authenticity and the lack of opportunity awareness development would provide evidence to support previous research studies which have criticised non-authentic texts because they do not reflect natural, real-world language (Horwitz, 2010; Su, 2007) and use artificial and unvaried language (Shrum & Glisan, 2000). Although other researchers have argued that non-authentic texts are appropriate for lower levels due to the simplicity and ease of comprehension (Velazquez, 2007), this study found no evidence of the benefits of non-authentic materials, and neither did this study find evidence of difficulties or comprehension problems with the authentic texts used in the video project. In the programme followed in the traditional

teaching approach, an additional activity using authentic texts was included. In this activity, students were required to look for an online advert and discuss it with a classmate. The task provided a list of items for discussion, which included the content and design, the description of the company, the requirements, further information about the job such as salary and working hours, and how to contact the employer. Based on the CG's decrease in opportunity awareness, it could be suggested that this type of activity was not effective in providing students with an overview of discipline-specific and generic requirements and competences, and seemed consistent with Mishan and Strunz's (2003) idea of "cosmetic authenticity", referring to authentic texts used to perform non-authentic tasks. In this case, the task lacked an authentic purpose because students had to look for adverts to discuss with a partner, which is not what a candidate would do with the text in real life.

Another authentic task that may have contributed to the EG's positive performance in Test 3b and in the productive Test 1 was the two-hour coaching session with a professional coach. This task may have benefited opportunity awareness by bridging the gap between the learning context and the real world. According to students' perceptions, the session helped them develop strategies for managing stress during job interviews and communicating self-confidence. They gained an understanding of the importance of non-verbal communication, body language, posture or professional outfit, thus effectively addressing specific areas identified as graduate weaknesses in previous research studies, such as their inability to demonstrate professional attitudes (Keiper et al., 2019), motivation (Meijers et al., 2013) and professional outlook (Crowne et al., 2020). By connecting the job-application video task to the real world, the coach helped them build their self-confidence and motivation, supporting previous studies that reported the benefits of coaching and of external collaboration with external professionals during career management training (Stanbury, 2005;Watts, 2006).

Qualitative data supported the view that real-world application of what students learn was critical for them, as the majority of CG students expressed concerns about the traditional teaching methodology's lack of authenticity ("*It helps pass the exam, but it doesn't help to learn*"; "*Not real-life*"; "*It isn't real*"; "*It isn't useful for real-life*"; "*The lack of real fire*"), while the EG students praised the authenticity and usefulness of the teaching methodology ("*... the satisfaction of having done something so useful in my professional life*").

3.2.2.3   *Transition Learning*

Transition learning includes job-search skills and self-presentation skills (Watts, 2006). Demanding recruitment processes require a variety of skills, including the ability to present oneself effectively; therefore, transition learning requires candidates to demonstrate they are suitable for the job by demonstrating effective self-presentation techniques (written and oral).

Although both teaching methodologies addressed content related to job-search skills explicitly in their programmes, there were statistically significant differences between the EG and the CG students' perceptions of the effectiveness of each teaching approach in improving their job-search skills and the job-application was considered more effective than the traditional approach. Qualitative data indicated that the EG students considered that creating a job-application video benefited their job-search ability in the short term ("*It's going to be useful soon when I look for a job and, above all, to be able to have the opportunity to go to an interview more calmly*"; "*It's going to be useful to find a job this summer*") and that the project linked to their real work life ("*I've had to face a challenge [...] and, of course, the satisfaction of having done something so useful in my professional life*"), mirroring students' perceptions in Hung's (2011) study on the creation of vlogs in ESP, which attributed various benefits to vlogs, such as improving their speaking skills, their professional development and their ability to compete in the job-

search process. Similarly, this study pointed to other research findings within ESP, particularly those concerning ESP technology-driven methodologies, which indicated that such learning environments benefit students' employability skills (Barab et al., 2000; Cabero, 2007) and those of studies on student-generated video content in ESP, which claimed that video creation increases students' professional curiosity and employability skills by directing students' attention to the needs of their future profession (Zhabo et al., 2018).

The relevance of employability was also perceived by the CG students, though they did not refer to the teaching methodology that had been used, but rather to the topic of the lesson that they were studying (*"The topic of the CV is useful to learn to define ourselves"*). Students in the CG believed that the traditional teaching approach was not suitable for their professional lives because the learning environment generated was not real or helpful in their real lives (*"It isn't real and is not very useful for real-life"*). On the contrary, the EG students thought that creating a job-application video provided them with a real-world experience. As other research findings on student-generated video CV have demonstrated, the process of creating this type of video exposes students to the world of work and helps them develop their communication skills (*"It's been an interesting task because of the non-verbal communicative skills that we've learned…"*) (Andrés, 2016), interpersonal skills (*" […] above all, to be able to have the opportunity to go an interview more calmly…"*) (Sas, 2016), as well as their employability skills (*"That I have a creative way to try to be a candidate above all if English is a requirement"*) (Lattanzi et al., 2012). The findings in this study also corroborated previous research findings in studies that examined digital storytelling or student-generated video and demonstrated their efficacy in generating learning environments that require students to learn meaningful and real-world language through authentic tasks and resources (Cunningham, 2011; Nordstrom & Korpelainen, 2011).

In terms of self-presentation abilities, the results of the Test 1 move analysis indicated that the traditional teaching methodology seemed ineffective at developing students' self-presentation skills. In the post-test, the CG included six of the nine steps, leaving out the steps used to list transferable skills, explain how skills and competencies are acquired, and predict success. Additionally, the content included that addressed these six steps was not distributed evenly, and students' productions reduced the amount of information provided about interests and about self-evaluation. The results in this study indicated that the traditional teaching methodology resulted in self-presentations based on objective data about academic credentials and work experience, which accounted for 75% of students' self-presentations (Rafaeli & Harness, 2002). This type of data usually entails accepted lexical and stylistic conventions, and the syntactic structures the CG used in Step 2 *Listing qualifications* and Step 5 *Stating work experience* matched those identified in native-speaker benchmark studies (Henry & Roseberry, 2001) and other reference studies (Tongpoon-Patanasorn & Thumnong, 2020), which implied that the group established credibility through the use of established language and structures.

Despite the fact that the CG's selection of lexico-grammatical features was consistent with previous research, the CG students failed to articulate any skills they had gained or any benefit their work experience would bring to the employer, thus turning their productions into a write-up of previous and current jobs, supporting Rafaeli and Harness's (2002) claim that relying too heavily on objective data risks transforming the self-presentation into an impersonal document and "leaving out the person behind the letter" (p. 30). Similarly, the CG's results were contrary to previous research emphasising the importance of communicating what the candidate can do and of using a "benefit-focused terminology to convince the interviewer that they have the experience, skills and savvy to do the job they need someone to do" (Lattanzi et al., 2012, p. 7).

The lack of information about the skills and competences associated with Step 2 *Listing qualifications* and Step 5 *Stating work experience* was emphasised by the complete absence of content in Step 3 *Listing transferable skills*, which explicitly addresses soft skills considered as subjective attributes. Rafaeli and Harness (2002) defined these subjective attributes as relatively imprecise or abstract concepts that are particularly difficult to justify and therefore require validation. Indeed, Step 4 *Stating how skills were obtained* is the strategy intended to validate any subjective attribute used for promoting the candidate. Unsurprisingly, the CG did not include any content to realise Step 4 *Stating how skills were obtained*. The reason for this was that due to the lack of subjective attributes, their validation was unnecessary, thereby failing to realise a strategy that previous research has claimed is essential (Henry & Roseberry, 2001; Tongpoon-Patanasorn & Thumnong, 2020). The findings indicated a lack of self-awareness and self-knowledge and a lack of understanding of the difference between an application letter and a résumé. Indeed, the CG's self-presentations resembled Ross's (2010) definition of a résumé as a document that summarises a candidate's professional experiences.

Three other steps addressed subjective content in the *Promoting the candidate* move: Step 6 *Stating objectives,* Step 7 *Stating personal interests* and Step 8 *Expressing positive self-evaluation*. The CG's self-productions indicated a variety of results in these three strategies. On the one hand, while the students included content for both Step 6 *Stating objectives* and Step 7 *Stating personal interests*, they lacked adequacy. Their content, in particular, was irrelevant to the discipline (*"I like basketball"*) and provided no justification or explanation for why or how such aims or interests would align with the general employer's interests, needs or requirements ("*I coach a football team"*). As a result, the CG did not succeed in developing a relevant self (Bhatia, 1997) in accordance with Grice's (1975) cooperative principles. Young candidates may lack work experience

and must rely on hobbies, personal interests or life experiences to demonstrate how they have developed additional skills.

On the other hand, the CG's results indicated that only 25% of the students included content to address Step 8 *Expressing positive self-evaluation,* and that the lexico-syntactic features they used were in line with those reported by Henry and Roseberry (2001). Based on Rafaeli and Harness's (2002) taxonomy of self-validating techniques, students used the self-report technique to realise the step, which followed the pattern "My claims about merit are true because ... I say so". The fact that students did not combine the "self-report" tactic with other validation techniques involving a third party weakened their claim's reliability. This is because, as Rafaeli and Harness (2002) argued, using a single validation technique in which the individual validates his or her subjective qualities undermines the credibility of the entire presentation.

The CG's results dropped in both Test 3a on self- and opportunity awareness and Test 3b on communication in job-search contexts. It is not surprising, then, that their self-presentations were not effective due to their focus on objective data. However, it is surprising that they did not link the content provided in Step 2 *Listing qualifications* and Step 5 *Stating work experience* to any skill or competence. Similarly, they did not include any transferable skill explicitly – the lack of subjective information extended to a lack of techniques for validating information. In their study on self-validating techniques, Rafaeli and Harness (2002) reported that higher education and professional training increased candidates' self-confidence and decreased self-validation when candidates presented unique characteristics, such as a greater demand for a certain profile, extraordinary experience or unique background. In this study, however, the CG students had more experience, but the EG students had higher education qualifications. As a result, the possibility that their professional profile or educational level resulted in an increase in self-confidence, which resulted in a decrease in self-validation, was ruled out.

Nevertheless, as Burke (1969) stated, "wherever there is persuasion, there is rhetoric, and wherever there is meaning, there is persuasion" (p. 172), so it could also be understood that the CG did not claim attributes explicitly but implicitly. In this case, dedicating 75% of the content to Step 2 *Listing qualifications* and Step 5 *Stating work experience* would be their tactic to claim their suitability for a vacancy. As a result, the "self-report" validation technique would be supplemented by the "previous role" validation technique. Soroko's (2012) taxonomy of self-presentation strategies appeared to confirm the overall trend of the group's productions and, unsurprisingly, revealed that the group primarily employed "Proofing by giving details: proper names of firms, places, and institutions" and "Validating by giving details: dates", which provided a type of content focused on time and job descriptions. In conclusion, while the group used a variety of presentation techniques, they were all aimed at presenting facts that, in the absence of explicit information on skills, competencies or abilities, were more akin to a CV than to an application letter.

By contrast, the EG's results indicated that creating a job-application video resulted in well-balanced self-presentations that included all steps with an equal distribution of content (SD = 4.8). Indeed, students described their language abilities, digital competences, transferable skills, qualifications, work experience, personal goals and interests, demonstrating alignment with Bhatia's (1997) assertion that the applicant must emphasise that their qualifications, expertise, attributes and strengths meet the jobrequirements. In terms of subjective attributes, the EG's results in Step 3 *Listing transferable skills* were consistent with the CUVID guidelines for VET teachers (Cattaneo et al., 2019), which recommended dedicating at least one-third of the video length to presenting interpersonal skills and personality.

Likewise, the EG provided content to address Step 4 *Stating how skills were obtained*, suggesting that creating an application video helped students understand the

importance of justifying subjective candidate attributes. This idea was supported by the perceptions of students who showed such an awareness (*"It is very difficult to express oneself without saying how much I could contribute without sounding like I know it all"*). The EG students justified the acquisition of skills and competences by citing their interests, personal characteristics, work experience and educational background, and employed a variety of self-validation techniques in order to appear reliable and credible to their target audience. This step plays an essential persuasive role within the candidate's presentation, as Rafaeli and Harness (2000, 2001) evidenced in their studies on candidates' tactics in application letters for self-validating their self-presentations. Among their six validation techniques, instances of all of them except "Important other" were found. Students used "External indicators" the most, followed by "Previous roles", "Self-report", "Evidence of achievement" and "Performance in similar situations". Some examples of self-validation techniques are:

- Previous roles: *"There I learnt a lot about work dynamics, and also I gained a lot of experience in this field."*

- Self-report: *"I am also able to solve problems and make decisions on my own."*

- External indicators: *"I passed Peru's National Exam for mathematics."*

- Evidence of achievement: *"I obtained a scholarship and spent one year at a high-school in the US."*

- Performance in similar situations: *"Combining both studies and work requires me to be organised and manage time and resources efficiently."*

Regarding the use of self-presentation strategies based on Soroko's (2012) taxonomy, the EG mainly employed "Emphasis, manifestation of merits desired by the employer: development, availability" and "Validating by expressing own opinion, self-

reflection with justification". The latter was related to Step 7 *Stating personal interests*, where the EG included interests relevant to the discipline or relevant to validate a positive quality in the candidate; for example, taking part in competitions as a horse rider reflected responsibility and commitment. Similarly, the content the EG students produced to address Step 4 *Stating how skills were obtained* was higher than for any other step and increased over time, thus signalling the development of self-awareness, understood as the ability to transfer skills effectively (Stanbury, 2005).

Self-representation in job-application letters must be persuasive to generate an emotional response and be credible. Self-appraisal is one of the most common strategies used for self-representation in promotional writing and consists of a description of the product or service in a relevant, positive and credible way to indicate its value to the audience. The results in this study suggested that the job-application video resulted in self-appraisal, thus showing agreement with Bhatia's (2014) claims. Indeed, through self-evaluation, varied content, a combination of subjective and objective information, and the use of self-validating techniques (Rafaeli & Harness, 2002), the EG's productions evidenced positive, relevant and credible self-descriptions. In conclusion, it can be suggested that the job-application video resulted in the accomplishment of the genre's communicative purpose.

3.2.3   Summary of Research Question 1

The first research question explored whether the EG students had improved career management skills and whether they had obtained greater competence than the CG students. The results obtained in this study seemed to validate the job-application video production as an effective approach to teach ESP for job search so as to develop students' career management skills. In particular, the application video project resulted in a statistically significant improvement in self-awareness (Test 3a), opportunity-awareness (Test 3a) and transition learning (Test 3b) over time. Similarly, the analysis of the Test 1

corpus also evidenced students' effective self-presentation skills. The EG's productions provided a comprehensive picture of the candidates consisting of positive, relevant and reliable self-descriptions, which included a combination of validated subjective and objective content.

On the contrary, the results suggested that the traditional teaching methodology was not effective in developing career management skills. The decrease in the scores of Test 3 on career management skills, both in Test 3a on self- and opportunity awareness and in Test 3b on transition learning, and the resulting self-presentations, suggested that the teaching methodology failed to develop students' self-knowledge and self-awareness, the skills required in their disciplines, and the purposes of an application letter compared to those of a CV. Therefore, the methodology failed to develop students' skills to produce a rounded and effective self-presentation. Stanbury (2005) stated that self-awareness and opportunity awareness, if combined well, result in transition. Therefore, failure to achieve a goal within transition learning might be due to deficiencies in self- and opportunity awareness.

This study has reported that self-awareness makes it possible to identify and make use of other skills that an individual may have gained through work experience, formal training or any other extracurricular activity. This implies that self-awareness is about knowing how to transfer the essence of an ability to different contexts. This is especially important in a VET context, as some learners are likely to lack work experience or education certificates and might need to conduct this analysis to determine the skills and abilities they may have developed through other activities. According to the findings of this study, the EG's improvement in self-awareness may have been due to the use of a variety of tasks, such as feedback, group sessions, psychometric tests and reflection checklists (Stanbury, 2005), that promoted self-awareness. The group's self-presentations were likely to have been highly effective due to the incorporation of these four types of

tasks into the job-application video programme. The traditional methodology's programme, on the other hand, included four job-search components, but they did not build on each other through reflection and did not include references to other documents or instructions to revisit previous documents to update them based on the new knowledge of themselves and of the rhetoric gained.

The results showed significantly increased opportunity awareness in the EG and decreased opportunity awareness in the CG. The primary distinction between the two methodologies was the analysis of authentic job offers and subsequent identification of the competences and skills necessary to fill the vacancy. The text's authenticity was also tied to the task included in the EG's programme, which differed from the CG's in that it used the text as a springboard for executing another authentic communicative action (Mishan & Strunz, 2003), whereas the control group used it for discussion without a real-life purpose.

Stanbury (2005) argued that self-presentation draws on all the previous elements of the DOTS model, and therefore job-search skills are relevant for a successful self-presentation. These skills include the ability to understand and demonstrate different techniques that candidates require for an impactful self-presentation both in writing and in person. As an introductory document to a prospective employer, both the application letter and the application video use self-presentation to create a positive first impression of the candidate to the prospective employer; therefore, both documents belong to a genre critical for effective transitions into the world of work (Bhatia, 1993; Henry & Roseberry, 2001). The document's objectives are to present the candidate's qualities, persuade the reader or validate the information; that is why the document's nature is persuasive and informative (Bhatia, 1993). The CG's productions partially attained the informative purpose, but not the persuasive one. These results suggested that the traditional methodology may not give enough weight to developing students' pragmatic competence,

which would confirm previous research studies which had explored pragmatic awareness development in ESP publications and reported a lack of it (Ildiko, 2008; Martinez-Flor & Alcón Soler, 2004; Usó-Juan & Martínez-Flor, 2006).

By contrast, the EG fulfilled the persuasive and informative (Bhatia, 1993) purposes of the self-presentation for various reasons. The EG's self-presentations suggested that they produced content equally for all strategies for the *Promoting the candidate* move, by describing their language skills, digital competences, transferable skills, education, work experience, personal goals and interests. Furthermore, they combined objective information, validated through accepted lexical and stylistic conventions, with subjective information, validated through self-validation techniques such as self-report, previous roles, and performance in similar situations (Rafaeli & Harness, 2002). Therefore, it can be suggested that creating a job-application video resulted in effective self-appraisal. Students successfully presented their relevant self in accordance with Grice's (1975) Maxim of Relevance, while leaving out less relevant aspects of self-description. These positive results in transition learning pointed to the development of effective self-awareness and the understanding of the pragmatic aspects required for a successful self-presentation in a document intended for job-search purposes.

3.3   Research Question 2

The second research question explored whether the EG students had improved their communicative competence and whether they had obtained greater competence than those in the CG, based on the analysis of the following data:

- Quantitative data on students' written and spoken L2 performance from the Test 1 corpus of students' self-presentations using the analysis of the CAF (syntactic complexity, lexical complexity, academic vocabulary, written and spoken accuracy, and fluency) and the step structure.

- Quantitative data on students' knowledge of collocations and job-search professional terminology from Test 2.

- Qualitative data on students' perceptions regarding the effectiveness of the teaching methodology in developing language skills from the FINAL questionnaire.

- Qualitative data on strategies applied by the EG students during the pre-production and production stages from the SCRIPT and the FILM questionnaires offered.

3.3.1   Results

3.3.1.1   Test 1 CAF Analysis

Test 1 written and spoken corpus was analysed for evidence of L2 performance regarding communicative adequacy and linguistic complexity, operationalised as syntactic complexity, lexical complexity, written and spoken accuracy, and fluency. Standard deviations for all tables are included in Appendix E.

Syntactic Complexity. As shown in Table 26, the results showed that the EG's productions became syntactically less complex over time ($4.22 > 2.95 = -1.30$) and the difference was statistically significant ($Z = -2.090$, $p = 0.037$). Likewise, the CG's

productions became slightly less complex over time (3.22 > 3.07 = −0.14), although no statistical significance was observed. In the pre-test, the EG's productions were syntactically more complex than the CG's (4.22 > 3.22 = 1). On the contrary, in the post-test, the CG's productions became more complex than the EG's (2.95 < 3.07 = −0.12). The EG's results for all four sets of syntactic complexity constructs dropped throughout the study: mean length of production unit (14.17 < 9.63 = −4.54), subordination (0.77 < 0.67 = −0.10), coordination (0.41 < 0.27 = −0.14) and particular structures (1.51 < 1.21 = −0.43).

The difference from pre-test to post-test reached statistical significance for length of production unit and particular structures (Z = −2.293, p = 0.022). The CG's results from pre-test to post-test were negative for three of the four categories, namely length of production unit (10.86 < 10.37 −0.49), subordination (0.55 < 0.42 = −0.13) and particular structures (1.51 <1.21 = −0.3) and positive in coordination (0.19 > 0.28= 0.09). None of these differences reached statistical significance.

Table 26 *Syntactic Complexity*

	Pre-Test Mean			Post-Test Mean			Pre-/Post-Test	
	EG	CG	Diff.	EG	CG	Diff.	EG	CG
Production unit length	14.17	10.86	3.31	9.63	10.37	−0.74*	−4.54*	−0.49
Subordination	0.77	0.55	0.22	0.67	0.42	0.25**	−0.10	−0.13
Coordination	0.41	0.19	0.22	0.27	0.28	−0.01	−0.14	0.09
Particular structure	1.51	1.26	0.25	1.21	1.23	−0.02	−0.43**	−0.3
Syntactic complexity	4.22	3.22	1	2.95	3.07	−0.12	−1.30*	−0.14

Mean Length of Production Unit. As shown in Table 27, in the pre-test, the EG outperformed the CG (14.17 > 10.86 = 3.31) and, in the post-test, the CG outperformed the EG (9.63 < 10.37 = −0.74). Though the difference in the mean length of production unit between the pre- and the post-test was negative for both groups (EG = −4.54; CG = − 0.48), the EG's drop reached statistical significance (Z = −2.293, p = 0.022). The EG

decreased the mean length of clause (MLC = 9.52 > 7.83 = −1.69) over time, as well as the mean length of T-unit (MLT = 18.82 > 11.43 = −7.39), which reached statistical significance ($Z = −2.395$, $p = 0.017$). In the post-test, the CG generated slightly shorter T-units (MLT = 11.43 < 11.45 = −0.02) and longer clauses than the EG (MLC = 7.83 < 9.3 = −1.47). The latter reached statistical significance ($U = 16.000$, $p = 0.033$).

Table 27 *Mean Length of Production Unit*

	Pre-Test Mean			Post-Test Mean			Pre-/Post-Test	
	EG	CG	Diff.	EG	CG	Diff.	EG	CG
MLC	9.52	9.14	0.38	7.83	9.3	−1.47*	−1.69	0.16
MLT	18.82	12.58	6.24	11.43	11.45	−0.02	−7.39*	−1.13
Production Unit	14.17	10.86	3.31	9.63	10.37	−0.74*	−4.54*	−0.48

Subordination. As shown in Table 28, overall, the EG used more subordination than the CG in both the pre-test (0.77 > 0.55 = 0.22) and the post-test (0.67 > 0.42 = 0.25). Though both groups reduced the number of subordinated structures over time (EG = 0.77 > 0.67 = −0.10; CG = 0.55 > 0.42 = −0.13), at the end of the intervention, the EG outperformed the CG in all subordination metrics with statistically significant differences: T-unit complexity ratio (C/T) ($U = 11.500$, $p = 0.011$), complex T-unit ratio (CT/T) ($U = 1.500$; $p = 0.000$), dependent clause ratio (DC/C) ($U = 9.000$, $p = 0.006$) and dependent clauses per T-unit (DC/T) ($U = 12.000$, $p = 0.011$).

Table 28 *Subordination*

	Pre-Test Mean			Post-Test Mean			Pre-/Post-Test	
	EG	CG	Diff.	EG	CG	Diff.	EG	CG
C/T	1.87	1.42	0.45	1.49	1.23	0.26*	−0.38	−0.19
CT/T	0.43	0.22	0.21*	0.41	0.13	0.28***	−0.02	−0.09
DC/C	0.26	0.20	0.06	0.29	0.13	0.16**	0.03	−0.07
DC/T	0.51	0.35	0.16*	0.48	0.18	0.3*	−0.03	−0.17
Total	0.77	0.55	0.22	0.67	0.42	0.25**	−0.10	−0.13

Coordination. As shown in Table 29, the EG reduced the overall amount of coordination over time (0.41 > 0.27 = −0.14) while the CG increased it (0.19 > 0.28 = 0.09). Neither of these differences was statistically significant. At the beginning of the project, the EG used more coordinated structures than the CG (0.41 > 0.19 = 0.22), while at the end of the project the CG used slightly more coordination than the EG (0.27 < 0.28 = −0.01). A similar trend was found in the ratio of coordinate phrases per clause (CP/C), as the EG's result in the pre-test was higher than the CG's (0.26 > 0.15 = 0.11).

In contrast, in the post-test the CG used more coordinate phrases per clause than the EG (0.21 < 0.25 = −0.04). The EG decreased the number of coordinate phrases per clause over time (CP/C = −0.05) while the CG increased it (CP/C = 0.1). Even though the EG's number of coordinate phrases per T-unit (CP/T) was higher than the CG's in both the pre-test (0.55 > 0.22 = 0.33) and the post-test (0.32 > 0.30 = 0.02), the EG's results dropped over time (0.55 < 0.32 = −0.23) while the CG's increased slightly (0.22 > 0.30 = 0.08).

Table 29 *Coordination*

	Pre-Test Mean			Post-Test Mean			Pre-/Post-Test	
	EG	CG	Diff.	EG	CG	Diff.	EG	CG
CP/C	0.26	0.15	0.11	0.21	0.25	−0.04	−0.05	0.10
CP/T	0.55	0.22	0.33	0.32	0.30	0.02	−0.23	0.08
Total	0.41	0.19	0.22	0.27	0.28	−0.01	−0.14	0.09

Particular Structures. As shown in Table 30, the EG used fewer particular structures over time (1.51 > 1.21 = −0.43), and the difference was statistically significant (Z = −2.293, p = 0.022). Though not so sharply, the CG's results also decreased (1.26 > 1.23 = −0.04). Overall, in the pre-test, the EG outperformed the CG (1.51 > 1.26 = 0.25), while in the post-test, the CG outperformed the EG (1.21 < 1.23 = −0.02).

Table 30 *Particular Structures*

	Pre-Test Mean			Post-Test Mean			Pre-/Post-Test	
	EG	CG	Diff.	EG	CG	Diff.	EG	CG
CN/C	1.01	0.89	0.12	0.72	0.99	−0.27	−0.29	0.11
CN/T	2.16	1.24	0.92	1.07	1.23	−0.16	−1.09*	−0.01
VP/T	2.37	1.65	0.72*	1.87	1.43	0.44*	−0.5	−0.22
Total	1.51	1.26	0.25	1.21	1.23	−0.02	−0.43**	−0.04

Regarding the use of complex nominals, in the pre-test the EG used more complex nominals than the CG both per clause (CN/C = 1.01 > 0.89 = 0.12) and per T-unit (CN/T = 2.16 > 1.24 = 0.92). Conversely, in the post-test the CG outperformed the EG in the number of complex nominals per clause (0.72 < 0.99 = −0.27) and per T-unit (1.07 < 1.23 = −0.16). Though both groups decreased the number of complex nominals per T-unit over time, the EG's decrease was statistically significant ($Z = -1.998$, $p = 0.047$). In terms of verb phrases per T-unit (VP/T), the EG's results were statistically significantly higher than the CG's in both the pre-test (2.37 > 1.65 = 0.72; $U = 13.000$, $p = 0.016$) and the post-test (1.87 > 1.43 = 0.44; $U = 11.500$, $p = 0.011$).

Lexical Complexity. As shown in Table 31, the EG's productions became lexically more complex (11.98 > 12.86 = 0.88) over time and the gain reached a high level of statistical significance ($Z = 2.701$, $p = 0.007$). Similarly, the CG also increased the lexical complexity of their productions over time (10.41 > 10.91 = 0.50), and the difference was statistically significant ($Z = -2.521$, $p = 0.012$). Compared to the CG, the EG's results were higher in the pre-test (11.98 > 10.41 = 1.57) and the post-test (12.86 > 10.91 = 1.95).

A further analysis indicated that the EG showed a statistically significant gain in sophistication (0.15 > 0.24 = 0.09; $Z = -1.988$, $p = 0.047$) and in variation (11.33 > 12.4 = 0.81; $Z = -2.701$, $p = 0.007$) and a slight drop in density (0.496 < 0.483 = −0.013). The CG decreased sophistication (0.25 > 0.23 = −0.02) and increased density (0.48 > 0.49 =

0.01) and variation (9.67 > 10.19 = 0.51). The difference in the latter reached statistically significance (Z = −2.521, *p* = 0.012).

Table 31 *Lexical Complexity*

	Pre-Test Mean			Post-Test Mean			Pre-/Post-Test	
	EG	CG	Diff.	EG	CG	Diff.	EG	CG
Density	0.50	0.48	0.01	0.48	0.49	−0.01	−0.01	0.01
Sophistication	0.15	0.25	−0.10	0.24	0.23	0.00	0.09*	−0.02
Variation	11.33	9.67	1.65*	12.14	10.19	1.95	0.81**	0.51*
Lexical complexity	11.98	10.41	1.57	12.86	10.91	1.95	0.88**	0.50*

Lexical Density. The EG's density was slightly higher than the CG's in the pre-test (0.49 > 0.48 = 0.01), and the CG's results were slightly higher than the EG's in the post-test (0.48 < 0.49 = −0.01). The EG's density decreased by 0.02 while the CG's increased by 0.01 (see Table 32).

Table 32 *Lexical Density*

	Pre-Test Mean			Post-Test Mean			Pre-/Post-Test	
	EG	CG	Diff.	EG	CG	Diff.	EG	CG
Lexical density	0.49	0.48	0.01	0.48	0.49	−0.01	−0.01	0.01

Lexical Variation. The EG's lexical variation was higher than the CG's in the pre-test (11.33 > 9.67 = 1.65) and the post-test (12.14 > 10.19 = 1.95). Both groups produced more lexically varied texts over time that reached statistical significance (EG = 0.81; Z = 2.521, *p* = 0.012; CG = 0.51; Z = 2.701, *p* = 0.007) (see Table 33).

Table 33 *Lexical Variation*

	Pre-Test Mean			Post-Test Mean			Pre-/Post-Test	
	EG	CG	Diff.	EG	CG	Diff.	EG	CG
Lexical variation	11.33	9.67	1.65	12.14	10.19	1.95	0.81**	0.51*

As shown in Table 34, the EG used more different words (NDW) than the CG in the pre-test (76.3 > 57.6 = 18.68) and post-test (93.3 > 62.9 = 30.42). The difference in the post-test was statistically significant (U = 15.000, p = 0.026). The EG produced texts with more different words over time (76.30 > 93.30 = 17) and the difference reached statistical significance (Z = −2.091, p = 0.037). As for the rest of the metrics related to the number of different words, the EG's results in the post-test were slightly higher than the CG's (NDWZ = 36.50 > 35.5 = 1; NDWERZ = 36.66 > 36.49 = 0.17; NDWESZ = 35.67 > 35.51 = 0.16).

Table 34 *Number of Different Words (NDW)*

	Pre-Test Mean			Post-Test Mean			Pre-/Post-Test	
	EG	CG	Diff.	EG	CG	Diff.	EG	CG
NDW	76.30	57.62	18.68	93.30	62.88	30.42*	17*	5.25
NDWZ	35.20	35.50	−0.30	36.50	35.50	1.00	1.30	0.00
NDWERZ	37.33	35.34	1.99	36.66	36.49	0.17	−0.67	1.15
NDWESZ	37.00	35.31	1.69	35.67	35.51	0.16	−1.33	0.20

Note: NDWZ = Number of Different Words (first 50 words). NDWERZ = Number of Different Words (expected random 50). NDWESZ = Number of Different Words (expected sequence 50).

As shown in Table 35, the TTR showed very similar results for both groups in both tests. In the pre-test, the EG's results were slightly higher than the CG's (0.62 > 0.60 = 0.02), whereas in the post-test, the CG outperformed the EG (0.57 > 0.62 = −0.05). The EG's results dropped −0.05 over time and the difference reached statistical significance (Z = −2.018, p = 0.044). The results obtained in the post-test for the different TTR-related metrics, in particular MSTTR, CTTR, RTTR and LOGTTR, were very similar for both groups. Some were higher for the EG (CTTR = 4.99 > 4.38 = 0.62; RTTR = 7.06 > 6.19 = 0.88; UBER = 19.49 > 19.27 = 0.22) and some others were higher for the CG (MSTTR = 0.71 < 0.72 = −0.01; LOGTTR = 0.89 < 0.90 = −0.01).

Table 35 *Type-Token Ratio (TTR)*

	Pre-Test Mean			Post-Test Mean			Pre-/Post-Test	
	EG	CG	Diff.	EG	CG	Diff.	EG	CG
TTR	0.62	0.60	0.02	0.57	0.62	−0.05	−0.05*	0.01
MSTTR	0.73	0.71	0.01	0.71	0.72	−0.01	−0.02	0.00
CTTR	4.78	4.15	0.63*	4.99	4.38	0.62	0.21	0.23
RTTR	6.76	5.87	0.89*	7.06	6.19	0.88	0.30	0.32
LOGTTR	0.90	0.89	0.01	0.89	0.90	−0.01	−0.02*	0.01
UBER	21.64	17.94	3.70	19.49	19.27	0.22	−2.14	1.33

Note: TTR = Type-Token Ratio. MSTTR = Mean Segmental TTR 50 words. CTTR = Corrected TTR. RTTR = Root TTR. LOGTTR = Bilogarithmic TTR. UBER = Uber Index.

Finally, the last set of metrics are related to specific parts of speech. As can be seen in Table 36, though the EG's lexical word variation (LWV) decreased over time by 0.03, the EG's productions had a higher lexical word variation than the CG's both at the beginning (0.82 > 0.74 = 0.13) and at the end of the study (0.89 > 0.77 = 0.12). Similarly, the EG's gain over time was also higher than the CG's (0.07 > 0.03 = 0.04).

As regards the part of speech-related metrics, at the beginning of the study, the EG outperformed the CG in verb variation (VV1 = 10.99 < 4.36 = 6.63; SVV 1 = 2.28 > 1.46 = 0.82; CVV1 = 0.83 > 0.81 = 0.02; VV2= 0.21 > 0.13 = 0.08), while the CG outperformed the EG in noun variation (NV = 0.83 < 0.84 = −0.01), adjective variation (ADJV = 0.11 < 0.12 = −0.01), and modifier variation (MODV = 0.18 < 0.19 = −0.01). Both groups displayed similar variation in adverb variation (ADVV = 0.07). In the post-test, the EG's results were statistically significantly higher than the CG's in verb variation (VV1 = 13.06 > 6.23 = 6.83; VV2 = 0.19 > 0.16 = 0.04), adjective variation (ADJV = 0.14 > 0.12 = 0.02), and adverb variation (ADV = 0.06 > 0.04 = 0.02). Both groups obtained the same results in noun variation (NV = 0.86) and modifier variation (MODV = 0.18). Throughout the project, the EG increased verb variation (VV1 = 10.99 > 13.06 = 2.07), noun variation (0.83 > 0.86 = 0.03), and adjective variation (0.11 > 0.14 = 0.03), decreased adverb

variation (0.07 < 0.06 = −0.01) and maintained modifier variation (0.18 = 0.18 = 0). On the other hand, the CG increased verb variation (VV1 = 4.36 > 6.23 = 1.87), noun variation (0.84 > 0.86 = 0.02), and adjective variation (0.12 > 0.12 = 0) while decreasing adverb (00.7 < 0.04 = −0.03) and modifier variation (0.19 < 0.18 = −0.01).

Table 36 *Part of Speech-related Variation*

	Pre-Test Mean			Post-Test Mean			Pre-/Post-Test	
	EG	CG	Diff.	EG	CG	Diff.	EG	CG
LWV	0.82	0.74	0.13	0.89	0.77	0.02	0.07	0.03
VV1	10.99	4.36	6.63*	13.06	6.23	6.83	2.07	1.87
SVV1	2.28	1.46	0.82**	2.45	1.72	0.73	0.17	0.26
CVV1	0.83	0.81	0.02	0.82	0.84	−0.01	−0.01	0.02
VV2	0.21	0.13	0.08**	0.19	0.16	0.04	−0.02	0.03
NV	0.83	0.84	−0.01	0.86	0.86	0.00	0.03	0.02
ADJV	0.11	0.12	−0.01	0.14	0.12	0	0.03	0.02
ADVV	0.07	0.07	0.00	0.06	0.04	0.02	−0.01	−0.03
MODV	0.18	0.19	−0.01	0.18	0.18	0.00	0.00	−0.01

Lexical Sophistication. As shown in Table 37, the EG's productions became more lexically sophisticated over time (LS = 0.15 > 0.24 = 0.09), and the difference was statistically significant ($Z = −1.988$, $p = 0.047$). At the beginning of the study, the EG's lexical sophistication was lower than the CG's (0.15 < 0.25 = 0.1), and, by the end of the study, the EG's productions were slightly more sophisticated than the CG's (0.24 > 0.23 = 0.01).

Indeed, the CG's results were higher than the EG's in all metrics in the pre-test (LS1 = 0.19 < 0.30 = −0.11; LS2 = 0.19 < 0.30 = −0.11; VS1 = 0.07 <0.13 = −0.06; VS2 = 0.10 < 0.22 = −0.12; CVS1 = 0.15 < 0.27 = −0.11), with statistically significant differences in LS1 ($U = 6.000$, $p = 0.002$) and LS2 ($U = 2.000$, $p = 0.001$). Over time, the EG increased all metrics (LS1 =0.25 > 0.32 = 0.07; LS2 = 0.19< 0.27 = −0.08; VS1 = 0.07 <

0.08 = 0.01; VS2 = 0.10 < 0.29 =0.19; CVS1 = 0.15 < 0.24 = 0.09) while the CG's result decreased in most metrics (LS1 = 0.34 > 0.28 =−0.06; LS2 = 0.30 <027 = −0.03; VS1 = 0.13 < 0.10 = −0.02; VS2 = 0.22 < 0.20 = −0.02) except CVS1 0.27 < 0.32 =0.05). By the end of the project, the EG outperformed the CG in lexical sophistication 1 (0.32 > 0.28 = 0.04) and verb sophistication 1 (0.29 > 0.20 = 0.09).

Table 37 *Lexical Sophistication*

	Pre-Test Mean			Post-Test Mean			Pre-/Post-Test	
	EG	CG	Diff.	EG	CG	Diff.	EG	CG
LS1	0.25	0.34	−0.10*	0.32	0.28	0.04*	0.07	−0.06
LS2	0.19	0.30	−0.11*	0.27	0.27	0.08	0.08*	−0.03
VS1	0.07	0.13	−0.06	0.08	0.10	−0.01	0.01	−0.03
VS2	0.10	0.22	−0.12	0.29	0.20	0.09	0.19	−0.02
CVS1	0.15	0.27	−0.11	0.24	0.32	−0.08	0.09	0.05
LS	0.15	0.25	−0.10	0.24	0.23	0.01	0.09*	−0.02

Academic Vocabulary. As shown in Table 38, the EG reduced the number of words belonging to the General Service List 1 (GSL 1K) (−9.41%) and increased those from the General Service List 2 (GSL 2K) (5.85%) and the Academic Word List (AWL 570) (0.6%) throughout the study. The CG, however, reduced the number of words from all three lists (GSL 1K = −1.59%; GSL 2K = −2.03%; AWL 570 = −0.4%).

In the pre-test, the EG's results were higher than the CG's for GSL 1K (75.51%> 62.94% = 12.57%), and the CG's results were higher than the EG's for GSL 2K (6.12% < 10.14% =−4.02%), AWL 570 (5.1% < 5.94% = −0.84%) and words not included in any list (13.27% < 20.98% = −7.71%).

In the post-test, the EG's results were still higher than the CG's for GSL 1K (66.1% > 61.15% = 4.75%), though the difference between them declined given that the EG used more words than the CG from the GSL 2K (11.97% > 8.11% = 3.86%) and AWL 570 (5.7%

> 5.54% = 0.16%). The latter reached a high level of statistical significance (U= 99; *p* =

0.00046). The CG used more words not included in any list than the EG (16.24 < 25 =

8.76%).

Table 38 *Academic Vocabulary (percentages)*

	Pre-Test Mean			Post-Test Mean			Pre-/Post-Test	
	EG	CG	Diff.	EG	CG	Diff.	EG	CG
GSL 1K	75.51	62.94	12.57	66.1	61.35	4.75	−9.41	−1.59
GSL 2K	6.12	10.14	−4.02	11.97	8.11	3.86	5.85	−2.03
AWL 570	5.1	5.94	−0.84	5.7	5.54	0.16***	0.6	−0.4
Not in list	13.27	20.98	−7.71	16.24	25	−8.76	2.97	4.02

To sum up, the EG used fewer words included in the GSL 1K over time (−9.41%)

and more words included in the GSL 2K (5.85%) and AWL 570 (0.6%). The group

increased the number of words not included in any list by 2.97%. Instead, from pre-test to

post-test, the CG reduced the number of words contained in the GSL 1K (−1.59%), GSL 2K

(−2.03%) and AWL 570 (0.4%) and increased those not included in any list (4.02%).

Further analysis of the words belonging to the AWL list showed that the five most

frequent terms in the pre-test of both groups and the post-test of the control group were

maintain, *job*, *grade*, *professional* and *team*. The EG also used these words in their post-

tests, although they were not the most frequent words from the AWL, but showed (*f* = 1),

the group included new academic vocabulary in their productions and even made them

the most frequently used words belonging to the AWL, such as *obtain*, *image*, *aspect*,

commit, *conclude*, *dynamic*, *finance* and *locate*.

Written Accuracy. As can be seen in Table 39, the EG's written productions

became more accurate over time (2.19 > 2.56 = 0.36) and, conversely, the CG's became

less accurate (1.76 < 1.62 = −0.14). At the beginning of the study, the EG's productions

were already more accurate than the CG's (2.19 > 1.76 = 0.46), and, at the end of the study, the EG's accuracy remained higher than the CG's (2.56 > 1.62 = 0.94).

The EG produced more error-free T-units over time (EFT = 3.70 > 7.50 = 3.8), and the difference was statistically significant (Z = −2.439, p = 0.015). Though the EG and CG wrote a similar number of error-free T-units in the pre-test (3.7 > 3.63 = −0.07), the EG outperformed the CG in the post-test (7.50 > 3.13 = 4.37). As for the error-free T-unit ratio (EFT/T), the EG's results were higher than the CG's in the pre-test (0.57 > 0.49 = 0.08) and in the post-test (0.44 > 0.39 = 0.05). However, both groups decreased the ratio over time (EG = −0.13; CG = −0.1). In terms of errors per T-unit (E/T), at the beginning of the study the EG produced texts with more errors per T-unit than the CG (2.25 > 1.46 = 0.79). Nevertheless, over time, the EG decreased the error number (E/T = 2.25 > 1.15 = −1.1) while the CG increased it (ET = 1.46 < 1.48 = 0.02), so the EG produced fewer errors per T-unit than the CG (1.15 < 1.48 = −0.33).

Table 39 *Written Accuracy*

| | Pre-Test Mean | | | Post-Test Mean | | | Pre-/Post-Test | |
	EG	CG	Diff.	EG	CG	Diff.	EG	CG
EFT	3.70	3.63	0.07	7.50	3.13	4.37	3.8*	−0.5
EFT/T	0.57	0.49	0.08	0.44	0.39	0.05	−0.13	−0.1
E/T	2.25	1.46	0.79	1.15	1.48	−0.33	−1.1	0.02
Accuracy Mean	2.19	1.76	0.43	2.56	1.62	0.94	0.36	−0.14

As illustrated in Table 40, concerning the error analysis of the corpus, the EG produced texts with fewer errors per word (TE/W) over time (0.122 > 0.081 = −0.041), while the CG's productions became less accurate due to a higher number of errors per word (0.115 < 0.137 = 0.022). At the beginning of the study, the EG's productions were slightly less accurate than the CG's (0.122 > 0.115 = 0.007). However, by the end of the

study, the EG's productions became more accurate than the CG's (0.081 < 0.137 = −0.056).

A further analysis by error type showed that over time, the EG reduced the ratio of grammatical (GE/W = 0.064 > 0.038 = −0.026) and mechanical (ME/W = 0.054 > 0.037 = −0.017) errors and slightly increased that of lexical errors (LE/W = 0.004 > 0.005 = 0.001). The CG increased the ratio of grammatical errors (GE/W = 0.060 > 0.064 = 0.004) and mechanical errors (ME/W = 0.350 > 0.057 = 0.293) and reduced the number of lexical errors (LE/W = 0.020 > 0.015 = −0.005). In the post-test, the EG's results were better than the CG's in all error types (GE/W = 0.038 < 0.064 = −0.026; LE/W = 0.005 < 0.015 = −0.01; ME/W = 0.037 < 0.057 = −0.02).

Table 40 *Grammatical, Lexical and Mechanical Accuracy*

	Pre-Test Mean			Post-Test Mean			Pre-/Post-Test	
	EG	CG	Diff.	EG	CG	Diff.	EG	CG
GE	7.2	5.75	1.45	6.4	6.500	−0.1	−0.8	0.75
GE/W	0.064	0.06	0.004	0.038	0.064	−0.026	−0.026	0.004
LE	0.5	1.87	−1.37	0.9	1.5	−0.6	0.4	−0.37
LE/W	0.004	0.02	−0.016	0.005	0.015	−0.01	0.001	−0.005
ME	5.7	3.37	2.33	6.2	5.9	0.3	0.5	2.53
ME/W	0.054	0.35	−0.296	0.037	0.057	−0.02	−0.017	0.293
TE	13.5	11	2.5	13.5	13.9	−0.4	0.03	2.9
TE/W	0.122	0.115	0.007	0.081	0.137	−0.056	−0.041	0.022

To sum up, the EG increased the number of error-free T-units, and reduced the errors per T-unit, the ratio of the grammatical, mechanical and total number of errors per word. The ratio of lexical errors increased very slightly. On the contrary, the CG reduced the number of error-free T-units and increased the errors per T-unit. The group performance per error type improved in lexical errors and was worse in grammatical and mechanical errors. An overview of the results of both groups in the post-test showed that

the EG's results were better than the CG in all the metrics analysed: error-free T-unit (EFT = 7.50 > 3.13 = 4.37), error-free T-unit ratio (EFT/T = 0.44 > 0.39 = 0.05), total errors per word (TE/W = 0.081 < 0.137 = −0.056), grammatical errors per word (GE/W = 0.038 < 0.064 = −0.026), lexical errors per word (LE/W = 0.005 > 0.015 = −0.01) and mechanical errors per word (ME/W = 0.037 < 0.057 = −0.02).

Spoken Accuracy. As illustrated in Table 41, the EG made fewer pronunciation errors per word than the CG in both the pre-test (0.038 < 0.121 = −0.083) and the post-test (0.021 < 0.124 = −0.103), and the difference between the groups reached statistical significance in both tests (U = 8.000, p = 0.004). Over time, the EG reduced the total number of errors per word by −0.017 and this difference reached statistical significance (Z = −2.585, p = 0.010). Conversely, the CG increased the total number of errors by 0.003 errors per word.

Table 41 *Spoken Accuracy*

	Pre-Test Mean			Post-Test Mean			Pre-/Post-Test	
	EG	CG	Diff.	EG	CG	Diff.	EG	CG
Consonants	0.002	0.013	−0.011	0.001	0.018	−0.017	−0.001	0.005
Diphthongs	0.006	0.032	−0.026	0.005	0.033	−0.028	−0.001	0.001
Suffixes	0.017	0.026	−0.009	0.01	0.029	−0.019	−0.007	0.003
Vowels	0.011	0.045	−0.034	0.005	0.044	−0.039	−0.006	−0.001
Total	0.038	0.121	−0.083**	0.021	0.124	−0.103**	−0.017*	0.003

In the pre-test, the EG's primary source of pronunciation errors was suffixing (0.017), followed by vowels (0.011), diphthongs (0.006) and consonants (0.002). For the CG, the most problematic areas were vowels (0.045), diphthongs (0.032) and suffixes (0.026), followed by consonants (0.013).

In the post-test, the EG's most common error type was suffixing (0.01), diphthongs and vowels (0.005) and consonants (0.001). For the CG, the most challenging areas were vowels (0.044), diphthongs (0.033), suffixes (0.029) and consonants (0.018).

Over time, the EG reduced the number of all error types, suffixing (0.017 > 0.01 = −0.007), vowels (0.011 > 0.005 = −0.006) and consonants (0.002 > 0.001 = −0.001) and diphthongs (0.006 > 0.005 = −0.001). The CG increased slightly the number of errors in three of the four error types, in particular consonants (0.013 < 0.018 = 0.005), suffixes (0.026 < 0.029 = 0.003) and diphthongs (0.032 < 0.033 = 0.001), but reduced slightly the number of vowel errors (0.045 > 0.044 = −0.001).

In conclusion, the EG's number of pronunciation errors was lower than the CG's before (0.038 < 0.121 = −0.083) and after the intervention (0.021 < 0.124 =−0.103) and both differences reached the same statistical significance (U = 8,000, *p* = 0.004). The EG's improvement in spoken accuracy over time reached statistical significance (Z= −2.585, *p* = 0.010), whereas the CG increased the number of errors over time and the difference was statistically significant (Z= −2.117, *p* = 0.034).

Written Fluency. As can be seen in Table 42 both groups increased text length over time, though the EG's gain was higher than the CG's (40.7 > 6.55) and statistically significant (Z = −2.191, *p* = 0.028). Similarly, the EG's text length was higher than the CG's in both the pre-test (136.6 > 94.75 = 31.82) and the post-test (167.3 > 101.3 = 66). The latter reached statistical significance (U= 16.000, *p* =0.033).

Table 42 *Written Fluency*

	Pre-Test Mean			Post-Test Mean			Pre-/Post-Test	
	EG	CG	Diff.	EG	CG	Diff.	EG	CG
W	126.6	94.75	31.82	167.3	101.3	66*	40.7*	6.55

Taken together, the results showed that the EG wrote statistically significantly longer texts over time.$p =$ As can be seen in Appendix E, the EG's results showed a high SD in both the pre-test (53.7) and the post-test (96.5), which was due to the disparity of proficiency levels within the group and the fact that the student with C1 proficiency level produced a much longer text. The EG wrote statistically significantly longer texts than the CG at the end of the study.

3.3.1.2   Test 2 Collocations and Professional Terms

As shown in Table 43, the EG's overall gain throughout the study was higher than the CG's (7.4 > 2.0). Similarly, the EG outperformed the CG in the pre-test (22.5 > 19.5 = 3.6) and post-test (38 > 30.1 = 7.91). Both Test 2a and 2b showed a similar trend, so they are described together. The EG outperformed the CG in the pre-test in Test 2a (9.9 > 8.62 = 1.28) and Test 2b (22.53 > 19.5 = 3.6) and in the post-test 2a (11.9 > 8.62 = 3.28) and post-test 2b (26.13 > 21.5 = 4.63). Similarly, the EG's improvement over time was also higher than the CG's in Test 2a (2.0 > 0) and Test 2b (5.4 > 2). Two statistically significant differences were found in Test 2b, one between the EG's and the CG's post-tests (U = 8.000, p = 0.004), and another one between the EG's pre-test and post-test (Z = −2.199, p = 0.028). In conclusion, the EG outperformed the CG in both Test 2a and Test 2b before and after the intervention. Though both groups improved their total result throughout the study, the EG's gain was higher than the CG's.

Table 43 *Test 2 (Max Total = 59; Test 2a = 25; Test 2b = 34)*

	Pre-Test Mean			Post-Test Mean			Pre-/Post-Test	
	EG	CG	Diff.	EG	CG	Diff.	EG	CG
2a Collocations	9.9	8.62	1.28	11.9	8.62	3.28	2	0
2b Professional Terms	22.53	19.5	3.6	26.1	21.5	4.63**	5.4*	2
Total	32.43	28.12	4.31	38	30.12	7.91	7.4	2

3.3.1.3   SCRIPT Questionnaire

The job-application video project included a questionnaire that the EG students completed after the scripting stage. When asked about the differences they found between the first drafts and final versions of the script, if any, all the students responded affirmatively to the question and reported improvement in different aspects:

- *"Yes, the development of ideas."*

- *"The first one was more direct and a bit less polished, above all at the beginning there were things that have been omitted."*

- *"In the final script the real purpose of the video is clearly to catch the attention and sentences are more measured."*

- *"Yes clearly, the first script was longer and more complicated but worse structured and did not sound natural. The final version is more polished and at the right level of English."*

- *"I want to be more direct with what I want to say without being too complicated."*

- *"Yes, I have been able to talk and tell more about myself and define concepts better."*

3.3.1.4   FILM Questionnaire

The job-application video project included a checklist that the EG students completed after the filming session. It aimed to foster reflection on the student's performance during the filming and included open-ended questions on the strategies they had applied before and during the filming. All students reported having rehearsed the scripts repeatedly:

- *"Paying attention to pronunciation and repeating the script many times."*

- *"'I tried to memorise the script as much as possible by repeating it to myself to mechanise it and make it sound more natural."*

- *"I prepared the filming by rehearsing the script twice every day."*

- *"I worked on the text so as not to have to read a lot since it would be noticed when I recorded that I was not looking at the camera."*

- *"I repeated it several times in front of the mirror to prepare a gesture to avoid wrong body posture or hand gestures."*

- *"I repeated several times the phrases with difficult links between word and word and between takes because in the mirror it came out."*

- *"The camera intimidates and makes you nervous, so you also have to make up your mind."*

The EG students' perceptions about the most challenging aspects of the filming session were "*pronunciation*" (*f* 5), "*to keep the right pace*" (*f* 1), "*to look at the camera*" (*f* 2), "*to pronounce the whole script correctly*" (*f* 1), or simply "*everything because I'm not used to this type of tasks*" (*f* 1).

3.3.1.5 *FINAL Questionnaire: Language Development*

As can be seen in Figure 16, the EG's overall perceptions on the effectiveness of the course for developing language skills were more positive than the CG's (4.0 < 3.19 = 0.79). There were statistically significant differences in students' perceptions on the course's effectiveness for developing vocabulary (U = 18.000, $p = 0.031$), writing skills (U = 16.500, $p= 0.027$) and pronunciation (U = 9.000, $p = 0.003$).

The EG students thought the job-application video helped them develop pronunciation (4.4) the most, followed by vocabulary (4.3) and writing (4.1), while the CG students thought the traditional approach had helped them develop grammar (3.5) the most, followed by vocabulary, listening and pronunciation (3.4).

Figure 16 *FINAL Questionnaire: Language Development*
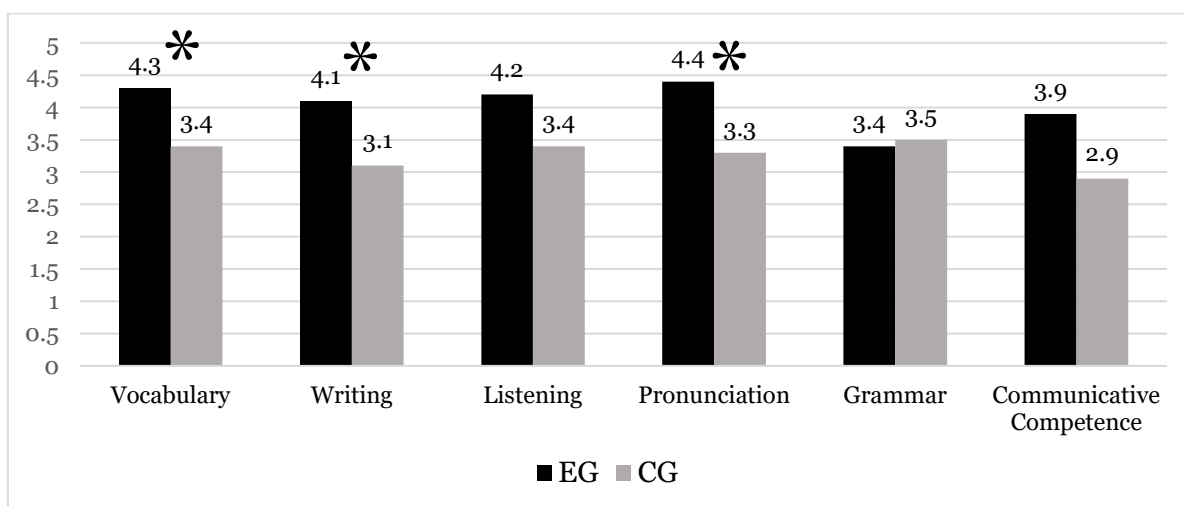
Students' responses to the open-ended questions about the most positive and the most challenging aspects of the course showed that the EG students considered that the most positive aspect of the video-based project was the development of speaking skills, presentation skills and non-verbal communication skills or communicative competence:

- *"Above all, I think it can be very useful to talk more fluently in English and to learn how to stand in front of a camera."*

- *"It's been an interesting task because of the non–verbal communicative skills that we've learned."*

Writing and pronunciation were the aspects the EG students liked the most and the least at the same time. They were considered as a positive outcome because the project

helped them improve their writing and pronunciation skills and negative because it was challenging and difficult:

- *"To gather all the ideas in my script." (Positive)*

- *"To write the script because I had to think a lot about what to include." (Challenge)*

- *"I've improved my pronunciation, and this is good." (Positive)*

- *"To learn how to say some words I didn't know." (Positive)*

- *"Stand in front of the camera and talk in English is challenging." (Challenge)*

In the CG, students' responses suggested that the only linguistic areas developed by the traditional approach were grammar and spelling:

- *"The text book is in our confort zone, but we just learn grammar."*

- *"I learn to spell."*

The CG students' responses on the aspects that they had liked the least in the course were related to a general lack of learning and a lack of speaking skills development:

- *"It helps pass the exam but not to learn."*

- *"I don't learn to speak."*

3.3.1.6   Summary of Results

As shown in Figure 17, the EG produced more lexically complex, accurate and fluent written and spoken texts over time. The improvement in lexical sophistication, variation and overall complexity as well as in fluency and spoken accuracy reached statistical significance, while no significance was found in the improvement in written

accuracy. On the other hand, the group's written productions evidenced a statistically significant drop in syntactic complexity. Additionally, the job-application video project led to increased knowledge of collocations and statistically significant improvement in professional terminology.

The CG's results for syntactic complexity and written and spoken accuracy dropped, but the decrease did not reach statistical significance for any of the measures. The CG students' productions became more lexically complex, featuring increased density and a statistically significant increase in lexical variation. However, the texts became less sophisticated and included fewer academic words. The group produced non-significantly longer texts and decreased their knowledge of collocations, while their results in professional terminology increased slightly.

Figure 17 *EG's and CG's Pre-/Post-Test Gains for RQ2*
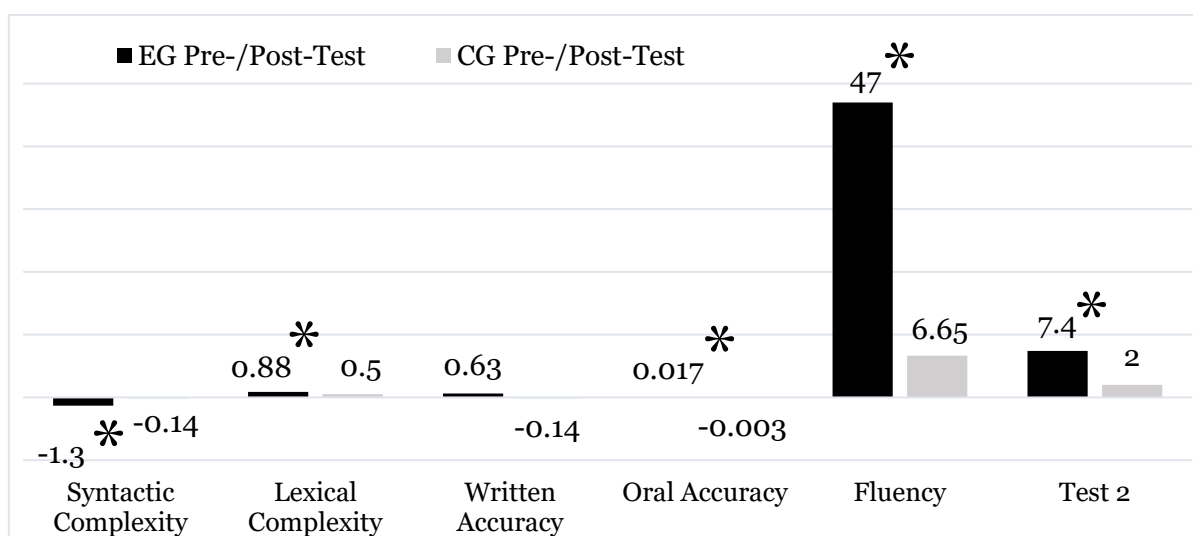
3.3.2   Discussion

3.3.2.1 Syntactic Complexity

Both groups' syntax became less complex over the course of the intervention, which could be attributed to Ortega's (2003) claim that it may take up to 12 weeks of

college-level instruction to develop syntactic complexity, supporting other researchers' decision not to measure syntactic complexity development in studies lasting less than 12 weeks (Hidalgo & Lázaro, 2020; Storch & Tapper, 2009). The EG's results revealed a statistically significant decrease in overall syntactic complexity, as well as in production unit length and specific structures. The CG's results for syntactic complexity also dropped, though no statistical significance was found. Coordination was the only set of metrics that the CG increased slightly.

Regarding mean length of production unit, though the CG's length of T-unit became shorter, the group used statistically significantly longer clauses. In contrast, the job-application video treatment resulted in shorter clauses and a statistically significant decrease in the mean length of T-unit, contradicting previous studies on video methodology such as Blake's (2000), which reported an increase of four to nine words per T-unit in synchronous and asynchronous video methodologies respectively. However, the EG's results aligned with job-application video style guidelines (Cattaneo et al., 2019; Lattanzi et al., 2012) that recommend using concise statements rather than lengthy explanations (Bright et al., 1997; Knouse, 1994; Wang, 2005) and concise descriptions of experiences in line with Grice's (1975) Maxim of Manner, which states that communications should be succinct and avoid unnecessary prolixity. As is the case in application letters, where less is more (Biegeleisen, 1994), job-application videos need to be brief and get to the point.

This suggested that the drop in the average length of production unit may be attributed to communicative adequacy and alignment with the genre's communicative purpose. As previously stated, the EG distributed their content across nine steps for the *Promoting the candidate* move, each step requiring specific discourse and lexico-grammatical features in order to achieve their communicative purposes. Twenty-one percent of the EG's content addressed Step 4 *Stating how skills were obtained* and used

narrative discourse mode and active verbs (*participated in, passed the exam, took part in*), aligning with Henry and Roseberry's (2001) findings in their study of native speakers' letters of application. The hypothesis that narrative discourse mode led to decreased mean length of production unit seemed consistent with Menke and Strawbridge's (2019) study on complexity, which led them to conclude that expository and argumentative texts required longer production units than narrative texts. In their analysis, the increase in unit length occurred at a time of curricular transition from personal document production to academic writing of discipline-specific texts aimed at a more specialised audience. Similarly, the hypothesis also seemed to be supported by Asención-Delaney and Collentine (2011), who analysed a corpus of L2 Spanish writing to understand how learners employed lexical and grammatical phenomena to communicate in writing in various types of interlanguage discourse. They reported four significant clusters of distinct discourse types with two main stylistic variations: narrative (characterised by verbal features) and expository (characterised by nominal features).

On the other hand, the EG's shorter mean length of production unit may be attributed to the fact that the group produced content to address all nine steps for candidate promotion. This may have required the EG students to switch ideas more often in order to describe language abilities, digital competence, qualifications, transferable skills, work experience, and personal goals or interests, thereby producing more clauses (C = 14 > 21) and T-units (T = 9 > 15). As a result, the EG students described a higher number of different aspects of themselves but explained each one in less detail, which would account for the production of more but shorter clauses and T-units.

In terms of subordination and coordination, both teaching approaches led to less subordination throughout the study. As for coordination, although no statistically significant differences were found, the EG reduced the use of coordination while the CG increased it throughout the study.

All together, the CG's results pointed to statistically significantly longer clauses, decreased subordination and increased coordination over time, supporting Bulté and Housen's (2012) study, which reported increased length-based measures, decreased subordination and increased coordination, as well as Crossley and McNamara's (2014) study, which indicated an equal or lower number of subordinated clauses and longer and more elaborated phrases. The results in these two studies ultimately agreed with Biber et al.'s (2011) claim that a T-unit-based subordination measurement is appropriate for the oral register, whereas phrasal elaboration reflects written academic discourse more accurately due to the higher concentration of nouns, nominalisations and prepositional phrases in academic texts (Biber et al., 2016; Lu, 2011) for which the noun phrase is central.

On the contrary, the EG's productions decreased subordination and coordination. Though the group decreased the results in all metrics except for the clause ratio, their results in all metrics within subordination were statistically significantly higher than the CG's, pointing to Beers and Nagy's (2009) study, which identified a relationship between a higher ratio of clauses per T-unit and persuasive writing. They attributed the higher ratio of clauses to a widely used persuasion technique, which is "state your opinion and provide a justification for it". There was evidence in this study that the EG used the pattern "I + verb + X + because Y" (*"I am a very ambitious person because I like the things well done"; "I like to read because I learn new things and new cultures"*). Likewise, this study would also lend support to Beers and Nagy's (2009) hypothesis that the persuasive pattern may result in shorter clauses and descriptive texts in longer clause length, thus ultimately supporting the idea of differentiation in syntactic complexity as a genre function.

In terms of particular structures, the EG's results indicated statistically significant decrease in the number of complex nominals per T-unit over the course of the study. Similarly, the number of verb phrases per T-unit declined but did not reach statistical

significance. Rather, the CG increased the number of complex nominals per clause and decreased the number of verb phrases per T-unit over time. The EG's findings contradicted previous research, such as Menke and Strawbridge's (2019), which indicated that students demonstrated increasing phrasal complexity over time. However, the researchers also claimed that the use of more complex nominals does not always result in higher-quality texts. Although the participants in their study demonstrated an increasing use of noun phrases in their writing, the authors concluded that students appeared to have increased the average length of noun phrases as a compensatory strategy, for instance using "*the people from the country of Mexico*" instead of "*Mexicans*".

However, as previously stated, Step 4 *Stating how skills were obtained* required narrative discourse, which Asención-Delaney and Collentine (2011) defined as characterised by verbal features. As a result, it is not surprising that the EG used more verb phrases than the CG. The EG's findings could also be attributed to the features they used to realise Step 6 *Stating objectives* and Step 9 *Predicting success*, both of which heavily rely on verb phrases (Henry & Roseberry, 2001). Similarly, 29% of the content that the CG students produced in their self-presentations was related to Step 2 *Listing qualifications* ("*After the Medium Grade, I started studying a Superior Grade of Electronic Maintenance*"), and 46% addressed Step 5 *Stating work experience* ("*In 2013 and 2014, I worked 6 months as a sound and light technician*"), which dealt with qualifications and job titles, including technical or specialised terms specific to the student's area of specialisation, thereby increasing the ratio of complex nominal terms (e.g. *vocational training course, electronic maintenance*), supporting Asención-Delaney and Collentine's (2011) claim that expository discourse is characterised by nominal features. The type of discourse and the lexico-grammatical features required to realise these two steps may account for some of the results the CG obtained in syntactic complexity, as exemplified in the following example produced by the CG:

- *"I have studied a Vocational Training course in Sound, and now I am studying another Vocational Training course, but now in Electronic Maintenance."*

This example may account for longer clause length, decreased subordination and increased coordination, because the participant used simple juxtaposition of facts and made no attempt to persuade the reader or connect ideas.

The EG's and CG's results seemed to reflect two distinct production patterns at the micro and macro levels, which were consistent with Norris and Ortega's (2009) and Ortega's (2012) distinction between dynamic and synoptic productive styles. Because of the variety of content and the mixed discourse, both expository and narrative, the job-application video resulted in dynamic productions that displayed less formality and resembled everyday contexts. In contrast, the traditional teaching approach resulted in synoptic productions that were more formal, specialised and impersonal as a result of the emphasis on qualifications and work experience. Norris and Ortega's (2009) and Ortega's (2012) additional claims that subordination is necessary for the dynamic style but less so for the synoptic style, which requires nominalisation, increased lexical density, longer noun phrases and fewer combined clauses, would support this idea.

3.3.2.2   Lexical Complexity

The EG's productions revealed a statistically significant increase in lexical sophistication and variation. Students used a higher number of less-frequent words as well as a higher number of different words, corroborating Bulté and Housen's (2014) claim that lexical and syntactic complexity do not develop in parallel, despite the fact that Bulté and Housen (2014) reported an improvement in syntactic but not in lexical complexity, while in this study an improvement in lexical but not in syntactic complexity was found. These findings would add to Skehan's (2009) and Tavakoli and Foster's (2011) claim, based on Levelt (1989) that, at least for non-native language users, lexical and syntactic complexity

are distinct and independent dimensions of L2 performance and proficiency, rather than different aspects of the same area of L2 performance.

Both groups showed a statistically significant increase in variation, with the EG showing a greater increase. The EG's results in lexical variation could be attributed to the different strategies used by the group to promote the candidate and the greater variety of content, which may have called for more diverse language to describe it. Each step of the move addressed a different characteristic of the candidate and was likely to require the use of specific parts of speech. For instance, Step 2 *Listing qualifications* and Step 5 *Stating work experience* may have required the use of discipline-specific nouns and complex nominals to express degree names (*Higher Vocational Education and Training Degree in Electronic Maintenance*) and specialised job positions (*Sound and light technician*). Step 3 *Listing transferable skills* may have resulted in a greater variety of verbs (*assume, solve, manage, promote, remain, fulfil*) and nouns (*deadline, dialogue* or *calm*). Step 7 *Stating personal interests* may have involved various nouns (*physics, electronics, workout, fitness, hobbies* and *horse rider*), and Step 8 *Expressing positive self-evaluation,* focused on qualities, could have increased adjective variation (*friendly, sociable, charismatic, peaceful, committed* and *ambitious*).

The EG demonstrated a slight statistically non-significant decrease in density, whereas the CG increased density slightly. The combined narrative and expository types of discourse the EG used, together with the variety of content provided for addressing all steps, which might have emphasised different parts of speech, may account for the lower density, given the emphasis on verbs that characterises the narrative style. In contrast, the CG used expository discourse, which generally requires complex nouns to help pack and concentrate the information. The CG's content distribution across the two steps addressing qualifications and job titles may have resulted in more complex nominals, which ultimately resulted in a higher density.

Over time, the EG's productions showed a statistically significant increase in lexical sophistication, whereas the CG's productions became less sophisticated. Just as the curricular content focused on job search and career development, rather than on a particular discipline, in this study lexical sophistication referred to academic or semi-technical vocabulary. Therefore, the academic vocabulary analysis of Test 1 corpus provided additional evidence for lexical sophistication. According to the academic vocabulary analysis using the GSL 1K and 2K vocabulary lists for general English and the AWL 570 vocabulary list for academic language, students who created the job-application video reduced the number of words in the GSL 1K and increased the number of words in the GSL 2K and AWL 570. The EG's ratio of AWL 570 words in the post-test written output was statistically significantly higher than the CG's, corroborating previous research examining the effects of a genre-based approach to academic writing instruction through authentic tasks and feedback, which found statistically significant improvements in academic language (Storch & Tapper, 2009). The researchers attributed the improvement to the students' exposure to sample texts and instructional materials.

Furthermore, Test 2 aimed to determine the effectiveness of each teaching approach for vocabulary acquisition, more particularly for the acquisition of '*adjective + preposition*' collocations in Test 2a and professional terminology in Test 2b. The EG outperformed the CG in both parts of Test 2, and the difference in Test 2b reached statistical significance, supporting previous studies that compared paper- and technology-based instruction materials and reported that the latter benefited academic improvement in vocabulary and grammar (Shevchenko, 2017). In particular, the improvement in the acquisition of job-search vocabulary (Test 2b) mirrored Elizondo et al.'s (2019) results regarding the benefits of tasks reflecting real-life situations on students' use of vocabulary related to job search, such as vocabulary used for self-description of personal qualities. The results obtained by the EG in Test 2 provided further evidence for the positive effects

of student-generated job-application video creation on vocabulary retention (Sildus, 2006), supporting Andrés (2019), who also examined student-generated job-application videos in the FL classroom and reported that vocabulary acquisition was one of the main benefits based on participants' perceptions. As previously stated, the EG's improvement in vocabulary retention and recall might be attributed to students' exposure to sample texts and instructional materials, corroborating Xudong et al.'s (2010) claim about the benefits of authentic tasks and feedback on students' lexis.

In sum, the job-application video resulted in statistically significantly more sophisticated, varied and complex productions, with larger academic vocabulary size that also reached statistical significance. These findings suggested that students' writing quality may have improved as a result of the video-based teaching approach, as suggested by research. For instance, Bulté and Housen (2012) found a correlation between lexical richness and high quality ratings by raters; Kuiken et al. (2010) concluded that communicative adequacy might be related to the range of vocabulary and accuracy of the productions rather than to syntactic complexity; Vasylets et al. (2020) investigated oral and written modes of communication and identified a relationship between communicative success and lexical complexity; finally, Bulté and Housen (2014) identified lexical richness as a predictor of high-quality written output.

The results in lexical complexity and in Test 2 on knowledge of collocations and job-search vocabulary might also be attributed to task repetition (TR) as mediated by corrective feedback (CF). Indeed, TR and CF are likely to account for the EG's and the CG's results in lexical complexity, accuracy, both written and spoken, and fluency. In this study, both groups repeated the same productive task in the pre-test and the post-test and went through a different 12-week treatment between both iterations of the task, which also entailed TR. The traditional methodology followed a programme consisting of four tools for job search, which implied producing a self-presentation for four different job-search

tools, including a CV, a video CV, a job interview and an application letter. For the written formats, the programme followed a product approach to writing with direct CF, which did not necessarily involve feedback processing, and there was no reflection and revision of previous productions. On the other hand, the video-based teaching approach followed a programme, which implied self-presentation in three modalities (written, oral and multimodal) and the use of a genre approach to writing with indirect CF, which implied feedback processing and various stages of revision. The TR effect and the availability of CF during the 12-week intervention involved in each programme seemed to account for the EG's and CG's results in accuracy and fluency in that each teaching methodology was more or less effective in influencing the cognitive processes involved in speech production as measured in the post-test (Chenoweth & Hayes, 2003; Levelt, 1989).

3.3.2.3   *Fluency and Accuracy*

Task repetition has been associated with increased lexical complexity, accuracy, communicative adequacy and fluency in studies examining oral L2 performance. It has been suggested that TR allows for the possibility of influencing Levelt's (1989) Model of Speech Production (Bygate, 2001). The EG's and the CG's results in lexical complexity, accuracy and fluency may also be attributed to written TR and the possibility (or lack thereof) of influencing the processes involved in written text production. In this study, the discussion of this hypothesis was based on Chenoweth and Hayes' (2003) model of the writing process, which consists of proposer, translator, transcriber and reviser. Similarly, for the discussion of the results in spoken accuracy, Levelt's (1989) Model of Speech Production was applied, consisting of conceptualisation, formulation, articulation and self-monitoring.

Bygate (2001) argued that when repeating a task in the oral mode, the students can retrieve the information about the conceptualisation, formulation and articulation of the

message and so have more resources available to focus on redundant forms, discourse patterns, vocabulary or content during the repetitions of the task. Likewise, in the written mode, it has been argued that individual differences in the way planning, translation, transcription and evaluation of the message are combined can be attributed to different configurations of production rules representing the knowledge stored in the long-term memory. As a result, based on the results obtained in this study, it can be hypothesised that the 12-week intervention followed to create a job-application video allowed students to store information in the long-term memory and retrieve it during the post-test and, therefore, to increase accuracy and fluency.

Considering the speech production process students followed during TR, first, they had to generate and organise ideas and thoughts according to a logic in order to create the conceptual content – the idea package (Chenoweth & Hayes, 2003). In order to generate ideas, writers and speakers need knowledge of the subject matter and knowledge of discourse. In particular, the results seemed to suggest that the EG students acquired both topic and discourse knowledge and were able to store and retrieve it during TR. In this study, the knowledge of the subject matter was concerned with students' self-knowledge due to the biographical nature of the genre. The EG students' self-presentations in the post-test evidenced self-knowledge and self-awareness. Indeed, this was also confirmed by the results obtained in Test 3 on career management skills, which showed a statistically significant improvement of self-awareness and job-search skills. In terms of discourse, students in the EG followed a genre-based approach to writing, which involved an analysis of the common strategies used for the *Promoting the candidate* move. Based on the post-test results, students successfully generated and organised ideas to create an effective idea package, thus supporting Henry and Roseberry's (2001) claim that discourse analysis at a strategy level rather than at the move or the genre level provides more useful information than that obtained from textbooks. The move analysis of the EG's post-test corpus

revealed improved step distribution, use of common lexico-grammatical features identified by Henry and Roseberry (2001) in their native speakers' corpus and self-validation techniques according to Rafaeli and Harness's (2002) and Soroko's (2012) taxonomies. These results seemed to indicate that the EG solved the task successfully by correctly allocating attentional resources to the various demands of the writing act, both in terms of content and discourse. It could be argued that the EG's productions conformed Cumming's (1990) claim that this type of task requires "reasoning about linguistic choices". Instead, the message generated by the CG seemed ineffective as they did not achieve all communicative purposes. Even though the group provided information about previous jobs and education qualifications, the lack of content describing the candidates' subjective attributes and skills gained as a result of their job experience, the lack of persuasion and the lack of techniques to make claims trustworthy indicated a lack of problem-solving behaviour of the task, thus suggesting that the CG students did not acquire the required knowledge about the topic and discourse, or that they did not store it in the long-term memory or retrieve it during the post-test (Hayes & Flower, 1986).

These two trends matched Bereiter and Scardamalia's (1987) "knowledge-telling" and "knowledge-transforming" writing models. On the one hand, the CG's self-presentations pointed to a "knowledge-telling" writing model that reflected that knowledge had been integrated into the writing by retrieving information from the long-term memory and compiling and sequencing it bit by bit, without a plan or specific goal setting, thus evidencing that students had not solved the problem posed by the task both in terms of content and rhetoric. Instead, the EG's productions pointed to the "knowledge-transforming" writing model, as their self-presentations evidenced that students had solved the problem posed by the task by retrieving knowledge from the long-term memory and adapting their thoughts to their communicative goals, thus engaging with problem-solving in the content and rhetorical spaces (Manchón, 2014a).

Second, students had to translate the idea package into a language string by selecting appropriate words, expressions or sentences. Based on Chenoweth and Hayes' (2003) model, the string the translator produces is checked by the evaluator and if the string is not acceptable, the reviser can call on the other processes to produce a revised version of the idea package. Choosing appropriate words, expressions and sentences addressed complexity, and revising whether they were acceptable addressed accuracy. Based on the EG's statistically significant increase in lexical complexity, lexical sophistication, lexical variation and academic vocabulary size as well as the increase in accuracy, it could be argued that creating a job-application video was also effective in generating information students could save and retrieve as knowledge in the long-term memory, thus benefiting their productions when the task was repeated (Bygate, 1998). The CG's statistically significant improvement in lexical variation would seem to suggest that students were able to store and retrieve lexical knowledge. However, the group's productions became lexically less sophisticated, less accurate and featured fewer academic words, which seemed to suggest that the students were not able to fully store and retrieve the required information for a successful iteration of the task.

Next, students had to transcribe the language string into text, thus involving fluency. Both groups increased fluency, which supported previous research findings (López, 2019), suggesting that mere task repetition of a writing task without the availability of CF (and regardless of whether or not writers are asked to self-reflect on their own texts before revising them) does lead to writing a longer text, which does not mean that these texts are more accurate or complex (López, 2019). Though both groups increased fluency, only the EG's gain was statistically significant, supporting previous research that reported a statistically significant increase in fluency in written TR and providing new empirical evidence for the beneficial effects of TR and indirect CF processing on written fluency (Amiryousefi, 2016; Indrarathne, 2013; Jung, 2013; López,

2019; Nitta & Baba, 2014, 2015). Borrowing Bygate's (1998) claim in spoken mode, these findings supported the idea that learners produced more fluent output when encountering the task again because they had stored information in the long-term memory, thus allowing for cognitive resources to be freed-up and enhancing the possibilities to write more content.

While both groups' results yielded benefits in fluency, those in accuracy and complexity appeared to be more mixed, supporting previous research findings. The CG's results corroborated Jung's (2013) study, which reported an increase in fluency but not in accuracy. This trade-off effect between accuracy and fluency has been reported in other studies, such as in López's (2019), in which the group that did not receive CF and the self-assessment group improved fluency but not accuracy. A possible explanation might be that though the CG received direct CF, the students might not have processed it, thus accounting for the similarity in the results obtained by a group that did not receive any feedback (López, 2019) and the CG's results. This would support previous research on the effect of processing CF on written L2 performance, which showed that only the group which reflected on error correction improved accuracy and fluency (Mercader, 2018). This ideas was supported by the fact that the EG's and CG's results in written accuracy per error type also corroborated López's (2019) findings in accuracy, according to which the indirect-feedback group reduced morpho-syntactic and total errors while the direct-feedback group only reduced lexical errors. It is possible that indirect feedback (EG) facilitated more in-depth linguistic processing and reflection than direct feedback (CG), resulting in improved morpho-syntactic form accuracy. These results contradicted Van Beunigen et al.'s (2012), which reported improved grammatical accuracy for direct CF and improved non-grammatical accuracy for indirect CF. However, the results in this study pointed in the same direction as Sánchez and Manchón's (2014) findings, which showed greater lexical accuracy after receiving direct CF and greater syntactic accuracy for indirect

CF. The EG students received indirect feedback, which may have resulted in noticing at the level of understanding (implying processing and analysis), while the CG students, who received direct feedback, may have just checked their errors and stop noticing at the level of perception (without processing and analysis of input) (Schmidt, 1990). Another explanation for the CG's results might be a trade-off effect between fluency and accuracy as suggested in the Limited Attentional Capacity Model (Skehan, 1999), which would lend support to López's (2019) findings, which reported trade-off effects between these two constructs in written TR.

Likewise, the CG's and the EG's results supported Shevchenko (2017), who compared paper- and technology-based instruction materials and reported that only the latter benefited academic improvement in vocabulary and grammar. This finding might also be related to the lack of authentic materials and tasks in the traditional programme, which would provide further support to the conclusions of previous studies such as Elizondo et al.'s (2019), which reported positive effects of authentic tasks on vocabulary acquisition, and Storch and Tapper's (2009), which attributed the improvement in academic vocabulary to students being exposed to authentic model texts and instructional materials.

In the field of video research, the results reinforced previous research findings, which reported that asynchronous video forums and synchronous videoconferencing lead to improved fluency in L2 performance (Blake, 2000). Likewise, the results were also consistent with Spring's (2020) findings in a study on the effects on CAF constructs of video creation, according to which using video creation in a PBLL class produced a statistically significant improvement in fluency.

In this study, qualitative data was collected from the students' responses to the open-ended questions in the SCRIPT questionnaire, which asked students to reflect on how the first draft compared to the final version. In some responses, students mentioned

they had been able to generate more and better content (*"I have been able to tell more about myself and to define concepts better"*), mirroring the participant's perceptions in Indrarathne's (2013) study on the effect of TR in written format, who stated that the second time she did the task she needed less time to plan *"what to write"*. According to the student, the second time she did the task, she *"needed less time for planning"* (p. 58), so she could complete the second versions of the stories more quickly. This suggested that repeating the task allowed students to make use of information stored in long-term memory, thus allowing them to pay attention to form, supporting Bygate's (2001) argument that when learners produce content for the first time, they can store information about the conceptualisation. When they produce content for the second time, they have this information, enabling them to alter their performance in the second repetition, especially if they have been given more information about what features to focus on in classes. Spending less time planning content allowed for more time and attention to be paid to vocabulary during the repetition of the task. Therefore, the repeated performance may become more accurate. Another student in the EG stated that there had been a clear improvement between the first and last scripts because *"the first script was longer, more complicated and the structure did not work and did not sound natural",* providing further evidence for Bygate's (2001) claim that learners have more freedom and time to focus on the grammar and discourse patterns on the second occasion. A third student stated that *"in the final script, there is a clear objective and the goal is that the video attracts the employer and the employer calls me"*, suggesting that TR had benefited adequacy, supporting the idea that it seems likely that students could have accessed information related to discourse, topic or vocabulary features that were also stored in long-term memory. A fourth participant stated: *"It is noticed that the words and phrases are more measured and have improved considerably concerning the first script"*, mirroring the students' perceptions in Indrarathne's (2013) study, who stated that the second time she performed the task she could *"change certain words and sentences"*. This finding would

ultimately support Bygate's (2001) arguments that learners can use information stored in long-term memory when repeating a task, and learners are left with more time to pay attention to redundant forms when a task is repeated.

Moving to the oral modality and using Levelt's (1989) Model of Speech Production, the third stage is the message articulation, which is concerned with the message's physical reproduction and thus with pronunciation in oral mode. According to the EG's results, there was a statistically significant drop in the number of errors affecting intelligibility. The effectiveness of the job-application video for improving spoken accuracy may be attributed to rehearsal, which, according to Ellis (2015), is like planning, and it is relevant to CAF because it allows influencing Levelt's (1989) Model of Speech Production. Based on qualitative data collected in this study, students' primary strategy for preparing for the filming was rehearsal, and the aims of their rehearsal ranged from improving pronunciation (*"Paying attention to pronunciation and repeating the script many times"*) to naturalness (*"I tried to memorise the script as much as possible by repeating it to myself to mechanise it and make it sound more natural"*) or word linking (*"I repeated several times the phrases to make them sound more natural"*). During the filming sessions, students received direct corrective feedback and used repetition until the result was satisfactory. After the filming, the students watched their raw footage to choose the best clips to be included in the video, thereby self-evaluating and reflecting on their performance. The job-application video project enabled students to work on pronunciation at various stages on an individual level, which is difficult to achieve in foreign-language classrooms. Indeed, due to the nature of the communicative event, pronunciation was critical and central to the project. Mispronunciation is likely to be overlooked when communicating synchronously, as long as it does not affect intelligibility, because the priority is to move the conversation forward and achieve the communicative goal. On the other hand, a job-application video is an asynchronous communicative act

consisting of a sustained monologue that must be as syntactically, semantically and phonetically accurate as possible in order to make a favourable impression and persuade the prospective employer.

The students' perceptions supported this view and indicated that pronunciation was the language skill they had developed the most during the video project. For the students who had created a job-application video, pronunciation was both one of the most positive aspects of the project (*"To learn how to say some words I didn't know"; "I've improved my pronunciation and this is great"*) and one of the most challenging ones (*"Standing in front of a camera and talk in English is challenging and I get nervous"*). Several students identified pronunciation as the most difficult aspect of the filming process (*"To pronounce words correctly and to be able to say all the text while filming"*), and almost half of the group (40%) reported having made changes to the script during the filming session to improve pronunciation. There was a statistically significant difference between the students' perceptions around the effectiveness of each teaching methodology for developing pronunciation skills, the EG's being higher than the CG's. Indeed, the CG did not mention any pronunciation-related aspect in their responses to the open-ended questions in the FINAL questionnaire.

The EG's statistically significant improvement in spoken accuracy supported previous studies that explored TR and reported higher speaking accuracy (Bygate, 1999), improved accuracy in narrative tasks (Matsumara et al., 2008), more accurate and appropriate formulations (Bygate & Samuda, 2005) and more focus on accuracy (Hawkes, 2012). Improved spoken accuracy is a benefit commonly reported in video creation projects, and this study confirmed the positive effect of rehearsal on students' spoken accuracy, supporting previous research findings that reported that rehearsal before filming benefits accuracy (Hur & Suh, 2012), the ability to monitor progress and reflect on performance increases students' awareness of improvement areas, such as intonation or

volume (Zhabo et al., 2018), strengths and weaknesses (Chang & Tseng, 2009), and language development and presentation skills (Hung, 2011). Another plausible explanation for the significant improvement in spoken accuracy concerns video authorship and ownership. Research has shown that video projects might benefit pronunciation because sharing the artefact with an authentic audience at school or on the Internet can make students take responsibility for their productions (Coleman et al., 2004) and feel motivated to create better and more creative recordings (Kearney & Schuck, 2006; Nikitina, 2009, 2011).

Finally, as already stated in Chapter 1, writing processes are cyclical, so they involve a recursive nature, which refers to the constant interaction between "reflection and text production processes" occurring not only within but also across drafts (Galbraith et al., 2007, p. 5). Hayes (1996) suggested that revision should not be considered a basic process in its own right but should instead be seen as involving the recursive application of cycles of reading, reflection and text production. Similarly, Levelt's (1989) Model of Speech Production also includes a self-monitoring stage. Reflection was an integral part of the video project, and the students engaged in reflective processes throughout all three stages of the video production, from pre-production, which focused on the scripting process, through production, which dealt with the filming process, and finally post-production, which included the video editing process. During the pre-production stage, the students examined models and materials, took a psychometric test, and revised their written productions with the support of indirect feedback in order to implement improvements at the content or rhetoric level, such as the use of action verbs or validation techniques to justify the origin of more subjective and difficult-to-prove skills. During the production stage, students pre-recorded themselves during rehearsal, which enabled them to identify their strengths and weaknesses in performance. Finally, during the post-production stage, students watched and listened to their footage and reflected on their

performance to decide on the clips that would be included in the final video. The SCRIPT, FILM and FINAL questionnaires, respectively, were given to the students at the end of each of these stages to encourage students' reflection on their productions, supporting Caicedo et al.'s (2018) study, which also reported improved accuracy in a student-generated video intervention and attributed it to self-reflection and assessment. According to the researchers, reflection and assessment are crucial for learners in effectively identifying areas of weakness and increasing their awareness of proper grammar usage.

In the traditional methodology programme, each of the four tools for job search was presented as the final task of a section rather than a task to build upon, and it also appeared to be a one-time task to which students did not seem expected to return. Students received direct corrective feedback on each final component with no specific requirement to proess it and went on completing the following tasks. Similarly, there were no instructions connecting these four elements, except for the video CV, which required students to use their previously created CV. These main productive tasks seemed to be compartmentalised, separate and isolated. The order these tasks followed did not reflect the order that would be followed in a real-world situation, but rather depended on the order of the sections of the unit, with the job interview preceding the application letter because speaking came before writing, which was the last section of the unit. Though some of the tasks included questions to engage the students in reflection, the task isolation and order indicated that students were not expected to revise any of the previous productions (initial conceptual content generation) to implement the new knowledge acquired about the topic and discourse. This may account for the CG students' inability to save and retrieve information related to the message generation. This contradicted Ding and Ding's (2013) process followed in their 360º-project, which also included four components for job search and required students to follow the natural order a candidate would follow in real life, with each phase building on the outcome of the previous one. Students were also

expected to return and improve their written productions based on the new knowledge gained throughout the project. According to the qualitative data collected in the FINAL survey's open-ended questions, students' perceptions of the effectiveness of the methodology in developing language skills were negative because *"the textbook is in our comfort zone, but we just learn grammar"*. The traditional teaching methodology developed only two linguistic areas: grammar (*"Grammar is better learned"*) and spelling (*"I learn to spell"*). Students believed that the primary disadvantage of the methodology was that it *"helps in passing the exam but does not help in learning"* and *"I do not learn to speak"*. Taken together, the results of both groups in vocabulary knowledge in Test 2 and the results in the CAF analysis supported Ellis' (1995) claim that there cannot be acquisition without noticing, and there cannot be noticing without attention.

3.3.3   Summary of Research Question 2

The second research question examined whether students in the EG improved their L2 communicative competence and achieved greater proficiency than students in the CG. The study's findings indicated that the EG improved L2 communicative competence by developing both linguistic and pragmatic skills. In terms of linguistic competence, the group gradually produced more lexically complex, accurate and fluent written and oral texts. Their post-productions, on the other hand, demonstrated a statistically significant decrease in syntactic complexity. Improvements in lexical sophistication, variation and complexity, as well as in the number of academic words, fluency and spoken accuracy were found to be statistically significant. Finally, the job-application video approach resulted in an increase in collocation knowledge and a statistically significant increase in professional terminology. In terms of pragmatic competence development, creating a job-application video resulted in effective self-presentations that included a variety of objective and subjective details about the candidate and effectively persuaded the reader by validating the subjective characteristics that are more difficult to demonstrate (Rafaeli & Harness,

2002; Soroko, 2012). The EG students used self-appraisal (Bhatia, 2014) as well as competency statements (Bright et al., 1997; Knouse, 1994) to present a relevant self (Grice, 1975).

The CG students, on the other hand, did not improve their L2 communicative competence, because of a lack of improvement in their L2 linguistic and pragmatic competences during the course. In terms of linguistic competence development, the group's written and spoken productions became syntactically less complex and less accurate. Despite increasing overall lexical complexity and reaching statistical significance in lexical variation, the group's productions became less sophisticated and decreased academic vocabulary size over time. The group's productions became more fluent and their knowledge of collocations decreased, while that of professional terms increased slightly, with no statistically significant difference. In terms of pragmatic competence development, the CG students' self-presentations lacked information about the candidate's subjective characteristics (Rafaeli & Harness, 2002; Soroko, 2012), as well as competency statements describing transferable skills and competences gained at work (Bright et al., 1997; Knouse, 1994), resulting in a general lack of self-appraisal (Bhatia, 2014). Furthermore, the few instances of students' interests and transferable skills were either irrelevant or unreliable due to a lack of validation. Students included information that is typically included in a résumé, evidencing a lack of comprehension of the communicative purpose.

These findings had two major implications. The first is that the EG and the CG displayed two distinct patterns: a dynamic and a synoptic productive style (Norris & Ortega, 2009: Ortega, 2012). The dynamic style of the EG was less formal, incorporating elements of narrative and discourse and using subordination. The group's content distribution across the nine steps of the candidate promotion process resulted in a greater number of (but shorter) T-units and clauses. The genre's persuasive purpose resulted in

decreased coordination and increased subordination. The increased number of verb phrases was due to the use of narrative discourse to justify how skills were acquired. The persuasive purpose of the text justified the absence of complex nouns and the strong reliance on verbs of action. On the other hand, the CG's synoptic style was more formal, specialised and impersonal. Concentrating on content related to credentials and work experience resulted in longer noun phrases, decreased subordination, increased coordination, a greater number of complex nominals and increased lexical density.

The EG's reduced syntactic complexity and increased communicative adequacy supported Bhatia's (1997) claim that the analysis must be top-down, starting with the genre structure and progressing to the lexico-grammatical features used to achieve the genre's communicative goal. Additionally, it corroborated Ortega's (2003) claim that linguistic production requires both complexity and discourse development, and that more complex sentences do not always imply better writing (Ortega, 2003; Pallotti, 2015). Indeed, prior research indicated that rather than an increase in syntactic complexity, the group's increased lexical complexity and accuracy were more likely to indicate an increase in students' writing quality (Bulté and Housen, 2012, 2014; Kuiken et al., 2010; Vasylets et al., 2020;). At the syntactic level, genre requirements appeared to explain the EG's findings, as students employed the lexico-grammatical features required to successfully promote the candidate. The syntactic and lexical complexity of the language produced was dependent on how students chose to realise the steps to accomplish the purpose, corroborating other studies claiming that CAF is insufficient and that adequacy should be considered both as a CAF measure and as an additional measure for the interpretation of CAF (De Jong et al., 2012; Hidalgo & Lázaro, 2020; Pallotti, 2015).

The second implication of this study is that the TR and CF involved in each group's intervention may have aided in the development of linguistic and pragmatic competence. Each teaching method was evaluated against the various cognitive processes involved in

writing (Chenoweth & Haye, 2003). The job-application video methodology's programme consisted of a series of tasks aimed at developing a single component for job search in written, oral, and multimodal formats, whereas the methodology of the traditional programme consisted of tasks aimed at developing four components for job search, including a CV, a video CV, a job interview and an application letter. Both programmes required repetitive tasks on the same content using different processes.

Planning was the first step in writing (Chenoweth & Haye, 2003), and the EG's findings indicated that students were capable of storing and retrieving the knowledge necessary for effective idea generation and organisation, as well as goal setting. This was attributed to students' successful development of self-awareness and self-knowledge, as well as the effectiveness of the genre-based approach to writing, which mirrored previous research (Henry & Roseberry, 2001). The CG, on the other hand, failed to achieve most communicative goals, which was attributed to a lack of knowledge, both in terms of self-knowledge and comprehension of the text's purpose. As a result, students were unable to recall the information needed to complete a successful writing task. Based on the writing model proposed by Bereiter and Scardamalia (1987), the EG's productions pointed to a "knowledge-transforming" type of self-presentation that evidenced that students had solved the problem posed by the task both in terms of content and rhetoric, while the analysis of the CG's self-presentations pointed to a "knowledge-telling" type of writing that reflected that knowledge had been integrated into the writing by compiling and sequencing information bit by bit and without implementing a plan or setting goals for the writing.

The second cognitive process involved in the writing was translating (Chenoweth & Haye, 2003), which required students to convert the conceptual content into a linguistic form using linguistic knowledge from multiple grammatical and lexical stores, which was then revised for accuracy. The EG's results indicated that the video project was effective at

assisting students in storing and retrieving information from the lexical store. In comparison, the CG students were unable to retrieve all of the data, raising the question of whether it had been saved at all. Results from both groups confirmed the findings of previous studies attributing increased vocabulary knowledge to learners' exposure to authentic materials (Storch & Tapper, 2009), digital instructional materials instead of monomodal materials (Shevchenko, 2010) and real-world tasks (Elizondo et al., 2019).

The third process involved in writing was transcribing (Chenoweth & Haye, 2003), which was concerned with the execution of the planned message, and thus with fluency in the written communication. Both groups produced longer texts, but the EG's increase was statistically significant, lending support to previous research that reported a statistically significant increase in fluency in written TR (Amiryousefi, 2016; Indrarathne, 2013; Jung, 2013; Nitta & Baba, 2014; 2015; López, 2019). The CG's decreased accuracy and increased fluency, though with no statistical significance, and this may have been the result of a trade-off between fluency and accuracy, and the type of feedback the groups received during the instruction stage may have had an effect on how the students processed the information (Schmidt, 1990), supporting López's (2019) claim that direct feedback would result in less linguistic processing and reflection than indirect feedback.

In the oral mode, the EG's statistically significant improvement in spoken accuracy was attributed to rehearsal (Ellis, 2015). Students' perceptions revealed that they considered that pronunciation was the skill they developed the most, supporting previous studies examining video creation that reported improvements in pronunciation, intonation and volume as well as presentation skills, and linked this improvement to rehearsal or authorship (Chang & Tseng, 2009; Hung, 2011; Hur & Suh, 2012; Kearney & Schuck, 2006; Nikitina, 2009, 2011; Zhabo et al., 2018).

Finally, the reviser was in charge of evaluating students' idea package, language string, and text produced during the writing process. Interaction of "reflection and text

production processes" makes writing cyclical and recursive, not only within but also between drafts (Galbraith et al., 2007, p. 5). The job-application video was evaluated, reflected on and reviewed throughout the video creation process. The video-based programme used four tools to promote reflection, which led to successful writing planning, correlating with previous studies that reported reflection was critical in video projects (Caicedo et al., 2018) or career management skills (Stanbury, 2005). In contrast, an illogical order of task completion in the traditional programme, with the interview taking place before the application letter, and a lack of connection between the tasks of the four job-search tools as well as no planned revision on previous writing resulted in a programme that did not appear to encourage reflection and review, lacking the recursive nature that revision has in the writing process (Ding & Ding, 2013). This may explain the CG students' inability to save or retrieve knowledge that could have allowed for freed–up resources to improve their performance.

3.4 Research Question 3

The third research question explored whether the EG students had improved their digital competence and whether they had obtained greater competence than those in the CG, based on the analysis of the following qualitative data:

- Data on students' digital skills from the DIG questionnaire.

- Data on students' perceptions regarding the effectiveness of the teaching approach to develop digital skills from the FINAL questionnaire.

- Data on strategies used for scripting the video from the FILM questionnaire.

3.4.1 Results

3.4.1.1 DIG Questionnaire

As can be seen in Table 44, the EG's total results were higher than the CG's in the pre-questionnaire (151.1 > 148.7 = 2.4) and the post-questionnaire (157.5 > 150.5 = 7). The EG's results were also higher than the CG's in Area 1 *Information and data literacy* and Area 3 *Digital content creation* in both the pre-questionnaire (A1 = 85.6 > 82.3 = 3.3 ; A3 = 45.3 > 44.8 = 0.5) and the post-questionnaire (A1 = 88 > 83.1 = 5.1; A3 = 47.4 > 45.2 = 2.2). The CG outperformed the EG in Area 2 *Communication and collaboration* in the pre-questionnaire (20.2 < 21.8 = −1.06) and the post-questionnaire (22 > 22.1 = −0.1).

Table 44 *DIG Questionnaire (Max Total = 185; Area 1 = 100; Area 2 = 30; Area 3 = 55)*

	Pre-Test			Post-Test			Pre-/Post-Test	
	EG	CG	Diff.	EG	CG	Diff.	EG	CG
Area 1	85.6	82.3	3.3	88	83.1	5.1	2.4*	0.9
Area 2	20.2	21.8	−1.6	22	22.1	−0.1	1.9	0.4
Area 3	45.3	44.8	0.5	47.4	45.2	2.2	2.1*	0.5
Total	151.1	148.7	2.4	157.5	150.5	7.0	6.4**	1.7

As shown in Figure 18, the EG's overall result in the DIG questionnaire increased over time ($151.1 < 157.5 = 6.4$) and the difference reached statistical significance ($Z = -2.085$, $p = 0.005$). A further analysis of the individual measures showed that the EG increased their scores in Area 1 *Information and data literacy* ($85.6 < 88 = 2.4$), Area 2 *Communication and collaboration* ($20.2 < 22.1 = 1.9$) and Area 3 *Digital content creation* ($45.3 < 47.8 = 2.1$), and that the difference was statistically significant for Area 1 *Information and data literacy* ($Z = -2.388$, $p = 0.017$) and Area 3 *Digital content creation* ($Z = -2.388$, $p = 0.017$).

Figure 18 *EG's DIG Questionnaire (Total = 185; Area 1 = 100; Area 2 = 30; Area 3 = 55)*
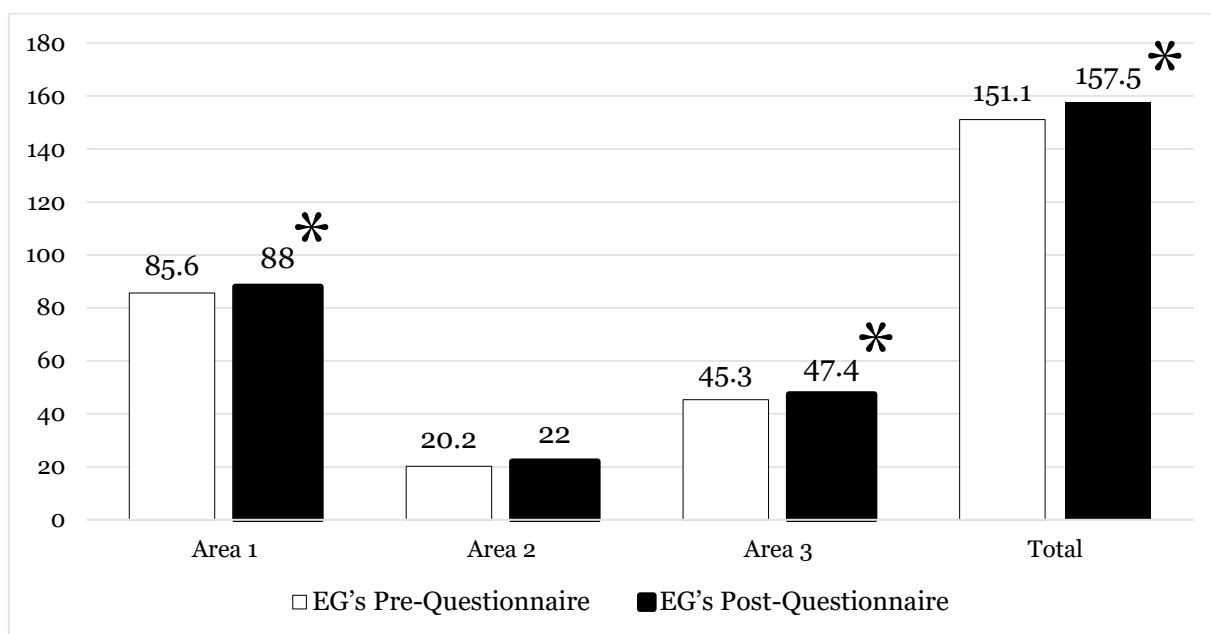
As shown in Figure 19, the CG's total results in the DIG questionnaire also increased very slightly over time ($148.7 < 150.5 = 1.7$), and so did Area 1 *Information and data literacy* ($82.25 < 83.12 = 0.9$), Area 2 *Communication and collaboration* ($21.75 < 22.12 = 0.4$) and Area 3 *Digital content creation* ($44.75 < 45.25 = 0.5$). None of the differences reached statistical significance.

Figure 19 *CG's DIG Questionnaire (Total = 185; Area 1 = 100; Area 2 = 30; Area 3 = 55)*
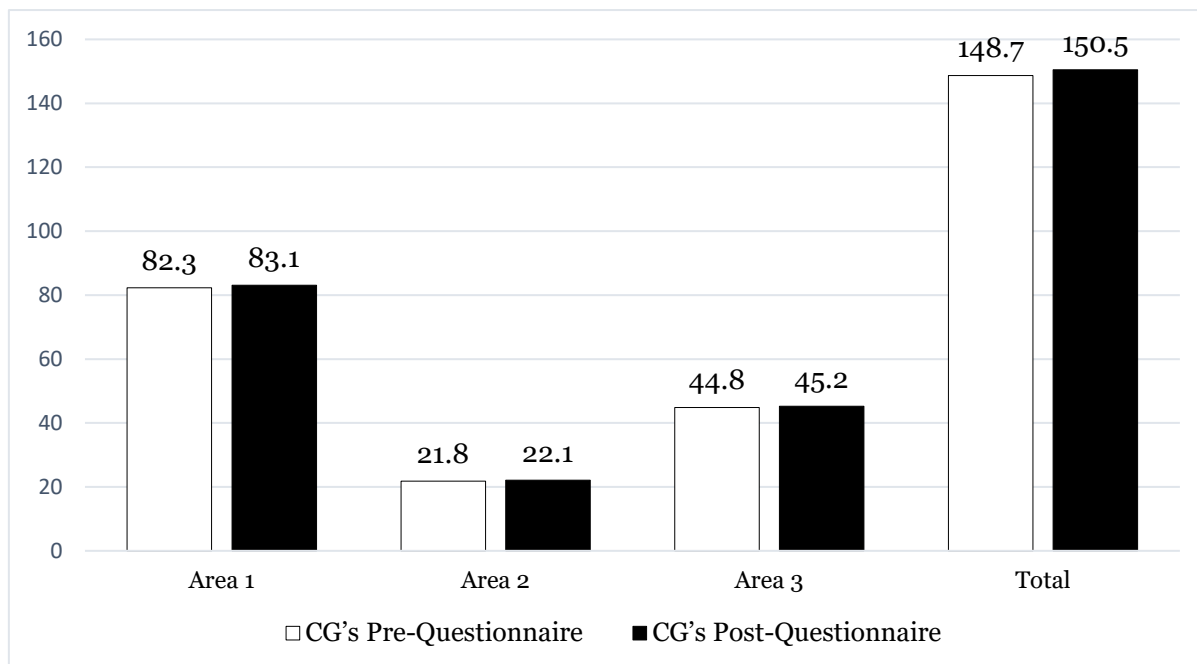
3.4.1.2   SCRIPT Questionnaire

The job-application video project included a questionnaire that the EG students completed after the scripting stage. According to their responses, students used four types of strategies to script the video: translating from the L1, checking online samples, asking for assistance and using reference materials.

1) Sixty percent of the students reported having used translation to script the video and all of them reported having used online dictionaries, in particular *WordReference, Linguee* and *Google Translate*, for translating, looking for vocabulary and checking the use of specific words in context.

2) Seventy percent of the students asked a classmate for support *"for translating words and expressions", "for helping me do the more difficult sections"* and *"for translating structures and sentences"*. Instead, only 30% of them asked for help outside the

classroom *"for making sure the structure of the job-application video was fine"* or *"for understanding the meaning of some words"*.

3) Forty percent of the students checked examples of online job-application videos.

3.4.1.3   FINAL Questionnaire: Digital Skills Development

The questionnaire results (see Figure 20) regarding students' perceptions supported the findings obtained in the DIG questionnaire. There was a striking difference between the EG's and the CG's perceptions concerning the effectiveness of the teaching methodology for developing digital skills. Overall, the EG rated the teaching approach they used as being very effective (4.1) while the CG's rating of the traditional approach was lower (2.6). The difference between the two ratings was statistically significant (U = 3.500, *p* = 0.001).

Figure 20 *FINAL Questionnaire: Digital Skills Development*
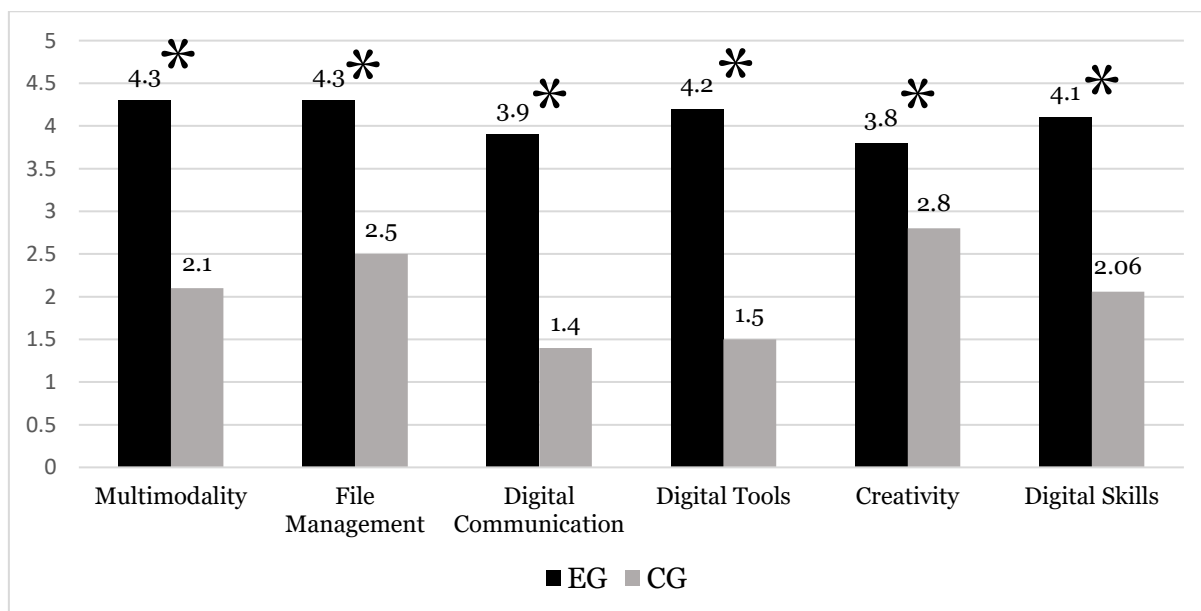
The EG reported that multimodality and file management were the two digital aspects they had developed the most (4.3), followed by tools (4.2) and communication (3.9). In comparison, the CG's highest score was file management (2.5), followed by

multimodality (2.1), tools (1.5) and communication (1.4). The differences between the two groups reached statistical significance in all categories including multimodality (U = 3,500, p = 0.000), file management (U = 3.500, p = 0.001), digital communication (U = 1,000, p = 0.000), digital tools (U = 000, p = 0.000), creativity (U = 18,000, p = 0.035).

The participants' responses to the three open-ended questions in the FINAL questionnaire were analysed to identify the recurrent themes and triangulate findings. The students who created the job-application video referred to video editing (*"To edit the video"*) and the wiki (*"To use a wiki"*) as positive aspects of the project. Similarly, video editing was considered a challenge (*"To record and edit the video"*), together with video filming (*"To film the video because it requires much time"; "To film the video, stand in front of the camera and talk in a foreign language is challenging because I got nervous."*).

In the third open-ended question, where students expressed their general opinion, some references to digital elements were identified:

- *"It's been an interesting task because of the non-verbal communicative skills that we've learned and all the digital skills we've developed when we've filmed, produced, corrected the video."*

- *"I'm not really satisfied because you know that the editing is a bit poor, and this annoys me because I had a clear idea in my head but due to all the problems I've faced when editing, I haven't been able to get anything better."*

This "positive vs negative" dichotomy reflected that considering something as a positive aspect of a project does not necessarily imply that it will be easy to achieve. Indeed, the fact that creating a job-application video was a challenging project that required students to complete tasks at different levels of difficulty for the first time, also

translated into a sense of achievement, as one of the students pointed out: *"To finish the project on time after facing many problems when filming and editing is satisfying."*

On the other hand, creativity is embedded in any new content creation process, and references to students' creativity as positive aspects of the job-application video project were made (*"I have a creative way to try to be a candidate above all if English is a requirement."*; *"It's been motivating and innovating."*)

The analysis of the qualitative data collected in the three open questions showed that the CG did not refer to any digital aspects in their responses about positive, challenging or satisfactory aspects of the course. They referred to "monotony" as one of the negative aspects (*"It's boring and not challenging."; "As usual. There isn't anything new in the course."* *"The book is in our comfort zone."*).

Students were requested to rate how useful, difficult and satisfactory they found the overall course was. As shown in Figure 21, the EG found the video project more useful than the CG found the traditional course (3.9 > 2.8), as well as more satisfactory (3.8 > 2.5). Both groups found the course equally difficult (2.6).

Figure 21 *Students' Perceptions of the Course: Usefulness, Difficulty and Satisfaction*
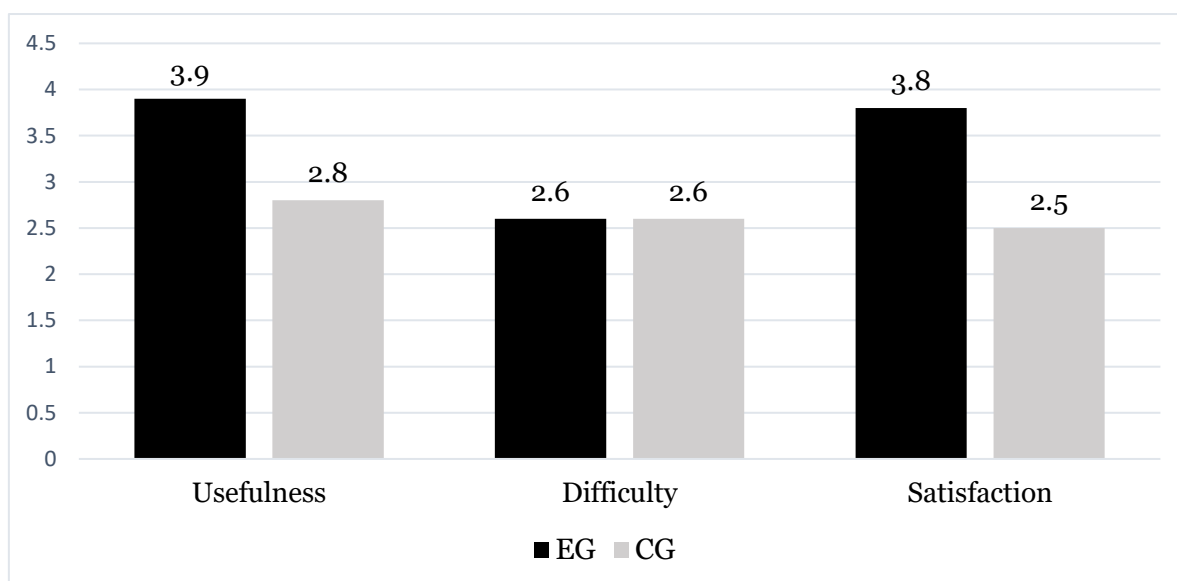
Students were asked about the most challenging aspect of the course and for the EG, time constraints (60%) were the most common problem, followed by language (20%) and technical aspects (20%). By comparison, among the CG students motivational aspects (70%) were most common, followed by language difficulties (30%) (Figure 22).

Figure 22 *Course Challenges*
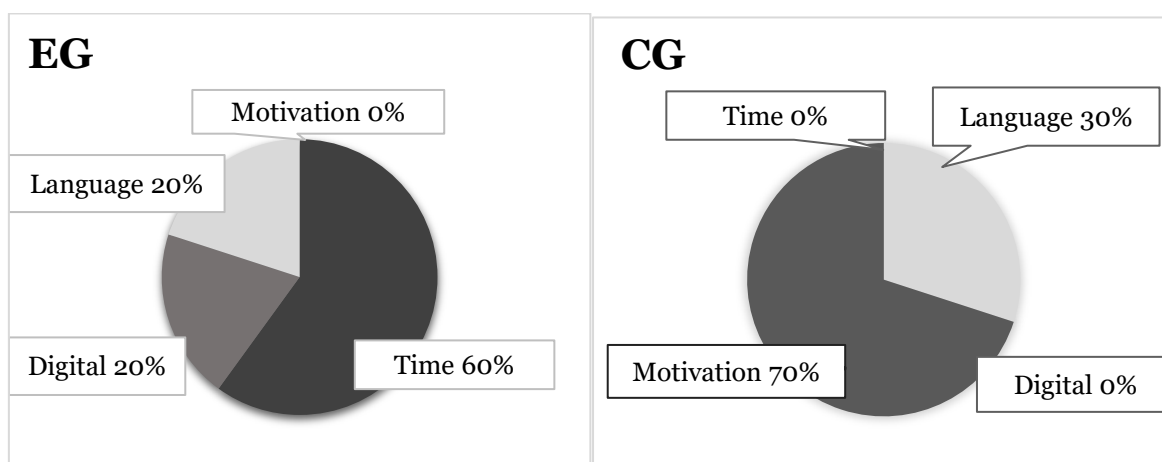
As indicated in Figure 23, the job-application video footage was analysed to determine the main multimodal elements that students used in their final artefacts. All the students used transitions to structure the video and on-screen text to name the sections. Ninety percent of them included music and 40% included some kind of artefact related to their interests, such as photographs, certificates or even drawings. The average length of the videos was two minutes and five seconds (2.05).

Figure 23 *Job-Application Video Editing*
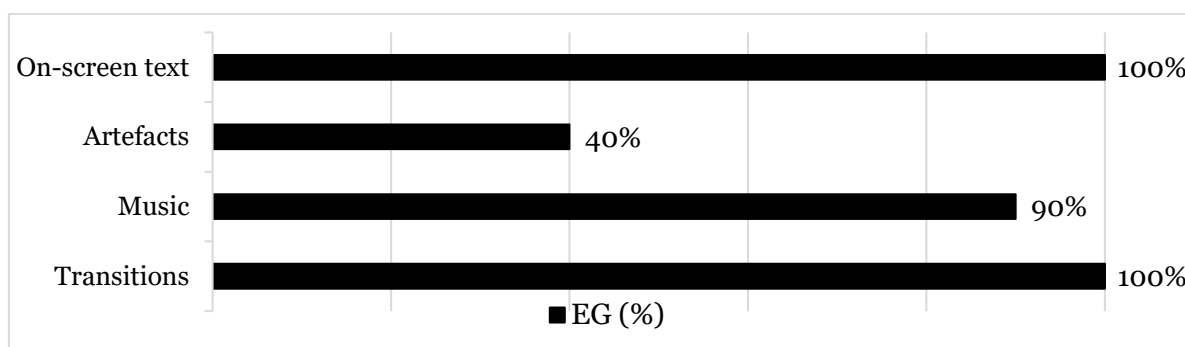
3.4.2   Discussion

In the present study, the creation of a job-application video resulted in equally statistically significant gains in Area 1 *Information and data literacy* and Area 3 *Digital content creation* (Z = −2.388, *p* = 0.024), as well as an statistically significant overall increase in digital competence (Z = −2.085, *p* = 0.005).

3.4.2.1 Area 1 Information and Data Literacy

Area 1 *Information and data literacy* consists of three competences, which relate to the ability to (1) browse, search, filter, (2) evaluate and (3) manage data and digital content (Carretero et al., 2017). Though both groups increased their results in this area throughout the study, the EG's results were higher than the CG's in both the pre- and the post-questionnaires, and so was their gain over time, which reached statistical significance. The EG's statistically significant increase in Area 1 *Information and data literacy* might be due to students independently completing a series of scaffolded web-based tasks, which provided them with the necessary self-knowledge and genre knowledge to script the job-application video. Throughout the scripting process, the EG students interacted with authentic multimodal web-based content from a variety of sources, requiring them to browse, search, filter, evaluate and manage data and digital content in order to complete the tasks, thereby developing the competences associated with Area 1 *Information and data literacy* and corroborating Živković's (2016) claim that activities involving authentic material from the Internet are effective in acquiring and creating knowledge, as well as Garret's (2009) claim that technology is a tool for building knowledge. Students found the activities satisfactory because they were meaningful (*"It's going to be useful to find a job this summer"*), practical and professional (*"The satisfaction of having done something so useful in my professional life"*), and they could apply what they learned (*"I've enjoyed this project because it's going to be very useful in the near future"*) and so improve their professional and communicative skills (*"It's been*

very interesting for the communicative skills that we've learned"). This supported Sokolova et al. (2015), who reported similar perceptions from students and concluded that computer-assisted ESP resources led to increased motivation in students regarding self-directed English learning and readiness to work independently, and generated a sense of responsibility in them. Further feedback from students supported the idea that they had enjoyed doing something for themselves (*"I've enjoyed doing something different and having the opportunity to do a project individually from scratch and learning how to do it step by step"*).

The authentic job adverts published in well-known job-search portals, the online DISC psychometric test, or the job-application video samples included in the wiki, seemed to be at the right complexity level and to have provided the proper instructional scaffolding to help students manage self-regulated learning, stimulate active processing of the learning materials and direct the attention to key aspects. This supported previous research claims that authentic web-based materials are a powerful instructional tool (Schworm & Gruber, 2012) but need the right complexity (Spelleri, 2002), the right degree of simplicity and familiarity (Guariento & Morley, 2001), and an appropriate text length (Galloway, 1990). Tasks such as extracting information from job adverts, taking a career-oriented test or writing content on a collaborative platform allowed students to carry out authentic web-based tasks and decide on and create content. This supported previous research on the positive effects of the use of authentic web-based tasks (Krajka & Grudzinska, 2002) to develop digital skills by searching, assessing, synthesising and communicating information (Coiro et al., 2008) in multimodal format from multiple sources (Hsieh, 2016) . Similarly, the students' perceptions mirrored those in Živković's (2016) study, according to which students considered that technology was effective in acquiring knowledge and agreed with the idea that the Internet was a good source of authentic materials. According to the qualitative data from the FINAL questionnaire, the

EG students considered that the job-application video was very effective for developing digital skills, in particular aspects related to file management.

Conversely, the digital tasks included in the traditional programme required students to look for real job offers and examples of video CVs on the Internet and to analyse a series of aspects. For the job adverts, students had to analyse the content and design, the description of the company, the requirements, further information about the job such as salary and working hours, and how to contact the employer. For the video CV, students had to analyse the suitability of the video for the type of job, the length, content, formality and style, as well as originality and creativity. The lack of statistically significant improvement of the CG students in Area 1 *Information and data literacy* may be attributed to the type of web-based task included in the programme, which lacked authenticity because it did not provide an authentic purpose for the search, supporting Garrett's (2009) claim that the mere use of authentic web-based resources does not represent CALL, but rather requires both authentic material and tasks. Furthermore, the web tasks did not appear to meet the requirements for ensuring adequate work with authentic texts, for example, their approach was too open, leaving the choice of job vacancies with the students. As a result, the teacher was unable to ensure that the texts chosen by the students were adequate for developing digital searching skills, which might have prevented the students from developing their self-regulated learning skills or might have prevented them from directing their attention to central aspects, as previous research has shown (Galloway, 1990; Guariento & Morley, 2001; Schworm & Gruber, 2012; Spelleri, 2002). Similarly, it supported previous findings stating that the mere use of technology does not develop autonomy but can assist developing it with the right support and scaffolding (Arnó-Macià, 2012). These findings suggested that the traditional approach did not allow students to improve their searching skills as they did not need to learn how to look for specific information or how to organise it, and they did not need to

look for specific terms either and, consequently, students did not engage in researching, analysing, organising and representing information effectively (O'Brien, 2005; Theodosakis, 2001).

Qualitative data from the SCRIPT questionnaire indicated that the EG students used online dictionaries and translation tools to translate single words, structures and phrases and to find out how to use specific words correctly in their application videos. Students also looked for job-application examples on the web, supporting Hsieh's (2016) claim that online resources can facilitate scaffolding to increase autonomy and minimise the effects of differences in proficiency, as well as supporting previous research on Internet-enhanced learning environments (Bull et al., 1999; Hannafin & Land, 1997; Saye & Brush, 2001).

3.4.2.2 Area 2 Communication and Collaboration

Area 2 *Communication and collaboration* consists of six competences, of which five were relevant to this study. These deal with the ability to 1) interact, 2) share, 3) engage in citizenship, 4) collaborate and 5) manage digital identity through digital technologies (Carretero et al., 2018). Both groups developed this area throughout the project. Contrary to the findings in Area 1 *Information and data literacy* and Area 3 *Digital content creation,* the CG's results were higher than the EG's in the pre- and the post-questionnaires. However, the EG's increase in this area was higher than the CG's, although it did not reach statistical significance.

At the beginning of the study, the CG was more competent in digital communication and collaboration than the EG. By the end of the study, the CG's results remained higher, but the EG had progressed more throughout the study. In general terms, the results suggested that the application of the video project was more effective than the traditional methodology for developing students' digital communication and collaboration

skills. This result may be due to the student-centred learning environment the video project generated, which was technology-enhanced, authentic and meaningful. An authentic learning environment is more likely to engage students in real-life tasks, which are likely to involve digital communication and collaboration in an occupational setting, as it happens at work in real life. Conversely, a teacher-centred environment that encourages students' passive roles and may or may not involve technology is not likely to make digital communication and collaboration a need. On the other hand, the job-application video project showed a clear advantage over the traditional methodology in constructing students' digital identity. The genre's autobiographical nature, together with its multimodal format ideal for sharing in web-based professional networks, granted the job-application video extraordinary potential for developing digital identity. According to previous research on the ePortfolio as a tool for identity construction, it may be suggested that the job-application video increased students' ability to manage their digital identities. The job-application video fits some of the ePortfolio's features and benefits; for instance, like the ePortfolio, the job-application video became an inventory of skills and knowledge (Munday et al., 2017) and the narrative used allowed students to construct and refine an identity (McAlpine, 2005). Although the job-application video's main purpose was not that of a repository in the same way that an ePortfolio is, its multimodal nature allowed for the integration of additional artefacts. Indeed, 40% of the students included artefacts in the form of images. Students mentioned objectives (90%), interests and hobbies (70%), language skills (90%), computer and decision-making skills (70%), communication skills (50%), and attributes such as motivation (80%), responsibility (70%) and autonomy (60%). This evidenced that the job-application video enabled students to share their knowledge, skills, goals and interests with a broader audience (Porto & Walti, 2010) and corroborated previous research that had claimed individuals should build their brand around their personality, values and interests (Cooper, 2014; Lee & Cavanaugh, 2014; Llopis, 2013; Poeppelman & Blacksmith, 2014). Based on the EG's increased self-

awareness, opportunity awareness and job-search skills, and in line with previous research, the job-application video appeared to facilitate the individual self-discovery required for the personal brand development (Toth, 2013).

3.4.2.3 Area 3 Digital Content Creation

Area 3 *Digital content creation* consists of four competences, and two of them are relevant to this study: 1) developing and 2) integrating and re-elaborating digital content (Carretero et al., 2018). Both groups increased their results throughout the study, but the EG's results in the pre- and the post-questionnaires, as well as the gain over time, were higher than the CG's and statistically significant.

Digital content creation is inherent to student-generated job-application video projects. It is therefore no coincidence that the EG's results reached statistical significance in Area 3 *Digital content creation*. The job-application video production exemplified the "4 Rs" of the digital era in that students *reused* (backed up) and *revised* (adapted) their written script to transform it into a video. They filmed the video and *remixed* (combined) the video clips with content in other formats (text, music, images and audio) to create the job-application video. Finally, students *redistributed* (shared) the content with peers, the teacher and the outside world (Sinclair, 2010). Students were able to author a multimodal text with a clear communicative purpose (to persuade the employer and secure an interview) by integrating digital media elements (texts, graphics, sound, animation and video), some of which they had created in previous stages, evidencing that the role of the student changed from passive receiver to active knowledge builder (Hur & Suh, 2012). Based on the analysis of the job-application video footage, the primary multimodal elements that students incorporated into their final videos were identified, and every student used transitions to organise the video as well as on-screen text to label the sections. Ninety percent included music, and 40% included artefacts related to their interests, such as photographs, certificates or even drawings. According to the qualitative

data from the FINAL questionnaire, the EG students considered that the job-application video had been very effective for developing digital skills, in particular multimodal skill. The students' responses to the open-ended questions supported this idea with references to the set of stages involved (*"all the skills we've developed when we've filmed, produced and edited the video"; "The opportunity to do a project from scratch and learning how to do it step by step"*) and referring to the individual stages (*"Gathering all the ideas in the script"; "I've improved my pronunciation"; "To film the video and stand in front of the camera"*). This supported previous research studies claiming that students become knowledge makers and designers (Jonassen, 1994; Sinclair, 2010) and use technology as a tool to analyse the world, access information, interpret and organise personal knowledge, and present their experience to others (Krajka & Grudzinska, 2002). Each student's final multimodal text was a creative expression of themselves and students valued the creativity involved in the job-application video (*"I have a creative way to try to be a candidate above all if English is a requirement"*), lending support to previous research claims that video projects are a vehicle for expressing and reflecting the authors' idiosyncrasies (Nicholas et al., 2011), encouraging students' own culture and identity development (Reyes & Vallone, 2008). Digital content creation is intrinsically creative, and our findings pointed in the same direction as previous research that attributed to digital video projects the benefit of developing media literacy skills, communication and presentation skills, creativity or autonomy (Barab et al., 2000; Cabero, 2007). Students found the job-application video project was *"motivating and innovating"*, that it was *"a great experience and so engaging"* and that it helped them *"face a challenge, leave the monotony of the classes and work aside and do something so satisfying and useful for my professional life"*, supporting the idea that allowing students to use non-conventional tools such as video for preparing their assignments can promote creativity and motivation (Nordstrom & Korpelainen, 2011).

Student-generated video as a teaching strategy was consistent with the constructivism's premise that learning was most effective when individuals can create something meaningful, an artefact of learning (Papert & Harel, 1991), and students supported this idea (*"It's going to be useful to find a job this summer and I'm happy with the result of the project"; "It's been an interesting task because of the skills we've learned"*). Students' responses provided further evidence that during the video project they created knowledge, communicated, collaborated, thought independently and creatively, solved problems, and became career experts, thus supporting the claim that the job-application video generated a learning environment that allowed students to be more creative and innovative, think critically, and solve real-world problems (Živković, 2014).

3.4.2.4 *Area 4 Safety and Area 5 Problem-Solving*

According to the *DigComp* Framework (Carretero et al., 2017), Area 4 *Safety* and Area 5 *Problem-solving* apply to any digital activity and are transversal skills. Area 4 *Safety* consists of four competences, one of which was relevant to the study: 1) protecting personal data and privacy. Only the first three areas of digital competence were analysed in the questionnaire, because this project was focused on developing those areas the most. However, the remaining two areas were also incidentally developed even if their improvement was not measured.

Area 4 *Safety* competence development was implicit in a video production project with materials hosted on a wiki. First, it entailed maintaining the privacy of content published on the collaborative wiki. The students learned how to edit their own dedicated wiki pages and how to protect their privacy by creating passwords to block access to specific personal details, if necessary. The use of personal data in job-application videos and job-search portals was also discussed. Likewise, they shared documents online with the teacher, for which they requested and granted permissions. At the end of the project, they also shared some of their videos in private mode.

Area 5 *Problem-solving* consists of four competences, two of which were relevant to this study, namely 1) solving technical problems and 3) creatively using digital technologies (Carretero et al., 2018). According to the qualitative data from the FINAL questionnaire, the EG students mentioned a range of aspects related to problem-solving, while the CG students did not mention any. The results suggested that job-application video creation, though innovative and motivating for students, was also challenging. Students concluded that time constraints and technology were the two main challenges they had faced, supporting Mohamad et al. (2016) and Miller et al. (2012), who also reported these two main difficulties in a video project. Students reported that the technical challenges were mainly related to video editing, mirroring Green and Crespi's (2012) results regarding lack of technical know-how to use video equipment and editing software, and corroborating the fact that the students seemed to have less digital competence than might have been expected (Cunningham, 2011). The students who created the job-application video found that digital technology was both a positive (*"To edit the video"; "To use a wiki"*) and a challenging feature (*"To film the video, stand in front of the camera and talk in a foreign language is challenging because I got nervous"; "To film the video because it requires much time"*). The fact that the students were aware of the complexity involved in creating a job-application video made them feel a stronger sense of accomplishment and satisfaction (*"The satisfaction of having done something useful in my professional life"; "Being able to finish on time and facing a lot of problems is really satisfying"; "To face a new situation successfully"*). The negative perceptions of some students who created the job-application video pointed to the frustration with technology already reported by Gabrielle (2003) in a study analysing the correlation between platform, motivation and self-directed learning, where technology seemed to have generated dual feelings: frustration on the one hand, and fun, interactive experiences on the other.

There were clear differences between the students' perceptions around the difficulty level of the course and their personal satisfaction with it, the EG's perceptions on satisfaction being more positive than the CG's and those on difficulty the same as the CG's. However, although both groups assessed the courses as being equally difficult, the students' answers to the open-ended questions indicated that the types of difficulty they faced were very different. In the case of the EG, time management was one of the main difficulties, followed by linguistic aspects – in particular, writing the script, because students found it difficult to generate ideas and to describe their strengths while making their claims look trustworthy; or filming the video due to the difficulty of pronouncing correctly, being natural or using appropriate body language, or finally editing the video. However, the difficulties indicated by the CG students were related to the level of difficulty of materials (*"The book is too difficulty"*), the lack of engagement (*"The book is boring"*), the lack of authenticity (*"The book lacks real fire"*), the lack of skills practice or learning (*"The programme helps students pass the exam but does not help them learn"*), or the lack of real-life application (*"It isn't useful for real life"*). These two types of difficulties differ in that students in the EG could look for and apply strategies to solve them, thus developing their problem-solving skills, as previous research studies reported (Aksel & Gurman-Kahraman, 2014; Khojasteh et al., 2013) whereas the challenges faced by the students in the CG were beyond their ability, and thus not suitable for developing problem-solving skills, but creating frustration. The different perspectives that the groups had on problem-solving skills and satisfaction with the course provided further evidence for the results obtained in Tsai's (2013) study, which also compared two instructional methods (one digital and the other teacher-centred) and reported a significant improvement in problem-solving digital skills, more positive perceptions and higher satisfaction in the EG than in the CG. Regarding the strategies applied, qualitative data from the SCRIPT, FILM and FINAL questionnaires showed that students used a range of strategies to overcome the problems they faced. During the scripting process, students

used translation, looked for sample videos, and used online web resources and dictionaries (*WordReference*, *Linguee*, *Google Translate*) for translating, checking pronunciation or learning about words in context. Most students (70%) reported having asked for support in the classroom for solving queries related to language (*"for translating structures and sentences"*) or tasks (*"for completing some tasks I didn't know how to complete"*), and 30% of them also outside the classroom, for aspects related to language or discourse (*"for making sure the structure of the job-application video was ok"*). All students reported having rehearsed systematically in preparation for the filming. Forty percent of the students checked other examples of job-application videos.

However, not all students reported being satisfied, and one student stated, *"I'm not really satisfied because you know that the editing is a bit poor and this annoys me because I had a clear idea in my head but due to all the problems I've faced when editing, I haven't been able to get anything better"*. This reflected an unsatisfactory result for the student in terms of editing quality but actually evidenced self-evaluation and suggested that students had assumed responsibility for their learning. In turn, this mirrored Živković's (2016) finding that students reported feeling responsible for their learning due to the autonomy they had gained in the classroom, and provided further support for the idea that though the technology may not directly develop autonomy, it can assist learners in developing autonomy (Arnó-Macià, 2012; Marco, 2002) and improve responsiveness, proactivity and involvement (Shevchenko, 2017).

Students reported their satisfaction for being able to apply what they had learned to their lives and thus improve their professional (*"It's going to be useful to find a job this summer"*) and communicative competences (*"It's been an interesting task because of the non–verbal communicative skills that we've learned and all the digital skills we've developed when we've filmed, produced, corrected the video"*), mirroring Sokolova et al. (2015), who also reported similar students' positive perceptions within a computer-

assissted ESP module. It also mirrors Živković's (2016) conclusion that students' perceptions about the relevance of the digital learning environment for their future careers translated into increased autonomy and responsibility for their learning. Likewise, this supported other studies on project work which argued that process-oriented learning serves as a series of problem-solving tasks that provide students with a learning goal beyond just passing an exam (Tsai, 2013). Some of them positively valued the greater degree of autonomy acquired by working with this methodology (*"doing it yourself"; "the challenge of doing it for yourself"*). The achievement of objectives, the opportunity to learn and create a project individually from scratch, and the importance of learning to achieve vital objectives for their training were some of the ideas they expressed. They also stated that the work, responsibility and achievement of goals and obligations required by the video curriculum were complementary learning to the project itself. Qualitative data from the FINAL questionnaire supported the idea that the traditional methodology did not provide such a learning environment (*"It helps pass the exam but not to learn"*).

3.4.3   Summary of Research Question 3

The third research question explored whether the students in the EG had improved digital skills and whether they obtained greater competence than the CG students. The results reported in this study indicated that the EG improved digital skills and obtained statistically significant improvements in the overall development of digital competence, in Area 1 *Information and data literacy* and Area 3 *Digital content creation*. Likewise, though no statistical significance was found, the results also pointed to improved performance in Area 2 *Communication and collaboration*. Similarly, students' perceptions evidenced that Area 5 *Problem-solving* was cross-cutting to any digital actions and that the video project benefited problem-solving skills development. Finally, the video project programme and the tasks it included implicitly helped develop Area 4 *Safety*. On

the other hand, the CG students improved their overall digital skills by slightly increasing their results in all areas, though none of those differences reached statistical significance.

The job-application video project facilitated students' digital competence development, according to student feedback. The EG and CG had very different views on the effectiveness of each teaching approach in developing digital skills. The EG rated the video creation project highly effective, whereas the CG rated the traditional approach as ineffective. The video-based approach scored higher than the traditional approach on all metrics and obtained a statistically significant higher rating across all measures, including multimodality, digital tools, file management, communication and creativity.

Regarding Area 1 *Information and data literacy*, students were able to complete authentic web-based tasks such as extracting information from job advertisements, taking a career-related test, or writing content on a collaborative platform, confirming previous research on the benefits of authentic web-based tasks (Krajka & Grudzinska, 2002) for developing digital skills to search, assess, synthesise and communicate information in multimodal format from multiple resources Hsieh (2016). According to the qualitative data from the FINAL questionnaire, the EG students believed that the job-application video had been effective for developing digital skills, particularly in the areas of file management and organisation. The CG students' lack of statistically significant improvement was attributed to the fact that the programme's web-based tasks involved authentic materials but not authentic tasks, supporting Garrett's (2009) claim that using authentic web-based resources does not represent CALL; this requires both authentic material and authentic tasks. Furthermore, the ineffectiveness of the task was also attributed to a lack of essential conditions for an authentic text; for instance, its open format could not ensure the appropriate level of complexity, of lexical and syntactic simplicity, or length, thus preventing instructional scaffolding. It therefore could not ensure that students would be able to manage self-regulated learning or direct their

attention to central aspects, as previous research has shown (Galloway, 1990; Guariento & Morley, 2001; Schworm & Gruber, 2012; Spelleri, 2002). The traditional approach did not allow students to effectively research, analyse, organise and represent information (O'Brien, 2005; Theodosakis, 2001).

As for Area 2 *Communication and collaboration*, the EG students improved their collaboration and communication skills to a greater extent than the CG students did. This was attributed to the authentic and meaningful learning environment that creating a video had generated, which was considered to engage students in real-life tasks that were more likely to involve digital communication and collaboration than a traditional methodology, whose technology-free environment emphasised students' passive roles and therefore was unlikely to need digital communication. The video project outperformed the traditional methodology in developing students' digital identities due to its biographical nature and multimodal format, making it an ideal tool for fostering self-awareness and sharing it in online professional networks. The job-application video has been analysed as a tool for digital identity by comparing it with the features that research has attributed to the ePortfolio. Like the ePortfolio, the job-application video uses a narrative that helps define an individual (McAlpine, 2005). Both tools can be viewed as an inventory of skills and knowledge (Munday et al., 2017), which allows the students to share their goals, interests, or abilities with a broader audience (Porto & Walti, 2010).

Regarding Area 3 *Digital content creation*, the statistically significant increase obtained by the EG was not surprising due to the nature of the project and the fact that the students who created a job-application video did create digital content. The EG students thought the job-application video was very effective for developing digital skills, especially multimodal skills, and they valued the job-application video's creativity, supporting previous research claims that video projects express and reflect their author's idiosyncrasies (Nicholas et al., 2011; Reyes & Vallone, 2008). Student feedback indicated

that the job-application video project was motivating, engaging, useful and satisfying (Nordstrom & Korpelainen, 2011).

Area 4 *Safety* was not measured explicitly, but the biographical nature of the job-application video required considering personal data protection-related aspects and creating an audiovisual product involved sharing files and managing data protection. Finally, Area 5 *Problem-solving* was assessed based on qualitative data collected from students' responses to the open-ended questions in the questionnaires. Students' responses to open-ended questions in the FINAL questionnaires were used to assess the area, and the results indicated that video productions were engaging but challenging. Students in the EG were able to develop their problem-solving skills and, in particular, students reported that time constraints and a lack of digital skills for filming and editing had been the most difficult challenges (Miller et al., 2012; Mohamad et al., 2016), and scriptwriting, video editing, rehearsal and filming had been the most difficult stages (Cunningham, 2011; Green and Crespi, 2012). The video project generated satisfaction among the students because completing a problematic task brings satisfaction and a sense of pride and accomplishment. The acknowledgement of obstacles also helped problem-solving skills. Students learned how to use the editing tool by asking for help inside and outside the classroom, translating, or watching a tutorial. The job-application video project appears to have made students more self-reliant and creative at problem-solving. Students' perceptions supported the view that traditional teacher-centred methods failed to create a learning environment suitable for problem-solving skills development and, although both groups rated the programme's overall difficulty nearly equally, the difficulties they faced were very different; the EG faced problems they could solve by applying strategies, whereas the CG faced a type of problem that was beyond the students' scope.

4. CHAPTER 4 CONCLUSIONS

This study set out to examine the effects of two teaching approaches to career-oriented ESP instruction on students' personal, social and learning to learn, multilingual and digital key competences for lifelong learning. To do so, a study was carried out with 18 students in two Higher VET groups enrolled in a Professional English module and taking a career-oriented ESP programme for job-search. The experimental group created a job-application video, while the control group followed the conventional coursebook programme set by the syllabus.

4.1   Research Questions

The first goal was to develop the personal, social and learning to learn key competence, with a focus on the validity of both teaching approaches for developing ESP students' career management skills. There is evidence that the job-application video methodology helped students improve their career management abilities. The video project, in particular, resulted in a statistically significant increase in self-awareness and transition learning, as well as the development of students' opportunity awareness and ability to present themselves effectively. Additionally, the findings suggested that creating a job-application video was more effective at developing career management skills than the traditional teaching methodology, which was found to be ineffective, as evidenced by a decrease in self-awareness, opportunity awareness and transition learning, as well as a failure to develop students' abilities to create a well-rounded and effective self-presentation.

Developing the multilingual key competence was the second goal, which examined the validity of both teaching approaches for developing L2 communicative competence, consisting of language and pragmatic competences, with pragmatic competence defined as the communicative adequacy of students' productions or the extent to which students'

self-presentations achieved their communicative objectives. The job-application video methodology was found to allow for the development of both language and pragmatic competences, and the evidence suggested that it was more effective at developing both language and pragmatic competences than the traditional method, which did not fully develop students' communicative competence due to the limited language development and the insufficient communicative adequacy in students' self-presentations. The results showed that though both groups reduced syntactic complexity and increased lexical complexity, the EG's results reached statistical significance in both measures, as did their increase in lexical sophistication, variation and academic vocabulary size, whereas the CG showed a statistically significant increase in lexical variation but decreased sophistication and academic vocabulary use. While the EG's written productions became more accurate and significantly more fluent, and their spoken output more accurate, the CG's written and spoken productions became less accurate, and students improved their written fluency slightly. Finally, the CG slightly improved their knowledge of professional terms, whereas the EG improved knowledge of both professional terms and collocations, the former reaching statistical significance.

Regarding pragmatic competence development, the CG students' self-presentations were partly ineffective due to a lack of subjective attributes to describe students' interests, goals and transferable skills, as well as competency statements to describe the skills acquired through work experience. The students mainly listed previous jobs and qualifications, indicating a critical flaw in the genre's discourse appropriateness, as they did not mention what they had learnt to do or how this would benefit the employer. The presentations, on the other hand, suggested a lack of understanding of the relevant self, because the few subjective personal details included were either irrelevant to the employer or failed to validate how the skill or competence had been acquired. By contrast, creating a job-application video helped students improve their ability to

introduce themselves for professional purposes. All the strategies used for promoting the candidate, including language ability, digital competences, transferable skills, education, work experience, personal ambitions, interests and self-evaluation, were effectively implemented. The creation of a job-application video was particularly effective in raising awareness of the importance of validation, resulting in credible presentations that combined objective and subjective content and were justified by the students using a variety of accepted techniques. Students evidenced effective self-appraisal by describing themselves in a relevant, positive and credible way to indicate their value to prospective employers.

The third goal, related to the development of the digital key competence, focused on both teaching methodologies' effectiveness for developing students' digital skills. The findings indicated that creating a job-application video helped develop students' digital competence based on their statistically significant gains in *DigComp*'s Area 1 *Information and data literacy* and Area 3 *Digital content creation* (Carretero et al., 2017). Similarly, despite the lack of statistical significance, the data indicated higher performance in Area 2 *Communication and collaboration*. Students' perceptions corroborated the idea that the job-application video project enabled the development of their digital competence. Indeed, there were statistically significant differences between the two groups' perceptions of the efficacy of the teaching approaches for developing digital skills, with the job-application video project scoring higher on all metrics. Area 5 *Problem-solving* was developed throughout the project, and students' perceptions and feedback indicated that the video project allowed for the development of problem-solving skills. These findings led to the conclusion that the job-application video project enabled students to use technology as a tool for learning and communication, and thus positioned them as active subjects. On the other hand, the traditional methodology emphasised a teacher-centred approach in which the subject was passive, resulting in statistically non-significant gains in all areas and a

lack of development of problem-solving skills, as a result of the nature of the problems the students faced, such as a lack of authenticity or motivation, which they could not influence.

4.2 Limitations and further research

As a result of this dissertation, a picture of student-generated job-application videos and their effectiveness as a teaching methodology for an ESP classroom compared to that of a traditional teacher-centred teaching approach has been sketched out. However, a number of limitations to this study should be acknowledged.

First of all, one of the study's major shortcomings was the sample size, which made it difficult to draw conclusive implications from the results obtained. Therefore, a larger sample size would be required to strengthen and shed further light on the results of the present research.

Another limitation related to the fact that this study did not consider any eventual effect derived from inter-learner variability. More extensive research including proficiency levels as a variable would result in more accurate conclusions and higher reliability. Additionally, this study could be supplemented with additional research involving participants with a variety of characteristics, examining variables such as digital competence, VET programme, age, sex, work experience or educational background. It would be desirable to conduct such a study given that ESP groups in VET settings are commonly heterogeneous, and diversity and mixed ability are common challenges in the ESP classroom.

A third limitation was the fact that each group had a different instructor. Ideally, having the same teacher as an instructor in both groups would reduce the potential effect of personal teaching style, which could have influenced students' perceptions and competence development. Similarly, other areas within learners' individual differences,

such as motivation, have also remained outside the scope of this study. Analysing students' motivation as a result of their instructional methodology and examining possible differences in motivation by age group, background or VET programme would enrich the research on the effects of student-centred and teacher-centred teaching approaches to ESP instruction.

Additionally, this study did not include a multimodal analysis of the job-application videos. Multimodality was analysed in pilot study 1, and it would be interesting to continue this line of research and draw conclusions about possible correlations between the sample and the type of job-application video students produced.

Another promising research direction would be to analyse and compare the effect of job-application videos and covering letters on the actual call rate for interview. Similarly, it would be interesting to examine the job-application video project's effectiveness in training students in career management skills through a more in-depth examination of the benefits in the mid and long term, as well as its effectiveness when applied to an actual selection process. Similarly, combining the job-application video creation project with other job-search tools, such as a professional profile on LinkedIn or a job interview, would be an additional enhancement to the project.

Despite these limitations, a strength of this research was its ecological validity, as it was conducted in a real-world classroom setting and, therefore, in light of the findings and the teaching and learning experience itself, student-generated job-application videos represent a contextualised classroom experience with significant potential in the English Professional module of VET.

4.3   Conclusions and pedagogical recommendations

In the area of the personal, social and learning to learn key competence development, this study has confirmed that effective self-presentations require the

development of self-awareness, opportunity awareness and job-search skills, as well as the fact that the traditional methodology was ineffective in developing any of them, and that the job-application video approach, by contrast, developed all of them and resulted in effective self-presentations. Two major implications are derived from these findings.

The first is that self-awareness development requires explicit stimulation and that including four documents for job search does not necessarily result in its development. According to the findings of this study, self-reflection and psychometric tests have proved to be effective tools for developing self-awareness because they allow students to discover and better understand themselves. Therefore, English instructors who are considering implementing employment projects in the professional English classroom should devote sufficient time to the pre-writing stage and to allow students time to explore and get to know themselves and discover their professional identity, skills and abilities from extra-curricular activities. Another useful tool suggested by previous research studies that this study has been able to confirm is the use of a group session, which in this study was conducted with a communication coach for preparing students' for filming. According to the students' perceptions, they valued having a group session with a professional other than the teacher, and being able to raise questions of all kinds, concerning video recording, nonverbal communication, and aspects related to job interviews, the importance of wearing professional outfits, or nonverbal communication. The analysis and review of sample job-application videos, as well as some group dynamics for self-motivation, proved extremely beneficial.

The second implication attributes the success of the video approach to the authenticity of materials and tasks, and a lack of authenticity as a contributing factor to the failure of the CG. As for authenticity, this study identified three scenarios: non-authentic tasks with non-authentic texts; authentic tasks with non-authentic texts – "cosmetic authenticity" (Mishan & Strunz, 2003); and authentic tasks with authentic texts.

Authentic tasks combined with authentic texts led to increased opportunity awareness and, according to the findings in this study, authenticity did not become an impediment for students with a lower competence in FL, due to the pre-selection of the texts for the appropriate level of complexity and length, and due to task scaffolding. This study suggested that using non-authentic tasks with authentic texts and non-authentic tasks with non-authentic texts led to decreased opportunity awareness. Due to the lack of authenticity, the CG students may have struggled to understand labour market opportunities and requirements, thereby preventing them from becoming aware of their potential as job candidates. Students' perceptions corroborated the view that the traditional approach's primary shortcoming was a lack of authenticity and real-world application.

This suggests that along with other self-assessment tasks, developing career management skills requires connecting classroom practice to real-world application so that learning can be meaningfully applied. In order to adequately address students' opportunity awareness, it is essential to allow students to research, analyse, filter and evaluate authentic job advertisements. Following on from this, language instructors need to select a diverse range of advertisements from well-known job portals and allow students ample time to become familiar with the demands of the labour market. Given that not all students will have work experience, it is recommended to include advertisements for scholarships, internships and volunteer opportunities as well, to ensure that realistic and achievable opportunities exist for all candidate profiles. Likewise, the authenticity of the task is also essential, and instructors need to design a task based on content that represents real-life communication acts. Because some students will have a limited command of the English language, job advertisements using bulleted lists of competences are recommended to ease comprehension. Similarly, another strategy for scaffolding

authentic texts for lower-level students involves using checking (in the L1 if necessary) to guide them during the analysis and focus their attention on information search.

In terms of the multilingual competence development, this study has confirmed the effectiveness of the genre approach to writing including several rounds for editing and the lack of effectiveness of the macro skill-based product approach to writing for communicative competence development, in terms of both linguistic and pragmatic competences. The CG students' self-presentations failed to achieve the persuasive communicative purpose and suggested that students did not distinguish the communicative purpose of an application letter from that of a written résumé. The CG's self-presentations lacked subjective attributes, skills gained through job experience, persuasion and techniques to make claims trustworthy; instead, they simply listed work experience and qualifications. This translated into a "knowledge-telling" writing model (Bereiter & Scardamalia, 1987) that reflected the fact that students made use of a direct retrieval of content from long-term memory, which they organised as it was stored in long-term memory and did not engage in problem-solving during the productive task to adapt the knowledge to the goal of the task.

Instead, using a step-based approach to writing seemed to help students gain an understanding of effective discourse patterns for a relevant, credible and compelling self-presentation. The EG's productions pointed to a "knowledge-transforming" writing model (Bereiter & Scardamalia, 1987), as their self-presentations demonstrated that their productions were tailored to the text's communicative purpose. Students addressed the text's rhetorical objectives by providing a complete picture of the candidate, emphasising the benefits their profile would bring to the company, making their claims credible through a variety of validation techniques, or demonstrating skills and abilities, regardless of work experience. This meant that students' ideas were represented not only as a reflection of their self-knowledge, but also as a rhetorical function within the text.

In terms of language competence, this study has accounted for the relationship between the groups' discursive patterns and linguistic choices. Indeed, genre analysis revealed that the experimental and control groups promoted the candidate in very different ways, and their complexity results also revealed two distinct patterns. By creating a job-application video, students gained an understanding of the rhetorical features necessary for an effective self-presentation. As a result, the group developed content that addressed all stages of the candidate's promotion, resulting in the use of more but shorter clauses to describe more but less detailed aspects of themselves. The job-application video approach resulted in dynamic productions (Norris & Ortega, 2009; Ortega, 2012) that lacked formality, resembled everyday situations and demanded subordination to justify how the candidates acquired the skills claimed in their self-presentations. The narrative and past-tense verbs used to validate abilities and skills were associated with a higher frequency of verb phrases compared to noun phrases. The EG's lexical complexity results reflected students' strategies for writing communicatively effective texts; for instance, using adjectives to express positive self-evaluation (Step 3) or verbs to describe transferable skills (Step 4) resulted in a statistically significant increase in lexical variation and sophistication. The results of the EG suggested that communicative adequacy could account for the decrease in syntactic complexity and that, as a result, the statistically significant decrease in syntactic complexity in the EG did not necessarily imply poor writing quality. Rather, the job-application video increased lexical complexity, sophistication and variation, as well as academic vocabulary size, all of which were associated with high-quality writing and communicative success (Bulté & Housen, 2012, 2014; Kuiken et al., 2010; Vasylets et al., 2020).

On the other hand, the CG used a synoptic style that was more formal, specialised and impersonal, requiring nominalisation, higher lexical density and fewer combined clauses. Including mainly objective information about education and work experience did

not require students to use validation techniques to justify the origin of the skills acquired, which in turn resulted in decreased subordination, increased coordination and more complex nominalisation due to the pattern they followed (*"I worked in... and then in..."*). The CG's results also suggested that genre analysis accounted for the results in lexical complexity. Their increased lexical density was attributed to expository statements to express qualifications (Step 2) and work experience (Step 5), which required discipline-specific terms and complex nominals to express degrees or job titles in technical fields ("*Higher Vocational and Education Training Cycle in Electronic Maintenance"*), resulting in information packing and, ultimately, in lexical density. This suggested that specific strategies make use of specific linguistic features (style, tone, voice, grammar and syntax) in order to accomplish the genre's communicative goal and that analysis should therefore move top-down, starting with the genre communicative goal and progressing to the lexico-grammatical features used to accomplish the genre's communicative goal (Swales, 1990).

The two teaching approaches have also been analysed as a 12-week intervention involving task repetition (TR) and corrective feedback (CF) that mediated between the pre-test and the post-test. On the one hand, the CG's intervention implied producing a self-presentation for job-search purposes in four formats (CV, video CV, job interview and application letter), applied a product approach to writing, and included direct CF of each one of the components, but did not require processing of the CF and did not involve reflection and revision of previous components. Rather, the EG's intervention required students to create a job-application video and implied producing a self-presentation in three modalities (written, oral and multimodal), applied a genre approach to writing with several editing rounds and included processing of indirect CF as well as reflection and revision of previous drafts. Both TR and CF in each intervention seemed to account for the EG's and CG's results in students' productions, thus evidencing each teaching

methodology's effectiveness in influencing the cognitive processes involved in speech production as measured in the post-test (Chenoweth & Hayes, 2003; Levelt, 1989).

The EG's increased accuracy was attributed to the fact that students needed to spend less time planning the content, and cognitive resources were freed up to focus on form (Bygate, 1999). Additionally, the EG's findings were attributed to the exposure to authentic, multimodal and real-world texts, and the CG's findings corroborated this hypothesis, albeit with contradictory findings. In this study, improved accuracy was also attributed to indirect feedback, which may have facilitated more in-depth linguistic processing and reflection than direct feedback. Likewise, the lack of improvement in morpho-syntactic accuracy was associated with direct feedback, which may have resulted in students applying a level of awareness at the perception level (Schmidt, 2011), thus not resulting in intake.

The effectiveness of each teaching approach in developing fluency was due to the fact that when the students produced the text, they did not have to invest the same amount of resources planning the content or translating it to a language string. As a result, students produced more fluent output because some cognitive processes were more automatically performed, and attentional resources were freed up. In particular, the importance of CF while engaged in the task repetition cycle has been confirmed by the results of both groups. The provision of indirect CF associated with the requirement of processing it led to increased fluency, accuracy and lexical complexity, supporting previous research (Bitchener & Ferris, 2012; Bitchener & Storch, 2016; Mercader, 2018). Similarly, the provision of direct CF with no requirement to process it led to decreased accuracy and a light increase in fluency, suggesting the trade-off effect previous research studies had reported as a result of the tension between the areas of fluency and accuracy (López, 2019). As a result, processing CF represents a valuable tool for language instructors to promote accuracy and fluency gains as part of the TR cycle. In this study,

this was accomplished through a structured writing process that scaffolded the tasks students would be carrying out, concentrating first on idea generation and then on rhetoric in a second draft. Adding additional reviews focused on the inclusion of active verbs, the explanation of why and how they had developed a specific skill, or the description of how their skills would benefit the company, helped them understand and address each communicative purpose gradually and store and retrieve knowledge when the task was repeated.

Additionally, in the oral modality, spoken accuracy dealt with the articulation stage of Levelt's (1989) Model of Speech Production. Spoken accuracy was one of the most significant linguistic benefits of the job-application video project. The EG students' spoken accuracy improved significantly as a result of rehearsal, which served as task repetition, and of reflection and self-assessment, as commonly reported in video projects. The results were also attributed to video authorship and ownership. Students' perceptions corroborated these findings, with pronunciation being identified as one of the most developed skills. Therefore, language instructors need to allow plenty of time for repetition and rehearsal. Monitoring the video filming sessions will also allow for providing support on pronunciation and performance.

The last objective of this study related to digital competence development, and it was expected that the use of video as a tool for self-expression and multimodal content creation would allow for the development of the digital competence to a greater extent than the traditional methodology. This study led to conclude that the video project promoted the development of the digital competence. Area 1 *Information and data literacy* was developed through the use of authentic web-based materials and reference tools by students during the scripting process. For Area 2 *Communication and collaboration*, the job-application video seemed to capture the essence of digital communication and allowed students to develop their identity. Indeed, the job-application

video enabled students to view themselves as producers of their own self-presentations for professional purposes in English, which increased students' self-efficacy by seeing themselves as capable of completing a complex task, which involved speaking English in a video as formal candidates. As a result of this project, students were able to further develop Area 3 *Digital content creation* by creating a multimodal artefact that expressed this new digital identity for professional purposes in a foreign language. The artefact served as each student's unique self-expression and allowed students to remix the oral articulation and written transcription as well as other forms of personal expression that none of the previous modes could have allowed for on their own.

Finally, this study's findings led to clear conclusions in the development of Area 5 *Problem-solving*. This study demonstrated that students encountered technological, language and time management difficulties when creating a job-application video and that they overcame these difficulties by employing a variety of strategies, such as seeking assistance both inside and outside the classroom, translating, or watching a tutorial to learn how to use the editing tool. According to the perceptions of the CG students, the traditional teacher-centred methodology was ineffective at creating the learning environment required for the development of students' problem-solving skills because the methodology did not offer anything new, and they felt they were in their comfort zone. Though both groups rated their programmes equally difficult, their responses to open questions revealed that EG mentioned obstacles they could overcome by developing problem-solving abilities, such as a lack of editing expertise or ineffective time management. In contrast, the CG mentioned difficulties that students were unable to resolve, such as lack of authenticity or motivation. Two recommendations are derived from these findings. The first is that English instructors should not overestimate students' digital skills when they are creating video projects. Considering that video projects entail technical challenges, instructors should try to mitigate the risk of students lacking the

technical know-how by providing enough resources. The second is that it is important to remember that acknowledging the existence of obstacles and challenges and the need to overcome them creates the optimal learning environment for developing problem-solving skills.

The research reported in this PhD represents an attempt to contribute to enhancing VET through an innovative cross-curricular scenario that embeds career management skills into ESP and mirrors learners' new role as interactive and creative participants in a collective learning process with integrated technology.

REFERENCE LIST

Ackermann, E. (2001). Piaget's constructivism, Papert's constructionism: What's the difference? *Future of Learning Group Publication, 5*(3), 438–449.

Aksel, A., & Gürman-Kahraman, F. (2014). Video project assignments and their effectiveness on foreign language learning. *Procedia-Social and Behavioral Sciences, 141*, 319–324.

Ahmadian, M. J. (2011). The effect of "massed" task repetitions on complexity, accuracy, and fluency: Does it transfer to a new task? *Language Learning Journal, 39*(3), 269–280.

Ahmadian, M. J., & Tavakoli, M. (2010). The effects of simultaneous use of careful online planning and task repetition on accuracy, complexity, and fluency in EFL learners' oral production. *Language Teaching Research, 15,* 35–59.

Ai, H., & Lu, X. (2010, June 8–12). *A web-based system for automatic measurement of lexical complexity* [Paper presentation]. 27th Annual Symposium of the Computer-Assisted Language Consortium (CALICO), Amherst, MA.

Ai, H., & Lu. X. (2013). A corpus-based comparison of syntactic complexity in NNS and NS university students writing. In N. Ballier, A. Díaz-Negrillo & P. Thompson (Eds.), *Automatic Treatment and Analysis of Learner Corpus Data* (pp. 249–264). John Benjamins.

Al-Ali, M. N. (2004). How to get yourself on the door of a job: A cross-cultural contrastive study of Arabic and English job application letters. *Journal of Multilingual and Multicultural Development, 25*(1), 1–23.

Al-Ali, M. N. (2006). Genre-pragmatic strategies in English letter-of-application writing of Jordanian Arabic–English bilinguals. *International Journal of Bilingual Education and Bilingualism,* 9(1), 119–139.

Alghizzi, T. M. (2017). *Complexity, accuracy, and fluency (CAF) development in L2 writing: The effects of proficiency level, learning environment, text type, and time among Saudi EFL learners* [Doctoral dissertation, University College Cork]. Cork Open Research Archive. https://cora.ucc.ie/handle/10468/4815

Alibakhshi, G., Kiani, G. R., & Akberi, R. (2010). Authenticity in ESP/EAP selection tests administered at Iranian universities. *The Asian ESP Journal, 6*(2), 64–92.

Alsamani, A. S., & Daif-Allah, A. S. (2016). Introducing project-based instruction in the Saudi ESP classroom: A study in Qassim University. *English Language Teaching, 9*(1), 51–64.

Amiryousefi, M. (2016). The differential effects of two types of task repetition on the complexity, accuracy, and fluency in computer-mediated L2 written production: A focus on computer anxiety. *Computer Assisted Language Learning*, 29(5), 1052–1068.

Amoroso, L. M., & Burke, M. (2008). Developing career-ready business students: Three curriculum models. *The Journal of Education for Business, 93*(8), 420–429.

Andrés, C. de (2019). Embedding employability in language learning: Video CV in Spanish. In C. Goria, L. Guetta, N. Hughes, S. Reisenleutner & O. Speicher (Eds.), *Professional competencies in language learning and teaching* (pp. 99–109). Research-publishing.net. https://doi.org/10.14705/rpnet.2019.34.918

Andrews, G., & Russell, M. (2012). Employability skills development: Strategy, evaluation and impact. *Higher Education, Skills and Work-Based Learning, 2*(1), 33–44.

Anthony, L. (2014). *AntWordProfiler* (Version 1.4.0) [Computer Software]. Waseda University. http://www.antlab.sci.waseda.ac.jp/

Arnó-Macià, E. (2012). The role of technology in teaching languages for specific purposes courses. *The Modern Language Journal, 96*, 89–104.

Asención-Delaney, Y., & Collentine, J. (2011). A multidimensional analysis of a written L2 Spanish corpus. *Applied Linguistics, 32*(3), 299–322.

Baba, K., & Nitta, R. (2014). Phase transitions in development of writing fluency from a complex dynamic systems perspective. *Language Learning*, *64*(1), 1–35.

Bachman, L. (1990). *Fundamental considerations in language testing*. Oxford University Press.

Bachmann, D., Holdsworth, P., Tamish, R., Surian, A., & Sharma, P. (2016). The new skills agenda for Europe. In J. Larjanko & J. Fredriksson (Eds.), *Skills and Competencies* (pp. 18–24). DVV International, Christoph Jost.

Badger, R., & White, G. (2000). A process genre approach to teaching writing. *ELT Journal*, *54*(2), 153–160.

Barab, S. A., Squire, K. D., & Dueber, W. (2000). A co-evolutionary model for supporting the emergence of authenticity. *Educational Technology Research and Development, 48*(2), 37–62.

Bardovi-Harlig, K. (2013). Developing L2 pragmatics. *Language Learning, 63(*1), 68–86.

Bardovi-Harlig, K., & Bofman, T. (1989). Attainment of syntactic and morphological accuracy by advanced language learners. *Studies in Second Language Acquisition*, *11*(1), 17–34.

Bastola, P. (2006). Task-based learning in the language class. *Journal of NELTA, 11*(1–2), 130–132.

Basturkmen, H. (2010). *Developing courses in English for specific purposes*. Springer.

Batistic, S., & Tymon, A. (2017). Networkin behaviour, graduate employability: A social capital perspective. *Education + Training*, *59*(4), 374–388. https://doi.org/10.1108/et-06-2016-0100

Batsila, M. (2017). *Linking vocational education to the world of employment: The case of business English in Greece* (Publication No. 49571) [Doctoral dissertation, The Open University]. Open Research Online (ONO).

Beacco, J., & Byram, M. (2007). *From linguistic diversity to plurilingual education: Guide for the development of language education policies in Europe*. Language Policy Divison of the Council of Europe.

Beers, S. F., & Nagy, W. E. (2009). Syntactic complexity as a predictor of adolescent writing quality: Which measures? Which genre? *Reading and Writing, 22*(2), 185–200.

Bellemare, C., Goussé, M., Lacroix, G., & Marchand, S. (2020). *Video résumés and job search outcomes: Evidence from a field experiment* (Discussion paper 13656). Institute de Labor Economics (IZA).

Bonn. Bereiter, C., & Scardamalia, M. (1987). *The psychology of written composition*. Lawrence Erlbaum.

Bhatia, V. K. (1993). *Analysing genre: Language use in professional settings*. Routledge.

Bhatia, V. K. (1997). Introduction: Genre analysis and world Englishes. *World Englishes, 16*(3), 313–319.

Bhatia, V. K. (2014). *Analysing genre: Language use in professional settings*. Routledge.

Biber, D., Gray, B., & Poonpon, K. (2011). Should we use characteristics of conversation to measure grammatical complexity in L2 writing development? *Tesol Quarterly*, *45*(1), 5–35.

Bitchener, J. & Knoch, U. (2008). The value of written corrective feedback for migrant and international students. *Language Teaching Research*, *12*, 409–431.

Bitchener, J. & Knoch, U. (2010). Raising the linguistic accuracy level of advanced L2 writers with written corrective feedback. *Journal of Second Language Writing*, *19*, 207–217.

Bitchener, J., & Storch, N. (2016). *Written corrective feedback for L2 development*. Multilingual Matters.

Birjandi, P., & Ahangari, S. (2008). Effects of task repetition on the fluency, complexity and accuracy of Iranian EFL learners' oral discourse. *Asian EFL Journal, 10*(3), 28–52.

Blake, R. (2000). Computer-mediated communication: A window on L2 Spanish interlanguage. *Language Learning & Technology*, *4*(1), 111–125.

Boahin, P., & Hofman, A. (2013). A disciplinary perspective of competency-based training on the acquisition of employability skills. *Journal of Vocational Education & Training*, *65*(3), 385–401.

Boisvert, P., & Rao, K. (2015). Video self-modelling for English language learners. *TESOL Journal, 6*(1), 36–58.

Bosker, H. R., Pinget, A. F., Quené, H., Sanders, T., & De Jong, N. H. (2013). What makes speech sound fluent? The contributions of pauses, speed and repairs. *Language Testing*, *30*(2), 159–175.

Brečko, B., & Ferrari, A. (2016). *The digital competence framework for consumer* (EUR 28133). Joint Research Centre Science for Policy Report. https://doi.org/ 10.2791/838886

Bremner, S., & Phung, B. (2015). Learning from the experts: An analysis of résumé writers' self-presentation on LinkedIn. *IEEE Transactions on Professional Communication, 58*(4), 367–380.

Bridgstock, R. (2009). The graduate attributes we've overlooked: Enhancing graduate employability through career management skills. *Higher Education Research & Development, 28*(1), 31–44.

Bright, J. E., Earl, J. K., & Adams, A. (1997). It's too short! The impact on résumé screening decisions of age, experience, format and content. *Proceedings of the 2nd Biennial Conference of the Australian Industrial and Organizational Psychology Society*. Elsevier B. V.

Bright, J. E., & Hutton, S. (2000). The impact of competency statements on résumés for short-listing decisions. *International Journal of Selection and Assessment, 8*(2), 41–53.

Bruce, K. (2014). Cracking the genre of the résumé. *Grassroots Writing Research Journal, 4*(2), 35–43.

Brunello, G., & Schlotter, M. (2011). *Non-cognitive skills and personality traits: Labour market relevance and their development in education & training systems* (Discussion paper 5743). Institute for the Study of Labor (IZA).

Bruner, J. (1990). *Acts of meaning*. Harvard University Press.

Budginaité, I., Barcevičius, E., Espasa, J. Algirdas, S., & Tsutskiridze, L. (2016). *Sustainable work throughout the life course: National policies and strategies.* Publications Office of the European Union. https://doi.org/10.2806/874170

Bull, K. S., Shuler, P., Overton, R., Kimball, S., Boykin, C., & Griffin, J. (1999). Processes for developing scaffolding in a computer mediated learning environment. *Rural special education for the new millennium. Conference Proceedings of the American Council on Rural Special Educacion (ACRES)* (pp. 241–248). Albuquerque. New Mexico.

Bueno-Alastuey, M. C. (2006). Un curso de inglés para ingenierías técnicas agrícolas usando el aulario virtual. *Huarte de San Juan. Filología y Didáctica de la Lengua, 8,* 129–148.

Bueno-Alastuey, M. C. (2009a). Using webCT in a course of English for academic/specific purposes: The case of English for agriculture. In I. Gonzalez-Pueyo, C. Foz, M. Jaime & M. J. Luzon (Eds.), *Teaching academic and professional English online* (pp. 127–152). PeterLang.

Bueno-Alastuey, M. C. (2009b). WebCT design and users' perceptions in English for agriculture. In R. de Cassia Vega Marriott & P. Lupion Torres (Eds.), *Handbook of research on e-learning methodologies for language acquisition* (pp. 480–496). IGI Global. https://doi.org/10.4018/978-1-59904-994-6.ch029

Bueno-Alastuey, M. C., & López Pérez, M. V. (2014). Evaluation of a blended learning language course: Students' perceptions of appropriateness for the development of skills and language areas. *Computer Assisted Language Learning*, *27*(6), 509–527.

Bulté, B., & Housen, A. (2012). Defining and operationalising L2 complexity. In A. Housen, F. Kuiken & I. Vedder (Eds.), *Dimensions of L2 performance and*

proficiency: Complexity, accuracy and fluency in SLA (pp. 21–46). John Benjamins Publishing.

Bulté, B., & Housen, A. (2014). Conceptualizing and measuring short-term changes in L2 writing complexity. *Journal of Second Language Writing, 26*, 42–65.

Burke, K. (1969). *A rhetoric of motives*. University of California Press.

Burns, A. (2009). *The Cambridge guide to second language teacher education*. Ernst Klett Sprachen.

Bygate, M. (1996). Effects of task repetition: Appraising learners' performances on tasks. In J. Willis & D. Willis (Eds.), *Challenge and change in language teaching* (pp. 136–146). Heinemann.

Bygate, M. (1999). Quality of language and purpose of task: Patterns of learners' language on two oral communication tasks. *Language Teaching Research, 3*(3), 185–214.

Bygate, M. (2001). Effects of task repetition on the structure and control of language. In M. Bygate, P. Skehan & M. Swain (Eds.), *Researching pedagogic tasks: Second language learning, teaching and testing* (pp. 23–48). Longman.

Bygate, M. (2006). Areas of research that influence L2 speaking instruction. In E. Usó-Juan & A. Martinez-Flor (Eds.), *Current trends in the development and teaching of the four language skills* (pp. 159–186). De Gruyter Mouton. https://doi.org/10.1515/9783110197778

Bygate, M., & Samuda, V. (2005). Integrative planning through the use of task repetition. In R. Ellis (Ed.), *Planning and task performance in a second language* (pp. 37–74). John Benjamins.

Bygate, M., Skehan, P., & Swain, M. (2001). R*esearching pedagogical tasks: Second language learning, teaching, and assessment*. Pearson.

Byrnes, H., & Manchón, R. M. (2014). Insights from and for L2 writing: An introduction. In H. Byrnes & R. M. Manchón (Eds.), *Task-based language learning: Insights from and for L2writing* (pp. 1–23). John Benjamins.

Byrnes, H., Maxim, H. H., & Norris, J. M. (2010). Realizing advanced foreign language writing development in collegiate education: Curricular design, pedagogy, assessment. *The Modern Language Journal, 94(4)*, i–235.

Cabero Almenara, J. (2014). Nuevas miradas sobre las TIC aplicadas en la educación. *Andalucía Educativa: Revista Digital De La Consejería De Educación, 81, 1–6.*

Caena, F. (2019). *Developing a European framework for the personal, social and learning to learn key competence (LifeComp)* (EUR 29855 EN). Publications Office of the European Union.

Caicedo Pereira, M. J., Lozano Bermúdez, J. A., & Vanegas Medina, L. A. (2018). Improving L2 oral accuracy and grammatical range through self-assessment of video speech drafts. *Profile Issues in Teachers' Professional Development, 20*(2), 127–142.

Carrera, F. X. F., Vaquero, E. T., & Balsells, M. A. B. (2011). Instrumento de evaluación de competencias digitales para adolescentes en riesgo social. *Edutec. Revista Electrónica de Tecnología Educativa, 3*, 1–25.

Carretero Gomez, S., Vuorikari, R., & Punie, Y. (2017). *DigComp 2.1: The digital competence framework for citizens with eight proficiency levels and examples of use* (EUR 28558 EN). Publications Office of the European Union. http://doi.org/10.2760/836968

Casal, J. E., & Lee, J. J. (2019). Syntactic complexity and writing quality in assessed first-year L2 writing. *Journal of Second Language Writing, 44*, 51–62.

Cattaneo, A. (2019, May). Video-enhanced training [Paper presentation]. *Journée D'étude Vidéoformation*, University of Geneva, Geneva, Switzerland.

Cattaneo, A. A., van der Meij, H., Aprea, C., Sauli, F., & Zahn, C. (2019). A model for designing hypervideo-based instructional scenarios. *Interactive Learning Environments, 27*(4), 508–529.

Cattaneo, A., Evi-Colombo, A., Ruberto, M., & Stanley, J. (2019). *Video pedagogy for vocational education. An overview of video-based teaching and learning.* European Training Foundation. http://doi.org/10.2816/720936

Cavanagh, M., & Peté, M. (2017). Fashion students choose how to learn by constructing videos of pattern making. *British Journal of Educational Technology, 48*(6), 1502–1511.

Chambel, T., Zahn, C., & Finke, M. (2006). Hypervideo and cognition: Designing video-based hypermedia for individual learning and collaborative knowledge building. In E. Alkhalifa (Ed.), *Cognitively informed systems: Utilizing practical approaches to enrich information presentation and transfer* (pp. 26-49). IGI Global. http://doi.org/10.4018/978-1-59140-842-0.ch002

Chandler, J. (2003). The efficacy of various kinds of error feedback for improvement in the accuracy and fluency of L2 student writing. *Journal of Second Language Writing, 12*(3), 267–296.

Chang, C., & Tseng, K. (2009). Use and performances of web-based portfolio assessment. *British Journal of Educational Technology, 40*(2), 358–370.

Chenoweth, A., & Hayes, J. (2003). The inner voice in writing. *Written Communication, 20*, 99–118.

Cole, M. S., Rubin, R. S., Feild, H. S., & Giles, W. F. (2007). Recruiters' perceptions and use of applicant résumé information: Screening the recent graduate. *Applied Psychology, 56*(2), 319–343.

Coles, P., & Quirke, P. (2001). Professional development through the action learning gateway. *Thailand TESOL Newsletter, 15*(2), 14–20.

Coleman, B., Neuhauser, J., & Vander Zwaag, C. (2004). "Play it again, zack!" video classrooms: Proven practice and projects In L. Cantoni & C. McLoughlin (Eds.), *Proceedings of EdMedia 2004 World Conference on Educational Multimedia, Hypermedia & Telecommunications* (pp. 4723–4728). Association for the Advancement of Computing in Education (AACE).

Council of Europe (2001) Common *European framework of reference for languages: Learning, teaching, assessment*. Cambridge University Press.

Council of Europe (2018). *Common European framework of reference for languages: Learning, teaching, assessment*. Companion volume. Council of Europe Publishing.

Council of the European Union (2004). *Draft resolution of the council and of the representatives of the governments of the member states meeting within the council on strengthening policies, systems and practices in the field of guidance throughout life in Europe* (EDUC 109 9286). Council of the European Union.

Council of the European Union (2008a). *Council resolution on better integrating lifelong guidance into lifelong learning strategies* (2008/C 319/02). Official Journal of the European Union. http://www.elgpn.eu/elgpndb/view/39

Cooper, C. G. (2014). *Impressions: The power of personal branding in living an extraordinary life*. Wisdom House Books.

Coxhead, A. (2000). A new academic word list. *TESOL Quarterly, 34*(2), 213–238. http://doi.org/10.2307/3587951.

Coyle, Y. & Roca de Larios, J. (2014). Exploring the role played by error correction and models in children's reported noticing and output production in a L2 writing task. *Studies in Second Language Acquisition, 36*, 451–485.

Crowne, K. A., Brown, M., Durant, D., Baburaj, Y., Hornberger, P., McCloskey, D., & Vike, L. (2020). A program for embedding career activities in multiple core business courses (Article 100421). *The International Journal of Management Education, 18*(3), 1–9.

Crossley, S. A., & McNamara, D. S. (2014). Does writing development equal writing quality? A computational investigation of syntactic complexity in L2 learners. *Journal of Second Language Writing, 26*, 66–79.

Crystal, D. (2003). *English as a globallLanguage*. Ernst Klett Sprachen.

Cumming, A. (1990). Metalinguistic and ideational thinking in second language composing. *Written Communication, 7*, 482–511.

Cummins, J. (2007). Rethinking monolingual instructional strategies in multilingual classrooms. *Canadian Journal of Applied Linguistics*, *10*(2), 221–240.

Cunningham, J. (2011). Learning in student-generated TV commercials enhanced by computer technology. *The JALT CALL Journal, 7*(2), 151–175.

CUVID (2018, September). *Curriculum video: VET teachers' instruction and training manual* [Manual]. https://www.cuvid.eu/wp-content/uploads/vettraining_en.pdf

Damminger, J. K., Potter, G. C., & Pritchard, R. E. (2009). Adding value to the first-year experience: Embedding self and major exploration in the college of business curriculum. *American Journal of Business Education, 2*(3), 49–56.

Danaye Tous, M., & Haghighi, S. (2014). Evaluation of ESP textbooks: Evidence from ESP textbook of computer engineering major. *International Journal of Research Studies in Language Learning, 3*(2), 55–68.

Davari, H., Iranmehr, A., & Erfani, S. M. (2013). A critical evaluation of PNU ESP textbooks. *Journal of Language Teaching and Research, 4*(4), 813–823.

Day, R., & Allen, T. D. (2004). The relationship between career motivation and self-efficacy with protégé career success. *Journal of Vocational Behavior, 64*(1), 72–91.

Decreto Foral 92/2012 (Agosto, 2013). Boletin Oficial de Navarra, *3,* 218–271, 4 de enero de 2013.

De Janasz, S. C., & Forret, M. L. (2008). Learning the art of networking: A critical skill for enhancing social capital and career success. *Journal of Management Education, 32*(5), 629–650.

De Jong, N. H., Steinel, M. P., Florijn, A., Schoonen, R., & Hulstijn, J. H. (2012). The effect of task complexity on functional adequacy, fluency and lexical diversity in speaking performances of native and non-native speakers. In A. Housen, F. Kuiken & I. Vedder (Eds.), *Dimensions of L2 performance and proficiency: complexity, accuracy and fluency in SLA* (pp. 121–142). John Benjamins Publishing.

Derous, E., Ryan, A. M., & Nguyen, H. D. (2012). Multiple categorization in résumé screening: Examining effects on hiring discrimination against Arab applicants in field and lab settings. *Journal of Organizational Behavior, 33*(4), 544–570.

Ding, H. (2007). Genre analysis of personal statements: Analysis of moves in application essays to medical and dental schools. *English for Specific Purposes, 26*(3), 368–392.

Ding, H., & Ding, X. (2013). 360-degree rhetorical analysis of job hunting: A four-part, multimodal project. *Business Communication Quarterly, 76*(2), 239–248.

Dobao, A. F. (2012). Collaborative writing tasks in the L2 classroom: Comparing group, pair, and individual work. *Journal of Second Language Writing, 21*(1), 40–58.

Dowrick, P. W. (2012). Self-modelling: Expanding the theories of learning. *Psychology in the Schools, 49*(1), 30–41.

Dudley-Evans, T., & Saint John, M. J. (1998). *Developments in English for specific purposes: A multi-disciplinary approach.* Cambridge University Press.

Dumova, T. (2008). Using digital video assignments as a tool for active learning. *International Journal of Learning, 14*(12), 63–71.

Earl, J., Bright, J., & Adams, A. (1998). "In my opinion…" What gets graduate résumés shortlisted? *Australian Journal of Career Development, 7*(1), 15–19.

Eby, L. T., Butts, M., & Lockwood, A. (2003). Predictors of success in the era of the boundaryless career. *Journal of Organizational Behavior: The International Journal of Industrial, Occupational and Organizational Psychology and Behavior, 24*(6), 689–708.

Edge, J. (2001). Attitude and access: Building a new teaching / learning community in TESOL. In J. Edge (Ed.), *Action Research* (pp. 1–11). TESOL.

Elizondo, J. F., Sánchez, A., & Pilgrim, Y. (2019). Assessing ESP vocabulary and grammar through task-based language teaching. *Revista de Lenguas Modernas, 30*, 73–95.

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Ellis, R. (1994). *The study of second language acquisition*. Oxford University Press.

Ellis, N. C. (2008). The dynamics of second language emergence: Cycles of language use, language change, and language acquisition. *The Modern Language Journal, 92*(2), 232–249.

Ellis, R. (2015). *Understanding second language acquisition 2nd edition*. Oxford University Press.

Ellis, R., Sheen, Y., Murakami, M., & Takashima, H. (2008). The effects of focused and unfocused written corrective feedback in English as a foreign language context. *System*, 36, 353–371.

Eslami-Rasekh, Z. (2005). Raising the pragmatic awareness of language learners. *ELT Journal*, *59*(3), 199–208.

Esteve, O., Fernández, F., Martín-Peris, E., & Atienza, E. (2017). The integrated plurilingual approach: A didactic model providing guidance to Spanish schools for reconceptualizing the teaching of additional languages. *Language and Sociocultural Theory, 4*(1), 1–24.

European Commission (2010a). *Communication from the Commission. Europe 2020: A strategy for smart, sustainable and inclusive growth* (52010DC2020). European Commission. https://bit.ly/52010DC2020

European Commission. (2010b). *The Bruges Communiqué on enhanced European cooperation in Vocational Education and Training for the period 2011–2020* (TD/TNC 144.309). Publications Office of the European Union. https://www.cedefop.europa.eu/en/content/bruges-communique

European Commission (2010c). *Languages for jobs: Providing multilingual communication skills for the labour market* (TD/TNC 112.565). European Commission (EC). http://hdl.voced.edu.au/10707/251323

European Commission (2016). *Developing skills for the labour market: The Riga conclusions: European cooperation in vocational education and training 2015–2020* (KE-02-16-623-EN-N). European Commission. http://doi.org/10.2767/437732

European Commission (2020). *European Skills Agenda for sustainable competitiveness, social fairness and resilience* (32020H120201). Official Journal of the European Union 63, 1–59. https://bit.ly/32020h120201

European Council (2006). R*ecommendation of the European Parliament and the Council of 18 December 2006 on key competencies for lifelong learning* (2006/962/EC). Publications Office of the European Union.

European Council (2018). *Council recommendation of 22 May 2018 on key competences for lifelong learning* (*2018/C 189/01,* 1–13). Publications Office of the European Union.

European Council (2019). *Proposal for a council recommendation on a comprehensive approach to the teaching and learning of languages (*2019/C189/03). Official Journal of the European Union.

European Union (2008). *Council resolution of 21 November 2008 on a European strategy for multilingualism* (2008/C 320, 1–13). Official Journal of the European Union.

European Union (2014). *Council conclusions of 20 May 2014 on multilingualism and the development of language competences* (C 183/26). Official Journal of the European Union. https://bit.ly/C18326

European Union (2 December, 2020). *Council recommendation of 24 November 2020 on vocational education and training (VET) for sustainable competitiveness, social fairness and resilience* (2020/C 417/01). Official Journal of the European Union, 63.

Evans, Jr, J. H., & Burck, H. D. (1992). The effects of career education interventions on academic achievement: A meta-analysis. *Journal of Counselling & Development, 71*(1), 63–68.

Farnia, M., Ypsilandis, G., & Ghasempour, B. (2019). Intracultural Iranian persuasion. *Journal of Intercultural Communication, 51, 34*–45.

Feng, H. (2008). A genre-based study of research grant proposals in China. In U. Connor, E. Nagelhout & W. Rozycki (Eds.), *Contrastive rhetoric: Reaching to intercultural rhetoric (Pragmatics and beyond new series 169* (pp. 63–*86)*. John Benjamins Publishing.

Ferris, D. R. (1995). Student reactions to teacher response in multiple-draft composition classrooms. *TESOL Quarterly, 29(1)*, 33–53.

Ferris, D. R. (2002). *Treatment of error in second language writing classes*. University of Michigan Press.

Fiorito, L. (2006, December 12). *Teaching English for specific purposes (ESP)*. UsingEnglish.com. https://bit.ly/usingEnglishESP

Flowerdew, J., & Peacock, M. (2001). *Research perspectives on English for academic purposes*. Ernst Klett Sprachen.

Foster, P., & Tavakoli, P. (2009). Native speakers and task performance: Comparing effects on complexity, fluency, and lexical diversity. *Language Learning*, *59*(4), 866–896.

Franca Plastina, A. (2013). Multimodality in English for specific purposes: Reconceptualizing meaning-making practices. *LFE. Revista De Lenguas Para Fines Específicos 19*, 372–396.

Fraenkel, J. R., Wallen, N. E., & Hyun, H. H. (1993). *How to design and evaluate research in education*. McGraw-Hill.

Friginal, E., & Weigle, S. (2014). Exploring multiple profiles of L2 writing using multi-dimensional analysis. *Journal of Second Language Writing*, *26*, 80–95.

Gabrielle, D. (2003). *The effects of technology-mediated instructional strategies on motivation, performance, and self-directed learning* [Doctoral dissertation, The Florida State University]. DigiNole Research Digital Repository. https://bit.ly/DrGabrielleD

Galbraith, D. (2009). Cognitive models of writing. *German as a Foreign Language*, (2–3), 7–22.

Galbraith, D., Van Waes, L., & Torrance, M. (2007). Introduction. In M. Torrance, L. Van Waes & D. Galbraith (Eds.), *Writing and cognition. Research and applications* (pp. 1–10). Elsevier. http://doi.org/10.1007/978–3–540–72726–2.

Galloway, V. (1992). Toward a cultural reading of authentic texts. In H. Byrnes (Ed.), *A multicultural world in transition.* (pp. 87-121). National Textbook Co.

Gareis, E. (2000). Two thumbs up! A student video production [Paper presentation]. *English Teaching Forum Online, 38*(1), 6–17.

Garrett, N. (2009). Computer-assisted language learning trends and issues revisited: Integrating innovation. *The Modern Language Journal, 93*, 719–740.

Gerard, J. G. (2012). Linking in with LinkedIn®: Three exercises that enhance professional social networking and career-building. *Journal of Management Education, 36*(6), 866–897.

Gilmore, D. C., & Ferris, G. R. (1989). The politics of the employment interview. In R. W. Eder & G. R. Ferris (Eds.), *The employment interview: Theory, research, and practice* (pp. 195–203). Sage Publications, Inc.

Gilsdorf, J. W. (1998). Organizational rules on communicating: How employees are – and are not – learning the ropes. *Journal of Business Communication, 35*(2), 173–201.

Gimeno-Sanz, A. (2015). Digital storytelling as an innovative element in English for specific purposes. *Procedia-Social and Behavioral Sciences, 178*, 110–116.

Gissel, A. L., Thompson, L. F., & Pond III, S. B. (2013). A theory-driven investigation of prospective applicants' intentions to submit video résumés. *Journal of Applied Social Psychology, 43*(12), 2449–2461.

Goldfarb, B. (2002). *Visual pedagogy: Media cultures in and beyond the classroom.* Duke University Press.

Goulah, J. (2007). Village voices, global visions: Digital video as a transformative foreign language learning tool. *Foreign Language Annals, 40*(1), 62–78.

Gutiérrez, G.A.G. (2006). Sociocultural theory and its application to CALL: A study of the computer and its relevance as a mediational tool in the process of collaborative activity. *ReCALL, 18*, 230–251.

Greene, H., & Crespi, C. (2012). The value of student-created videos in the college classroom – an exploratory study in marketing and accounting. *International Journal of Arts & Sciences, 5*(1), 273.

Grice, H. P. (1975). Logic and conversation. In P. Cole & J. L. Morgan. (Eds.), *Syntax and Semantics*, Vol. 3, Speech Acts (pp. 41–58). Academic Press.

Grgurovic, M., Chapelle, C., & Shelley, M. C. (2013). A meta-analysis of effectiveness studies on computer technology-supported language learning. *ReCALL, 25*(02), 165.

Guariento, W., & Morley, J. (2001). Text and task authenticity in the EFL classroom. *ELT Journal, 55*(4), 347–353.

Gulikers, J. T., Bastiaens, T. J., & Martens, R. L. (2005). The surplus value of an authentic learning environment. *Computers in Human Behaviour, 21*(3), 509–521.

Gutman, L. M., & Schoon, I. (2013). *The impact of non-cognitive skills on outcomes for young people: Literature review (TD/TNC 115.546)*. Education Endowment Foundation.

Gwozdek, A. E., Springfield, E. C., & Kerschbaum, W. E. (2013). EPortfolio: Developing a catalyst for critical self-assessment and evaluation of learning outcomes. *Journal of Allied Health, 42*(1), 11E–17E.

Hadley, G. (2003). *Action research in action*. SEAMEO Regional Language Centre.

Hadzigiannoglou Xenodohidis, T. (2002). An ESP curriculum for Greek EFL students of computing: A new approach. *English for Specific Purposes World Journal, 2*(1), 1–22.

Hakkarainen, K. (2009). A knowledge-practice perspective on technology-mediated learning. *International Journal of Computer-Supported Collaborative Learning*, *4*(2), 213–231.

Hakkarainen, P., Saarelainen, T., & Ruokamo, H. (2007). Towards meaningful learning through digital video supported, case based teaching. *Australasian Journal of Educational Technology, 23*(1), 87–109.

Hakkarainen, P., & Vapalahti, K. (2011). Meaningful learning through video-supported forum-theater. *International Journal of Teaching and Learning in Higher Education, 23*(3), 314–328.

Halliday, M. A. K. (2014). Language as a social semiotic. In J. Angermuller, D. Maingueneau & R. Wodak (Eds), *The discourse studies reader* (pp. 263–272). John Benjamins.

Hannafin, M. J., & Land, S. M. (1997). The foundations and assumptions of technology-enhanced student-centered learning environments. *Instructional Science, 25*(3), 167–202.

Harding, K. (2007). *English for specific purposes*. Oxford University Press.

Harmer, J. (1991). *The practice of English language teaching*. Longman.

Harwood, N. (2005). What do we want EAP teaching materials for? *Journal of English for Academic Purposes, 4*(2), 149–161.

Hashmi, U., Rajab, H., & Ehsan Sindi, A. (2019). Dental students' perceptions of ESP material and its impact on their language proficiency: A case study of a Saudi Arabian university. *Arab World English Journal (AWEJ), 10*(4), 3–17.

Hawkes, M. L. (2012). Using task repetition to direct learner attention and focus on form. *ELT Journal, 66*(3), 327–336.

Helyer, R., & Lee, D. (2014). The role of work experience in the future employability of higher education graduates. *Higher Education Quarterly, 68*(3), 348–372.

Henry, A., & Roseberry, R. L. (2001). A narrow-angled corpus analysis of moves and strategies of the genre: Letter of application. *English for Specific Purposes, 20*(2), 153–167.

Hidalgo, M. Á., & Lázaro-Ibarrola, A. (2020). Task repetition and collaborative writing by EFL children: Beyond CAF measures. *Studies in Second Language Learning and Teaching, 10*(3), 201–522. https://doi.org/10.14746/ssllt.2020.10.3.5

Hiemstra, A. M., Derous, E., Serlie, A. W., & Born, M. P. (2012). Fairness perceptions of job-application videos among ethnically diverse applicants. *International Journal of Selection and Assessment, 20*(4), 423–433.

Holmes, L. (2013). Competing perspectives on graduate employability: Possession, position or process? *Studies in Higher Education, 38*(4), 538–554.

Homburg, T. J. (1984). Holistic evaluation of ESL compositions: Can it be validated objectively? *TESOL Quarterly, 18*(1), 87–107.

Horwitz, E. K. (2010). Foreign and second language anxiety. *Language Teaching, 43*(2), 154–167.

Hou, H. (2013). "Please consider my request for an interview': A cross-cultural genre analysis of cover letters written by Canadian and Taiwanese college students. *TESL Canada Journal, 30(7)* 45–62.

Hou, H., & Li, M. (2011). A contrastive rhetoric analysis of internship cover letters written by Taiwanese and Canadian hospitality majors. *International Journal of Linguistics, 3*(1), 43–57.

Housen, A., & Kuiken, F. (2009). Complexity, accuracy, and fluency in second language acquisition. *Applied Linguistics, 30*(4), 461–473.

Housen, A., Kuiken, F., & Vedder, I. (Eds.). (2012). *Dimensions of L2 performance and proficiency. Complexity, accuracy, and fluency in SLA*. John Benjamins.

Hsieh, Y. C. (2016). A case study of the dynamics of scaffolding among ESL learners and online resources in collaborative learning. *Computer Assisted Language Learning, 30*(1–2), 115–132.

Hua, Z. (2007). Presentation of "self" in application letters. In Z. Hua, P. Seedhouse, L. Wei & V. Cook (Eds.), *Language learning and teaching as social interaction* (pp. 126–147). Palgrave Macmillan.

Hughes, J. (2005). The role of teacher knowledge and learning experiences in forming technology-integrated pedagogy. *Journal of Technology and Teacher Education, 13*(2), 277–302.

Hughes, H. (2013). International students using online information resources to learn: Complex experience and learning needs. *Journal of Further and Higher Education, 37*(1), 126–146.

Hung, H. K. V., Keppell, M. J., & Jong, S. Y. M. (2004). Learners as producers: Using project based learning to enhance meaningful learning through digital video production. In R. Atkinson, C. McBeath, D. Jonas-Dwyer & R. Phillips (Eds.), *Beyond the comfort zone: Proceedings of the 21st ASCILITE conference* (pp. 428–436). ASCILITE. https://bit.ly/Hungetal2004

Hung, S. A. (2006). *Alternative EFL assessment: Integrating electronic portfolios into the classroom* [Doctoral dissertation, Indiana University]. LearnTechU. http://www.learntechlib.org/p/117036/

Hung, S. (2011). Pedagogical applications of vlogs: An investigation into ESP learners' perceptions. *British Journal of Educational Technology, 42*(5), 736–746.

Hung, S. (2009). Promoting self-assessment strategies: An electronic portfolio approach. *Asian EFL Journal, 11*(2), 129–146.

Hunt, K. W. (1970). Do sentences in the second language grow like those in the first? *Tesol Quarterly, 4*(3), 195–202.

Hur, J. W., & Suh, S. (2012). Making learning active with interactive whiteboards, podcasts, and digital storytelling in ELL classrooms. *Computers in the Schools, 29*(4), 320–338.

Hustler, D., Carter, K., Halsall, R., Watts, T., Ball, B., & Ward, R. (1998). *Developing career management skills in higher education*. NICEC Project Report. Careers Research and Advisory Centre.

Hutchinson, T., & Waters, A. (1987). *English for specific purposes*. Cambridge University Press.

Hwang, C. C. (2005). Effective EFL education through popular authentic materials. *Asian EFL Journal, 7*(1), 90–101.

Hyland, K. (2003). Genre-based pedagogies: A social response to process. *Journal of Second Language Writing, 12*(1), 17–29.

Hyland, K. (2004). *Genre and second language writing*. University of Michigan Press.

Ildiko, S. (2008). Assessing the presence of pragmatic awareness in four ESP publications-focusing on conversation openings and closing. *Szakmai Füzetek*, *2008*(24), 104–110.

Indrarathne, B. (2013). Effects of task repetition on written language production in task-based language Ttaching. In B.-P. Olmos-López, J. Huang & J. Almeida (Eds.), *Papers from the 8th Lancaster University Postgraduate Conference in Linguistics & Language Teaching* (pp. 42–65). Lancaster University.

Ishikawa, S. (1995). Objective measurement of low-proficiency EFL narrative writing. *Journal of Second Language Writing*, *4*(1), 51–69.

Jackson, D. (2016). Re-conceptualising graduate employability: The importance of pre-professional identity. *Higher Education Research & Development, 35*(5), 925–939.

Jackson, D. (2019). Student perceptions of the development of work readiness in Australian undergraduate programs. *Journal of College Student Development, 60*(2), 219–239.

Jacobson, E., Degener, S., & Purcell-Gates, V. (2003). *Creating authentic materials and activities for the adult literacy classroom: A handbook for practitioners*. National Center for the Study of Adult Learning and Literacy.

James, C., Scholfield, P., & Ypsiladis, G. (1994). Cross-cultural correspondence. *World Englishes, 13*(3), 325–340.

Jaunarajs, I., & McGarry, E. (2018). Organizational alignment to promote leadership development for career readiness in college settings. *New Directions for Student Leadership, 2018*(157), 101–113.

Jewitt, C. (2005). Multimodality, "reading', and "writing" for the 21st century. *Discourse: Studies in the Cultural Politics of Education,* 26(3), 315–331.

Jewitt, C. (2006). *Technology, literacy and learning: A multimodal approach.* Routledge.

Jewitt, C. (2008). Multimodality and literacy in school classrooms. *Review of Research in Education*, *32*, 241–267.

Jewitt, C. E. (2011). *The Routledge handbook of multimodal analysis.* Routledge/Taylor & Francis Group.

Johnson, M. D., Mercado, L., & Acevedo, A. (2012). The effect of planning sub-processes on L2 writing fluency, grammatical complexity, and lexical complexity. *Journal of Second Language Writing*, *21*(3), 264–282.

Jonassen, D. H. (1994). Thinking technology: Toward a constructivist design model. *Educational Technology, 34*(4), 34–37.

Jones, S., Myhill, D., & Bailey, T. (2013). Grammar for writing? An investigation of the effects of contextualised grammar teaching on students' writing. *Reading and Writing*, *26*(8), 1241–1263.

Jordan, R. R. (1997). *English for academic purposes: A guide and resource book for teachers*. Cambridge University Press.

Judge, T. A., & Bono, J. E. (2001). Relationship of core self-evaluations traits—self-esteem, generalized self-efficacy, locus of control, and emotional stability—with job satisfaction and job performance: A meta-analysis. *Journal of Applied Psychology, 86*(1), 80–92.

Jung, S. (2013). The effect of task repetition and corrective feedback in L2 writing. *MSU Working Papers in Second Language Studies*, *4*(1), 24–37.

Kacmar, K. M., & Carlson, D. S. (1994). Using impression management in women's job search processes. *American Behavioural Scientist, 37*(5), 682–696.

Kampylis, P., Punie, Y., & Devine, J. (2015). *Promoting effective digital-age learning: A European framework for digitally-competent educational organisations* (JRC98209). Publications Office of the European Union. https://ec.europa.eu/jrc/en/digcomporg

Kearney, M. (2009, December 10th). *Towards a learning design for student-generated digital storytelling* [Paper presentation]. The Future of Learning Design Conference, Paper 4, (pp. 28–37). University of Wollongong. Australia. http://ro.uow.edu.au/fld/09/Program/4

Kearney, M., & Schuck, S. (2006). Spotlight on authentic learning: Student developed digital video projects. *Australasian Journal of Educational Technology, 22*(2), 189–208.

Keiper, M. C., Sieszputowski, J., Morgan, T., & Mackey, M. J. (2019). Employability skills: A case study on a business-oriented sport management program. *E-Journal of Business Education and Scholarship of Teaching, 13*(1), 59–68.

Kelly, J. F., & O'Brien, E. H. (1992). Using job-application videos to teach deaf college students job search skills and improve their communication. *American Annals of the Deaf, 137(5),* 404–410.

Kern, R. (2015). *Language, literacy, and technology*. Cambridge University Press.

Khojasteh, L., Mukundan, J., & Shokrpour, N. (2013). Malaysian TESL students' challenges: Instructional use of video production. *Journal of Scientific Research and Reports, 2(1),* 46–62.

Kitchen, M., & Jeurissen, M. (2004). Developing a culture of teachers as researchers. *Many Voices, 22*, 16–20.

Kluzer, S., & Pujol, L. (2018). *DigComp into action: Get inspired, make it happen. A user guide to the European digital competence framework*. JRC Science for Policy Report (EUR 29115 EN). Publications Office of the European Union. https://doi.org/10.2760/112945

Knouse, S. B. (1994). Impressions of the résumé: The effects of applicant education, experience, and impression management. *Journal of Business and Psychology*, *9*(1), 33–45.

Knouse, S. B., Giacalone, R. A., & Pollard, H. (1988). Impression management in the résumé and its cover letter. *Journal of Business and Psychology*, 3(2), 242–249. https://doi.org/10.1007/BF01014492

Kong, K. C. (1998). Are simple business request letters really simple? A comparison of Chinese and English business request letters. *Text-Interdisciplinary Journal for the Study of Discourse*, *18*(1), 103–141.

Koponen, M., & Riggenbach, H. (2000). Overview: Varying perspectives on fluency. In H. Riggenback (Ed.), *Perspectives on fluency* (pp. 5–24). University of Michigan Press.

Koys, D. J. (2017). Using the department of labor's "My next move" to improve career preparedness. *Journal of Management Education, 41*(1), 94–117.

Krajka, J., & Grudzinska, Z. (2002) Using the internet in the language classroom to foster learner independence – Ideal and reality. In G. Dudeney (Ed.), IATFL *Call review, The journal of the computer SIG* (pp. 25–32). IATFL. http://iatefl.org.pl/sigs/tdal/n7krajka.htm

Kuiken, F., Vedder, I., & Gilabert, R. (2010). Communicative adequacy and linguistic complexity in L2 writing. In I. Bartning, M. Martin, I. Vedder & G. Palloti (Eds.), *Communicative proficiency and linguistic development: Intersections between SLA and language testing research* (pp. 81–99). European Second Language Association.

Kulik, C. C., & Kulik, J. A. (1991). Effectiveness of computer-based instruction: An updated analysis. *Computers in Human Behavior, 7*(1–2), 75–94.

Kurman, J. (2001). Self-enhancement: Is it restricted to individualistic cultures? *Personality and Social Psychology Bulletin, 27*(12), 1705–1716.

Laker, D. R., & Laker, R. (2007). The five-year resume: A career planning exercise. *Journal of Management Education, 31*(1), 128–141.

Lambert, C., & Kormos, J. (2014). Complexity, accuracy, and fluency in task-based L2 research: Toward more developmentally based measures of second language acquisition. *Applied Linguistics, 35*(5), 607–614.

Larsen-Freeman, D. (2006). The emergence of complexity, fluency, and accuracy in the oral and written production of five Chinese learners of English. *Applied Linguistics, 27*(4), 590–619.

Lattanzi, M., Merlini, M., & Salerno, I. (2012). *Guía para la creación y uso de la herramienta VideoCV. Proyecto EVA* (2012-IT 1-LE005-02799). Diputación de Granada.

Law, B., & Watts, A. G. (1977). *Schools, careers and community: A study of some approaches to careers education in schools.* Church Information Office for the General Synod Board of Education.

Lee, W. Y. (1995). Authenticity revisited: Text authenticity and learner authenticity. *ELT Journal, 49*(4), 323–328.

Lee, J. W., & Cavanaugh, T. W. (2014). Self-branding reflection through the use of infographic résumé. *Sport Management Education Journal, 10*(1), 78–85.

Lee, J. W., & Cavanaugh, T. (2016). Building your brand: The integration of infographic resume as student self-analysis tools and self-branding resources. *Journal of Hospitality, Leisure, Sport & Tourism Education, 18*, 61–68.

Leech, N. L., & Onwuegbuzie, A. J. (2007). An array of qualitative data analysis tools: A call for data analysis triangulation. *School Psychology Quarterly*, *22*(4), 557–584.

Lei, L., & Liu, D. (2016). A new medical academic word list: A corpus-based study with enhanced methodology. *Journal of English for Academic Purposes, 22*, 42–53.

Levelt, W. J. M. (1989). *Speaking: From intention to articulation*. The MIT Press.

Liaw, S. C. (2010). Enhancing learning of foreign languages through film subtitling. *Esteem Academic Journal, 6*(2), 51–63.

Light, L., Dumlao, C. M., & Stecker, P. M. (1993). Video résumé: An application of technology for persons with severe disabilities. *Teaching Exceptional Children*, *25*(3), 58–61.

Liou, H. C. (2007). Toward autonomous learning of academic English writing: What can electronic disciplinary portfolios offer. In S. Chang (Ed.), *Proceedings of the 24th International Conference on English Teaching and Learning in the ROC* (pp. 273–284). Taiwan ELT Publishing.

Llopis, G. (2013, April 8th). *Personal branding is a leadership requirement, not a self-promotion campaign*. Forbes. https://bit.ly/Llopis2013

Lomicka, L., & Lord, G. (2016). Social networking and language learning. In F. Farr & L. Murray (Ed.), *The Routledge handbook of language learning and technology* (pp. 255–268). Routledge.

Long, R. W., & Tabuki, M. (2014). Understanding fluency through disfluency: Comparing EFL learners with native speakers. *International Journal of Arts & Sciences, 7*(6), 61–80.

López, A. J. S. (2019). *External task repetition: the role of modality, written corrective feedback and proficiency. A comparative study*. [Doctoral thesis, Universidad de Murcia]. Digitum. http://hdl.handle.net/10201/65841

Lowenthal, P. R. (2010). The evolution and influence of social presence theory on online learning. In S. Dasgupta (Ed.), *Social computing: Concepts, methodologies, tools, and applications* (pp. 113–128). IGI Global.

Lowenthal, P. R., & Dunlap, J. C. (2010). From pixel on a screen to real person in your students' lives: Establishing social presence using digital storytelling. *The Internet and Higher Education, 13*(1–2), 70–72.

Lu, X. (2010). Automatic analysis of syntactic complexity in second language writing. *International Journal of Corpus Linguistics, 15*(4), 474–496.

Lu, X. (2011). A corpus-based evaluation of syntactic complexity measures as indices of college-level ESL writers' language development. *TESOL Quarterly*, *45*(1), 36–62.

Lu, Xiaofei (2012). The relationship of lexical richness to the quality of ESL learners' oral narratives. *The Modern Language Journal, 96*(2), 190–208.

Lu, Xiaofei & Ai, Haiyang. (2015). Syntactic complexity in college-level English writing: Differences among writers with diverse L1 backgrounds. *Journal of Second Language Writing, 29,* 16–27.

Lu, X., & Xu, Q. (2016). L2 syntactic complexity analyzer and its applications in L2 writing research. *Foreign Language Teaching and Research, 48,* 409–420.

Lynch, T., & Mclean, J. (2000). Exploring the benefits of task repetition and recycling for classroom language learning. *Language Teaching Research, 4,* 221–50.

Lynch, T., & Maclean, J. (2001). Effects of immediate task repetition on learners' performance. In M. Bygate, P. Skehan & M. Swain (Eds.), *Researching pedagogic tasks, second language learning, teaching and testing.* Longman.

MacDonald, M. N., Badger, R., & Dasli, M. (2006). Authenticity, culture and language learning. *Language and Intercultural Communication, 6*(3–4), 250–261.

Maier, P. (1992). Politeness strategies in business letters by native and non-native English speakers. *English for Specific Purposes*, *11*(3), 189–205.

Manchón, R. M. (2014a). The internal dimension of tasks: The interaction between task factors and learner factors in bringing about learning through writing. In H. Byrnes & R. M. Manchón (Eds.), *Task-based language learning: Insights to and from writing* (pp. 27–52). John Benjamins.

Manchón, R. M. (2014b.) The distinctive nature of task repetition in writing. Implications for theory, research, and pedagogy. *Estudios de Lingüística Inglesa Aplicada, (14),* 13–42.

Mancilla, R. L., Polat, N., & Akcay, A. O. (2017). An investigation of native and non-native English speakers' levels of written syntactic complexity in asynchronous online discussions. *Applied Linguistics*, *38*(1), 112–134.

Marco, M. J. L. (2002). Internet content-based activities for English for Specific Purposes. *Forum, 40*(3) 20–25.

Martínez-Flor, A., & Alcón, E. (2004). Pragmatic competence in the ESP context: A study across disciplines. In I. Fortanet, J. C. Palmer & S. Posteguillo (Eds.), *Linguistic studies in academic and professional English* (pp. 167–201). Servei de Publicacions de la Universita Jaume I.

Matsumura, M., Kawamura, K., & Affricano, A. (2008). Narrative task-type repetition and changes in second language use in a classroom environment: A case study. *Journal of Faculty of Education and Human Sciences of Yokohama National University, 10*, 125–145.

McAlpine, D. (2005). Creating a sense of auditory space. *Journal of Physiology, 566*(1), 21–28.

Meijers, F., Kuijpers, M., & Gundy, C. (2013). The relationship between career competencies, career identity, motivation and quality of choice. *International Journal for Educational and Vocational Guidance, 13*(1), 47–66.

Menke, M. R., & Strawbridge, T. (2019). The writing of Spanish majors: A longitudinal analysis of syntactic complexity. *Journal of Second Language Writing, 46(2019),* 100665. https://doi.org/10.1016/j.jslw.2019.100665

Mercader, J.A. (2018, May 19). T*he effects of written languaging on grammatical complexity, accuracy, and fluency. A study with advanced EFL writers in a revision task* [Paper presentation]. First International Conference on the Language Learning Potential of L2 Writing and Written Corrective Feedback, Murcia, Spain.

Michel, M. (2017). Complexity, accuracy and fluency in L2 production. In S. Loewen & M. Sato (Eds.), *The Routledge handbook of instructed second language acquisition* (pp. 50–68). Routledge.

Miller, L., Hafner, C. A., & Fun, C. N. K. (2012). Project-based learning in a technologically enhanced learning environment for second language learners: Students' perceptions. *E-Learning and Digital Media, 9*(2), 183–195.

Mishan, F. (2004). Authenticating corpora for language learning: a problem and its resolution. *ELT Journal, 58*(3), 219–227.

Mishan, F. (2005). *Designing authenticity into language learning materials*. Intellect Books.

Mishan, F., & Strunz, B. (2003). An application of XML to the creation of an interactive resource for authentic language learning tasks. *ReCALL, 15*(2), 237–250.

Mohamad, M., Ismail, I. S., Wahab, N., & Mamat, S. (2016). Medical students' challenges and strategies in producing web TV programs on YouTube. *Creative Education, 7*(4), 604–618.

Mora, J. C., & Valls-Ferrer, M. (2012). Oral fluency, accuracy, and complexity in formal instruction and study abroad learning contexts. *TESOL Quarterly, 46*(4), 610–641.

Morgan, H. (2014). *The infographic resume: How to create a visual portfolio that showcases your skills and lands the job*. McGraw Hill Professional.

Morrow, K. (1977). Authentic texts and ESP. In S. Holden (Ed.), *English for specific purposes* (pp. 13–17). Modern English Publications.

Mozaffari, A., & Moini, R. (2014). Academic words in education research articles: A corpus study. *Procedia-Social and Behavioral Sciences, 98,* 1290–1296.

Munday, J., Rowley, J., & Polly, P. (2017). The use of visual images in building professional self-identities. *International Journal of ePortfolio, 7*(1), 53–65.

Munby, J. (1981). *Communicative syllabus design: A sociolinguistic model for designing the content of purpose-specific language programmes*. Cambridge University Press.

Murray, N. (2010). Pragmatics, awareness raising, and the cooperative principle. *ELT Journal, 64*(3), 293–301.

Nahar, M. (2013). The moves in the application letters of PT polysindo eka Perkasa's applicants. *Ragam Jurnal Pengembangan Humaniora, 13*(2), 81–93.

Nation, I. (2001). *Learning vocabulary in another language*. Cambridge University Press.

Neddar, B. A. (2012). Short notes on discourse, interlanguage pragmatics and EFL teaching: Where do we stand? *Procedia-Social and Behavioral Sciences*, *46*, 5687–5692.

Nicholas, B. J., Rossiter, M. J., & Abbott, M. L. (2011). The power of story in the ESL classroom. *Canadian Modern Language Review, 67*(2), 247–268.

Nikitina, L. (2009). Student video project as a means to practice constructivist pedagogy in the foreign language classroom. *Journal of Educators & Education/Jurnal Pendidik Dan Pendidikan, 24, 165–176*.

Nikitina, L. (2011). Creating an authentic learning environment in the foreign language classroom. *International Journal of Instruction 4*(1), 33–46.

Nitta, R., & Baba, K. (2014). Task repetition and L2 writing development: A longitudinal study from a dynamic systems perspective. In H. Byrnes & R. M. Manchón (Eds.), *Task-based language learning insights from and for L2 writing* (pp. 107–136). John Benjamins.

Nitta, R., & Baba, K. (2015). Self-regulation in the evolution of the ideal L2 self: A complex dynamic systems approach to the L2 motivational self-system. In Z. Dörnyei, P. D. MacIntyre & A. Henry (Eds.), *Motivational dynamics in language learning* (pp. 374–404). Multilingual Matters.

Nordstrom, K., & Korpelainen, P. (2011). Creativity and inspiration for problem solving in engineering education. *Teaching in Higher Education, 16*(4), 439–450.

Norris, J. M., & Ortega, L. (2009). Towards an organic approach to investigating CAF in instructed SLA: The case of complexity. *Applied Linguistics, 30*(4), 555–578.

Nunan, D. (1988). Principles for designing language teaching materials. *Guidelines: A Periodical for Classroom Language Teachers, 10*(2), 1–24.

O'Brien, A. (2005). Filmmaking across the curriculum. *Screen Education,* (38), 87–90.

Op't Eynde, P., & Turner, J. E. (2006). Focusing on the complexity of emotion issues in academic learning: A dynamical component systems approach. *Educational Psychology Review, 18*(4), 361–376.

Ortega, L. (2003). Syntactic complexity measures and their relationship to L2 proficiency: A research synthesis of college-level L2 writing. *Applied Linguistics, 24*(4), 492–518.

Ortega, L. (2012). Interlanguage complexity. In B. Kortmann & B. Szmrecsanyi (Eds.), *Linguistic complexity: Second language acquisition, indigenization, contact* (pp. 127–155). De Gruyter.

Oura, G. K. (2001). Authentic task-based materials: Bringing the real world into the classroom. *Sophia Junior College Faculty Bulletin, 21*, 65–84.

Palalas, A. (2011). ESP for busy college students. *IALLT Journal of Language Learning Technologies, 41*(1), 108–136.

Pallotti, G. (2009). CAF: Defining, refining and differentiating constructs. *Applied Linguistics*, *30*(4), 590–601.

Pallotti, G. (2015). A simple view of linguistic complexity. *Second Language Research, 31*(1), 117–134.

Panagiotarou, A., Stamatiou, Y. C., Pierrakeas, C. J., & Kameas, A. (2020). Gamification acceptance for learners with different E-skills. *International Journal of Learning, Teaching and Educational Research, 19*(2), 263–278.

Pangrazio, L. (2016). Reconceptualising critical digital literacy. *Discourse: Studies in the cultural politics of education*, *37*(2), 163–174.

Papert, S., & Harel, I. (1991). *Constructionism: Research reports and essays, 1985–1990*. Ablex Publishing Corporation.

Pazaver, A., & Wang, H. (2009). Asian students' perceptions of grammar teaching in the ESL classroom. *The International Journal of Language Society and Culture*, *27*, 27–35.

Pekrun, R., Goetz, T., Titz, W., & Perry, R. P. (2002). Academic emotions in students' self-regulated learning and achievement: A program of qualitative and quantitative research. *Educational Psychologist, 37*(2), 91–105.

Piaget, J. (1970). Piaget's theory. In P. H. Mussen (Ed.), C*armichael's manual of child psychology* (pp. 703–732). Wiley.

Pine, G. J. (2009). *Teacher action research: Building knowledge democracies*. Sage.

Pinquart, M., Juang, L. P., & Silbereisen, R. K. (2003). Self-efficacy and successful school-to-work transition: A longitudinal study. *Journal of Vocational Behavior, 63*(3), 329–346.

Pirhonen, J., & Rasi, P. (2017). Student-generated instructional videos facilitate learning through positive emotions. *Journal of Biological Education, 51*(3), 215–227.

Poeppelman, T., & Blacksmith, N. (2014). Personal branding via social media: Increasing SIOP visibility one member at a time. *TIP: The Industrial-Organizational Psychologist, 51*(3), 112–119.

Polio, C., & Shea, M. C. (2014). An investigation into current measures of linguistic accuracy in second language writing research. *Journal of Second Language Writing, 26*, 10–27.

Porto, S., & Walti, C. (2010). Lifelong learning links in the ePortfolio. In J. Liebowitz & M.S. Frank (Eds.), *Knowledge management and e-learning* (pp. 219–252). Francis and Taylor.

Precht, K. (2000). *Patterns of stance in English.* [Unpublished doctoral dissertation]. Northern Arizona University.

Prior, P. (2013). Multimodality and ESP research. In B. Paltridge & S. Starfield (Eds.), *The handbook of English for specific purposes* (pp. 519–534). John Wiley & Sons.

Ferrari, A. (2013). *DigComp: A framework for developing and understanding digital competence in Europe (*EUR 26035). JRC Science and Policy Reports. Publications Office of the European Union.

Rafaeli, A., & Harness, A. (2000). Validating your merit in letters of application for employment. *Journal of Mundane Behavior, 1*(2), 180–199.

Rafaeli, A., & Harness, A. (2002). Validation of self-presentation: Theory and findings from letters of application for employment. *Advances in Qualitative Organization Research, 4*(1), 1–37.

Rahim, M. I., & Zainal Arifin, M. (2014). Analysis of schematic structure of job application letters of a Malaysian company. *Esteem Academic Journal, 10*(2), 114–123.

Raimes, A. (1983). *Techniques in teaching writing*. Oxford University Press.

Rainie, L., & Anderson, J. (2017). *The future of jobs and jobs training*. Pew Research Center.

Reitmaier, T., Bidwell, N. J., & Marsden, G. (2011). Situating digital storytelling within African communities. *International Journal of Human-Computer Studies, 69*(10), 658–668.

Redecker, C. (2017). *European framework for the digital competence of educators: DigCompEdu* (EUR 28775). Publications Office of the European Union. http://doi.org/ 10.2760/178382

Reyes, S. A., & Vallone, T. L. (2007). *Constructivist strategies for teaching English language learners*. Corwin Press.

Ring, G., Weaver, B., & Jones Jr, J. J. (2009). Electronic portfolios: Engaged students create multimedia-rich artifacts. *Journal of the Research Center for Educational Technology, 4*(2), 103–114.

Rivers, C., & O'Brien, J. (2018). Developing business-ready graduates – Teaching inside out. In H. T. M. Bui, H. T. M. Nguyen & D. Cole (Eds.), *Innovate higher education to enhance graduate employability: Rethinking the possibilities* (pp. 83–94). Routledge.

Rolls, J. A., & Strenkowski, M. (1993). V*ideo technology: Resumes of the future* [Paper presentation]. 8th World Conference on Co-operative ICJ Education, Dublin City University, Dublin.

Rose, K. R. & Kasper, G. (Eds.). (2001). *Pragmatics in Language Teaching*. Cambridge University Press.

Ross, C. M. (2010). Preparing for a career in recreation. In C. A Stevens, J. F. Murphy, L. R. Allen & E. A. Sheffield (Eds.), *A career with meaning: recreation, parks, sport management, hospitality, and tourism* (pp. 361–382). Sagamore Publishing.

Roth, P. L., Bobko, P., Van Iddekinge, C. H., & Thatcher, J. B. (2016). Social media in employee-selection-related decisions: A research agenda for uncharted territory. *Journal of Management, 42*(1), 269–298.

Sala, A., Punie, Y., Garkov, V., & Cabrera, M. (2020). *LifeComp: The European framework for personal, social and learning to learn key competence (*EUR 30246 EN). Publications Office of the European Union.

Salah, S. M. (2008). *The relationship between vocabulary knowledge and reading comprehension of authentic Arabic texts*. Brigham Young University.

Sancha, I., & Gutiérrez, S. (2016). *Vocational education and training in Europe–Spain*. Fundación Estatal para la Formación en el Empleo (Cedefop ReferNet Spain). https://bit.ly/VETinEurope

Sánchez, A., & Manchón, R. M. (2014). *Direct & indirect written corrective feedback: Effects on noticing and uptake* [Paper presentation]. AESLA Conference, University Pablo Olavide, Sevilla.

Sas, C. (2016, January 28–29). *Technologies for employability* [Paper presentation]. HEA Conference Transforming Teaching and Learning in STEM. Nottingham, UK.

Savickas, M. L. (2011). Constructing careers: Actor, agent, and author. *Journal of Employment Counselling, 48*(4), 179–181.

Saye, J., & Brush, T. (2001). The use of embedded scaffolds with hypermedia-supported student-centered learning. *Journal of Educational Multimedia and Hypermedia, 10*(4), 333–356.

Sayer, P. (2005). An intensive approach to building conversation skills. *ELT Journal, 59*(1), 14–22.

Scardamalia, M., & Bereiter, C. (1987). Knowledge telling and knowledge transforming in written composition. *Advances in Applied Psycholinguistics*, *2*, 142–175.

Schmidt, R. W. (1990). The role of consciousness in second language learning. *Applied Linguistics*, *11(2)*, 129–158.

Schmidt, R. W. (2001). Attention. In P. Robinson (Ed.) *Cognition and second language instruction* (pp. 3–32). Cambridge University Press.

Schuck, S., & Kearney, M. (2006). Capturing learning through student-generated digital video. *Australian Educational Computing, 21*(1), 15–20.

Schworm, S., & Gruber, H. (2012). E-Learning in universities: Supporting help-seeking processes by instructional prompts. *British Journal of Educational Technology, 43*(2), 272–281.

Secules, T., Herron, C., & Tomasello, M. (1992). The effect of video context on foreign language learning. *The Modern Language Journal, 76*(4), 480–490.

Selber, S., & Selber, S. A. (2004). *Multiliteracies for a digital age*. SIU Press.

Sevilla-Pavón, A., Serra-Cámara, B., & Gimeno-Sanz, A. (2012). The use of digital storytelling for ESP in a technical English course for aerospace engineers. *The Eurocall Review, 20*(2), 68–79.

Sheen, Y. (2007). The effect of focused written corrective feedback and language aptitude on ESL learners' acquisition of articles. *TESOL Quarterly, 41*, 255–283.

Sheen, Y., Wright, D., & Moldawa, A. (2009). Differential effects of focused and unfocused written correction on the accurate use of grammatical forms by adult ESL learners. *System, 37*(4), 556–569.

Shevchenko, M. (2017). Multimedia as an ESP teaching aid at technical universities. *Science Rise. Pedagogical Education,* (4), 4–8.

Shintani, N., & Ellis, R. (2013). The comparative effect of direct written corrective feedback and metalinguistic explanation on learners' explicit and implicit knowledge of the English indefinite article. *Journal of Second Language Writing, 22*, 286–306. http://dx.doi.org/10.1016/j.jslw.2013.03.011

Shintani, N., Ellis, R., & Suzuki, W. (2014). Effects of written feedback and revision on learners' accuracy in using two English grammatical structures. *Language Learning, 64*(1), 103–131.

Shrum, J. L., & Glisan, E. W. (2000). *Teacher's handbook: Contextualized language instruction (2nd Ed.).* Heinle & Heinle.

Skehan, P. (1998). *A cognitive approach to language learning.* Oxford University Press.

Skehan, P. (2009). Modelling second language performance: Integrating complexity, accuracy, fluency, and lexis. *Applied Linguistics, 30*(4), 510–532.

Skehan, P., & Foster, P. (1999). The influence of task structure and processing conditions on narrative retellings. *Language Learning*, *49*(1), 93–120.

Sibson, R., & Roepen, D. (2016). *Evaluating the use of a career ePortfolio in the development of business students' professional identities* [Paper presentation]. EPortfolio Australia Forum 2016: Connecting learning to the future (pp. 53–60). ELearning Services.

Sildus, T. I. (2006). The effect of a student video project on vocabulary retention of first-year secondary school German students. *Foreign Language Annals*, *39*(1), 54–70.

Sinclair, G. (2010). *Exploring Canada's digital future* [Paper presentation]. Big Thinking, at the Congress of the Humanities and Social Sciences, Concordia University, Montréal, Québec.

Sokolova, E. Y., Golovacheva, E., & Chernaya, A. (2015). Professionally-oriented communicative language teaching approach by the design of a computer assisted ESP course: Analysis of results. *Procedia-Social and Behavioural Sciences, 215,* 191–195.

Soldi, R., Cavallini, S., Friedl, J., Volpe, M., & Zuccaro, C. P. (2016). *A new skills agenda for Europe*. Publications Office of the European Union. http://doi.org/10.2863/708323

Soroko, E. (2012). The presentation of self in letters of application: A mixed-methodology approach. *Journal of Employment Counseling, 49*(1), 4–17.

Spelleri, M. (2002). From lessons to life: Authentic materials bridge the gap. *ESL Magazine, 5*(2), 16–18.

Spring, R. (2020). Can video-creation project work affect students' oral proficiency? An analysis of fluency, complexity and accuracy. *TESL-EJ, 24*(2), 1–17.

Stahl, E., Finke, M., & Zahn, C. (2006). Knowledge acquisition by hypervideo design: An instructional program for university courses. *Journal of Educational Multimedia and Hypermedia, 15*(3), 285–302.

Stacey, G., & Hardy, P. (2011). Challenging the shock of reality through digital storytelling. *Nurse Education in Practice, 11*(2), 159–164.

Stanbury, D. (2005). *Careers education benchmark statement*. Association of Graduate Career Advisory Services (AGCAS).

Stefanou, C., & Révész, A. (2015). Direct written corrective feedback, learner differences, and the acquisition of second language article use for generic and specific plural reference. *The Modern Language Journal, 99*(2), 263–282.

Stevens, B. (2005). What communication skills do employers want? Silicon Valley recruiters respond. *Journal of Employment Counselling, 42*(1), 2–9.

Storch, N. (2009). The impact of studying in a second language (L2) medium university on the development of L2 writing. *Journal of Second Language Writing, 18*(2), 103–118.

Storch, N., & Tapper, J. (2009). The impact of an EAP course on postgraduate writing. *Journal of English for Academic Purposes, 8*(3), 207–223.

Storch, N., & Wigglesworth, G. (2007). Writing tasks: The effects of collaboration. In M.P. Garcia Mayo (Ed.), *Investigating tasks in formal language learning* (pp. 157–177). Multilingual Matters.

Storch, N., & Wigglesworth, G. (2010). Learners' processing, uptake, and retention of corrective feedback on writing. Case studies. *Studies in Second Language Acquisition, 32*, 303–334.

Stoughton, J. W., Thompson, L. F., & Meade, A. W. (2015). Examining applicant reactions to the use of social networking websites in pre-employment screening. *Journal of Business and Psychology, 30*(1), 73–88.

Su, Sh. (2007). *Attitudes of students and instructors toward textbook-based language skills and authentic materials in selected adult English as a second language programs* [Doctoral dissertation], Spalding University.

Sultana, R. G. (2012). Career guidance from a lifelong learning perspective: Issues for Europe and beyond. *International Journal of Continuing Education and Lifelong Learning, 4*(2), 51–63.

Swales, J. (1990). *Genre analysis: English in academic and research settings*. Cambridge University Press.

Tangpijaikul, M. (2014). Preparing business vocabulary for the ESP classroom. *RELC Journal, 45*(1), 51–65.

Tavakoli, P., & Foster, P. (2011). Task design and second language performance: The effect of narrative type on learner output. *Language Learning*, *61*, 37–72.

Tavakoli, P., & Skehan, P. (2005). Strategic planning, task structure and performance testing. In R. Ellis (Ed.), *Planning and task performance in a second language* (pp. 239–273). John Benjamins.

Tavakoli, P., Campbell, C., & McCormack, J. (2015). Development of speech fluency over a short period of time: effects of pedagogic intervention. *TESOL Quarterly*, *50*(2), 447–471.

Tedick, D. J. (1990). ESL writing assessment: Subject-matter knowledge and its impact on performance. *English for Specific Purposes, 9*(2), 123–143.

Tello Rueda, Y. (2006). Developing pragmatic competence in a foreign language. *Colombian Applied Linguistics Journal*, 8, 169–182.

Theodosakis, N. (2001). T*he director in the classroom: How filmmaking inspires learning*. Tech4Learning Publishing.

Thompson, R. A., & Lagattuta, K. H. (2006). Feeling and understanding: Early emotional development. In K. McCartney & D. Phillips (Eds.), *Blackwell handbook of early childhood development* (pp. 317–337). Blackwell Publishing.

Tomlinson, B. (2012). Materials development for language learning and teaching. *Language Teaching, 45*(2), 143–179.

Tomlinson, M. (2017). Introduction: Graduate employability in context: Charting a complex, contested and multi-faceted policy and research field. In M. Tomlinson & L. Holmes (Eds.), *Graduate employability in context: Theory, research and debate* (pp. 1–40). Palgrave Macmillan.

Tonkyn, A. (2012). Measuring and perceiving changes in oral complexity, accuracy and fluency. In A. Housen, F. Kuiken & I. Vedder (Eds.), *Dimensions of L2 performance and proficiency* (pp. 221–245). John Benjamins.

Thumnong, P., & Tongpoon-Patanasorn, A. (2017). A genre analysis of job application letters written by ASEAN applicants. In *Proceedings of the Asian conference on education and international development 2017: Educating for change* (pp. 357–368). The International Academic Forum (IAFOR).

Tongpoon-Patanasorn, A., & Thumnong, P. (2020). Move and politeness strategies in job application letters in ASEAN contexts. *LEARN Journal: Language Education and Acquisition Research Network, 13*(2), 105–125.

Toth, C. (2013). Revisiting a genre: Teaching infographics in business and professional communication courses. *Business Communication Quarterly, 76*(4), 446–457.

Truscott, J. (2007). The effect of error correction on learners' ability to write accurately. *Journal of Second Language Writing*, 16(4), 255–272.

Tsai, S. (2011). Courseware integration into task-based learning: A case study of multimedia courseware-supported oral presentations for non-English major students. *ReCALL, 23*(2), 117–134.

Tsai, S. (2013). Integrating English for specific purposes courseware into task-based learning in a context of preparing for international trade fairs. *Australasian Journal of Educational Technology, 29*(1), 111–127.

Tseng, M. Y. (2010). Analyzing the discourse of job-application videos: performance and relevance. *Text & Talk*, *30*(5), 571–589.

Turner, P., & Turner, S. (2009). Triangulation in practice. *Virtual Reality*, *13*(3), 171–181.

Upton, T. A., & Connor, U. (2001). Using computerized corpus analysis to investigate the text linguistic discourse moves of a genre. *English for Specific Purposes*, *20*(4), 313–329.

Uso-Juan, E., & Martinez-Flor, A. (2006). Fostering ESP learners' ability to communicate appropriately: An example based on softening requests. In *Proceedings of the 5th international AELFE conference* (pp. 449–456). Prensas Universitarias de Zaragoza.

Vahabi, M., & Sadeh, N. (2011). An investigation of ICT role in ESP: An implication for technical education. *The Journal for ESL Teachers and Learners, 2011,* 209–213.

Vaish, V., & Towndrow, P. A. (2010). Multimodal literacy in language classrooms. In N. H. Hornberger & S. L. McKay (Eds.), *Sociolinguistics and language education* (pp. 317–345). Multilingual Matters.

Valipouri, L., & Nassaji, H. (2013). A corpus-based study of academic vocabulary in chemistry research articles. *Journal of English for Academic Purposes, 12*(4), 248–263.

Van Beuningen, C. G., de Jon, N. H., & Kuiken, F. (2008). The effect of direct and indirect corrective feedback on L2 learners' written accuracy. *ITL-Review of Applied Linguistics*, *156*, 279–296.

Van Beuningen, C. G., de Jon, N. H., & Kuiken, F. (2012). Evidence on the effectiveness of comprehensive error correction in Dutch multilingual classrooms. *Language Learning*, 62, 1–41.

Vaughan, K. (2011). The potential of career management competencies for renewed focus and direction in career education. *New Zealand Annual Review of Education, 20*(2010), 24–51.

Vasylets, O., Gilabert, R., & Manchón, R. M. (2020). Task modality, communicative adequacy and CAF measures. In R. M. Manchón (Ed.), *Writing and language learning: Advancing research agendas*, (pp. 183–206). John Benjamins Publishing Company.

Velazquez, A. C., & Redmond, M. L. (2007). The use of authentic texts in the K-12 Spanish program. In L. P. McCoy (Ed.), *Studies in teaching 2007 research digest. Research projects presented at annual research forum* (pp. 133–138). Wake Forest University.

Vercellotti, M. L. (2017). The development of complexity, accuracy, and fluency in second language performance: A longitudinal study. *Applied Linguistics, 38*(1), 90–111.

Vičič, P. (2011). Preparing materials for ESP teaching. *Inter Alia, 2*, 107–120.

Vuorikari, R., Punie, Y., Gomez, S. C., & Van Den Brande, G. (2016). *DigComp 2.0: The digital competence framework for citizens. Update phase 1: The conceptual reference model (EUR 27948 EN)*. Publications Office of the European Union.

Vuorinen, R., & Watts, A. G. (2012). *Lifelong guidance policy development: A European resource kit*. University of Jyväskylä.

Vygotsky, L.S. (1962). *Thought and language*. MIT Press.

Vygotsky, L.S. (1978). *Mind in society. The development of higher psychological processes*. Harvard University Press.

Wang, H. (2005). A pragmatic genre analysis of job application letters. *Sino-US English Teaching, 2*(12), 76–81.

Wang, S., & Reeves, T. C. (2007). The effects of a web-based learning environment on student motivation in a high school earth science course. *Educational Technology Research and Development, 55*(2), 169–192.

Wallace, M. J. (1998). *Action research for language teachers*. Cambridge University Press.

Watts, A. G. (2006). Career development learning and employability. In M. Yorke (Ed.). *Learning and employability series 2*. The Higher Education Academy.

Waung, M., Hymes, R. W., & Beatty, J. E. (2014). The effects of video and paper resumes on assessments of personality, applied social skills, mental capability, and resume outcomes. *Basic and Applied Social Psychology*, *36*(3), 238–251.

Waung, M., McAuslan, P., DiMambro, J.M., Mięgoć, N. (2017). Impression management use in resumes and cover letters. *Journal of Business and Psychology* 32(6), 727–746.

West, M. (1953). *The teaching of English: A guide to the new* methodology *series*. Longman.

Widodo, H. P. (2016). Teaching English for specific purposes (ESP): English for vocational purposes (EVP). In W. A. Renandya & H. P. Widodo (Eds.), *English language teaching today* (pp. 277–291). Springer.

Wigglesworth, G., & Storch, N. (2009). Pair versus individual writing: Effects on fluency, complexity and accuracy. *Language Testing*, *26*(3), 445–466.

Wilkins, D. (1976). *Notional syllabuses*. Oxford University Press.

Williams, S., Dodd, L. J., Steele, C., & Randall, R. (2016). A systematic review of current understandings of employability. *Journal of Education and Work, 29*(8), 877–901.

Willmot, P., Bramhall, M., & Radley, K. (2011). Introducing audio-visual media for inspirational learning and positive engagement. In J. Bernardino & J. C. Quadrado (Eds.), *Proceedings of the SEFI International Annual Conference* (pp. 420–426). SEFI. http://www.sefi.be/wp-content/papers2011/T9/14.pdf

Wilton, N. (2014). Employability is in the eye of the beholder employer decision-making in the recruitment of work placement students. *Higher Education, Skills and Work-Based Learning, 4*(3), 242–255.

Wind, A. M. (2012). Second language writing development from a dynamic systems theory perspective. In B. P. Olmos-López & J. H., Joao Almeida (Eds.), *Papers from the Lancaster University Postgraduate Conference in Linguistics & Language Teaching,* 8 (pp. 90–123). Lancaster University.

Wolfe-Quintero, K., Inagaki, S., & Kim, H. Y. (1998). *Second language development in writing: Measures of fluency, accuracy, & complexity*. University of Hawaii Press.

Woo Y., Herrington, J. A., Agostinho, S. & Reeves, T. C. (2007). Implementing authentic tasks in web-based learning environments. *Educause Quarterly, 30(3),* 36–43.

Xudong, D., Cheng, L. K., Varaprasad, C., & Leng, L. M. (2010). Academic writing development of ESL/EFL graduate students in NUS. *Reflections on English Language Teaching, 9*(2), 119–138.

Yamak, L. A. (2008). Student documentaries: A language learning tool. *English Teaching Forum, 46*(2), 20–27.

Yorke, M. (2006). Employability in higher education: What it is – What it is not? In M. Yorke (Ed.), *Learning and employability series 1*. The Higher Education Academy.

Young, R. F. (2011). Interactional competence in language learning, teaching, and testing. In E. Hinkel (Ed.), *Handbook of research in second language teaching and learning, 2 (*pp. 426–443). Routledge.

Young, S. (2019, January 28). DOTS model by Law and Watts. https://www.cdanz.org.nz/te-mohiotanga/law-and-watt-s-dots-model/278/

Yunxia, Z. (1997). An analysis of structural moves in Chinese sales letters. *Text-Interdisciplinary Journal for the Study of Discourse, 17*(4), 543–566.

Zahn, C., Hesse, F., Finke, M., Pea, R., Mills, M., & Rosen, J. (2005). Advanced video technologies to support collaborative learning in school education and beyond. In T. Koschmann, D. Suthers & T. Chan (Eds.), *Proceedings of the International Conference on Computer Supported Collaborative Learning 2005* (pp. 737–742). International Society of the Learning Sciences.

Zahn, C., Pea, R., Hesse, F. W., & Rosen, J. (2010). Comparing simple and advanced video tools as supports for complex collaborative design processes. *The Journal of the Learning Sciences, 19*(3), 403–440.

Zakaria, N., Yamin, A., & Maarof, R. (2017, May). *Career management skills among vocational students* [Paper presentation]. International Research and Innovation Summit (IRIS2017) 226. IOP Conference Series: Materials Science and Engineering. http://doi.org/10.1088/1757-899X/226/1/012187

Zamel, V. (1983). The composing processes of advanced ESL students: Six case studies. *TESOL Quarterly, 17*(2), 165–188.

Zegwaard, K. E., Campbell, M., & Pretti, T. J. (2017). Professional identities and ethics: The role of work-integrated learning in developing agentic professionals. In T. Bowen & M. T. B. Drysdale (Eds.), *Work-integrated learning in the 21st century international perspectives on education and society*, 32 (pp. 145–160). Emerald Publishing Limited.

Zeng, B. (2005). The process-oriented approach to ESL/EFL writing instruction and research. *Celea Journal, 28*(5), 66–70.

Zhabo, N., Avdonina, M., Grigorian, N., Sdobnova, Y., & Ryabinin, A. (2018). Learning foreign languages for specific purposes through video creation by students. In L. Gómez, A. López & I. Candel (Eds.), *International Conference of Education, Research and Innovation – ICERI2018 Proceedings* (pp. 8828–8833). IATED Academy. http://doi.org/ 10.21125/iceri.2018

Živković, S. (2016). The ESP technology-supported learning environment. *European Journal of Social Science Education and Research, 3*(1), 154–162.

APPENDICES

Appendix A – Frameworks

A1 *The Digital Competence Framework for Citizens (DigComp)*

1	Information and data literacy

1.1	Browsing, searching and filtering data, information and digital content

To articulate information needs, to search for data, information and content in digital environments, to access them and to navigate between them. To create and update personal search strategies.

1.2	Evaluating data, information and digital content

To analyse, compare and critically evaluate the credibility and reliability of sources of data, information and digital content. To analyse, interpret and critically evaluate the data, information and digital content.

1.3	Managing data, information and digital content

To organise, store and retrieve data, information and content in digital environments. To organise and process them in a structured environment.

2	Digital communication and collaboration

2.1	Interacting through digital technologies

To interact through a variety of digital technologies and to understand appropriate digital communication means for a given context.

2.2	Sharing through digital technologies

To share data, information and digital content with others through appropriate digital technologies. To act as an intermediary, to know about referencing and attribution practices.

2.3	Engaging in citizenship through digital technologies

To participate in society through the use of public and private digital services. To seek opportunities for self-empowerment and for participatory citizenship through appropriate digital technologies.

2.4	Collaborating through digital technologies

To use digital tools and technologies for collaborative processes, and for co-construction and co-creation of resources and knowledge.

2.5	Netiquette

To be aware of behavioural norms and know-how while using digital technologies and interacting in digital environments. To adapt communication strategies to the specific audience and to be aware of cultural and generational diversity in digital environments.

2.6	Managing digital identity

To create and manage one or multiple digital identities, to be able to protect one's own reputation, to deal with the data that one produces through several digital tools, environments and services.

3	Digital content creation
3.1	**Developing digital content** To create and edit digital content in different formats, to express oneself.
3.2	**Integrating and re-elaborating digital content** To modify, refine, improve and integrate information and content into an existing body of knowledge to create new, original and relevant content and knowledge.
3.3	**Copyright and licences** To understand how copyright and licences apply to data, information and digital content.
3.4	**Programming** To plan and develop a sequence of understandable instructions for a computing system to solve a given problem or perform a specific task.

4	Safety
4.1	**Protecting devices** To protect devices and digital content, and to understand risks and threats in digital environments. To know about safety and security measures and to have due regard to reliability and privacy.
4.2	**Protecting personal data and privacy** To protect personal data and privacy in digital environments. To understand how to use and share personally identifiable information while being able to protect oneself and others from damages. To understand that digital services use a "Privacy policy" to inform how personal data is used.
4.3	**Protecting health and well-being** To be able to avoid health-risks and threats to physical and psychological well-being while using digital technologies. To be able to protect oneself and others from possible dangers in digital environments (e.g. cyber bullying). To be aware of digital technologies for social wellbeing and social inclusion.
4.4	**Protecting the environment** To be aware of the environmental impact of digital technologies and their use.

5	Problem-solving
5.1	**Solving technical problems** To identify technical problems when operating devices and using digital environments, and to solve them (from trouble-shooting to solving more complex problems).
5.2	**Identifying needs and technological responses** To assess needs and to identify, evaluate, select and use digital tools and possible technological responses to solve them. To adjust and customise digital environments to personal needs (e.g. accessibility).
5.3	**Creatively using digital technologies** To use digital tools and technologies to create knowledge and to innovate processes and products. To engage individually and collectively in cognitive processing to understand and resolve conceptual problems and problem situations in digital environments.
5.4	**Identifying digital competence gaps** To understand where one's own digital competence needs to be improved or updated. To be able to support others with their digital competence development. To seek opportunities for self-development and to keep up-to-date with the digital evolution.

A2 *Career Education Framework*

Self-awareness
Identify knowledge, abilities and transferable skills developed by one's degree.
Identify personal skills and how these can be deployed.
Identify one's interests, values and personality in the context of vocational and life planning.
Identify strengths and weaknesses, and areas requiring further development.
Develop a self-reflective stance to academic work and other activities.
Synthesize one's key strengths, goals and motivations into a rounded personal profile.
Opportunity awareness
Demonstrate knowledge of general trends in graduate employment and opportunities for graduates in one's discipline.
Demonstrate understanding of the requirements of graduate recruiters.
Demonstrate research-based knowledge of typical degree-related career options and options in which one is interested.
Decision-making
Identify the key elements of career decision-making, in the context of life planning.
Relate self-awareness to knowledge of different opportunities.
Evaluate how personal priorities may impact upon future career options.
Devise a short-/medium-term career development action plan.
Identify tactics for addressing the role of chance in career development.
Review changing plans and ideas on an ongoing basis.
Transition learning
Demonstrate understanding of effective opportunity-search strategies.
Apply understanding of recruitment/selection methods to applications.
Demonstrate ability to use relevant vacancy information, including ways of accessing unadvertised vacancies.
Identify challenges and obstacles to success in obtaining suitable opportunities, and strategies for addressing them.
Demonstrate capacity to vary self-presentation to meet requirements of specific opportunities.
Demonstrate ability to present oneself effectively in selection interviews and other selection processes.
Identify challenges and obstacles to adapting successfully to new environments, and strategies for addressing them.
Demonstrate awareness of attitudes crucial to the achievement of one's goals.

Appendix B – Instruction-Related Materials

B1 *Home Page of Project Wiki*

B2 *Weekly Menu of Project Wiki*

B3 *Wiki's 'Surveys' Page*

B4 *Sample of 'Week's Sessions' Page*

B5 *Task to Select a Vacancy*

IT- COMPUTERS
IT TECHNICIAN
IT SUPPORT TECHNICIAN
SYSTEM ADMINISTRATOR

AUDIOVISUAL
AV LONDON
AV TECHNICIAN LONDON
AV TECHNICIAN LIVE EVENTS LONDON

JUNIOR
JUNIOR SERVICE DESK TECHNICIAN (Reading, UK)
JUNIOR TECHNICIAN ELECTRONICS- CIRCUITS DIAGRAMS (Workingham, UK)
DIGITAL APPRENTICE TECHNICIAN (LONDON)

INTERNSHIPS
INTERNSHIP TECHNOLOGY
INTERNSHIP IT SUPPORT LONDON
INTERNSHIP PROJECT SUPPORT LONDON 3 MONTHS

ELECTRONICS
ELECTRONIC TECHNICIAN
PRODUCTION TECHNICIAN
ELECTRONIC ENGINEERING TECHNICIAN II

MECHANICS
GENERAL-PURPOSE MECHANICAL TECHNICIAN
GENERAL MECHANIC SERVICE TECHNICIAN

ELECTRICITY VACANCY

B7 *Example of Authentic Web-Based Text with Authentic Task*

Junior Service Desk Technician
Amsys
Reading

Our client, an exceptional IT support solutions company, a leading cross-platform Managed IT Service Provider and a trusted IT partner, serving throughout the UK, are now looking for a young and passionate 1st line cross platform engineer to join a friendly working environment that offers lots of development within their great team of IT experts.

Duties and Responsibilities

- The chosen candidate will be primary contact for logging support requests, by phone, email
- They will accurately qualify support requests within agreed service level timeframes
- They will be responsible for managing the service email mailbox
- They will be providing a First Time Fix for known support issues
- Seek customer approval for Pay-As-You-Go work
- Maintain a high standard of communication and customer service throughout the process

Technical skills

- Experience working in a help desk environment working on a call-logging or job-tracking system managing Incidents, as part of a service team in a hand-on role
- Mac OS X troubleshooting, configuration and installation experience
- Good functional understanding of Mac applications and technologies (launching, saving, printing etc..)
- Ability to access a customer's level of IT knowledge and adapt in communication and support methods to suit
- Ability to think logically
- Ability to develop good analytical and problem-solving skills
- Willingness to undertake relevant technical training to fulfil the role to the required standard

Personal skills

- Excellent communication, customer service and interpersonal skills
- Polite and courteous telephone manner
- Ability to understand and assess customer requirements
- Commitment to continuous personal and professional growth
- Ability to work to a high standard under pressure and adapt to different demands
- Good team player who is able to communicate concisely with other team members
- Excellent organization skills and ability to prioritize workload
- Able to accurately maintain systems and records
- To take part in administrative processes such as asset management, maintaining customer records and IT audit information and purchases.

Job Type: Full-time

Salary: £18,000.00 /year

Job Location:

- Reading

B8 *Example of Non-Authentic Text and Task*

1 Read the following texts.

JOB ADVERTS

1   **DATABASE ADMINISTRATOR** required by Technical Services, a private small business with more than 40 years of experience in providing solutions to government agencies.
You will have to install, troubleshoot, configure and maintain a database system. You will also monitor and optimise system performance.

5   The work requires knowledge of Oracle DB, SQL, MySQL, JavaScript and Microsoft Database Engine. A Bachelor's degree and 3-5 years experience is also desirable. As we are active in Europe, fluency in French and German is also a requirement.

If you are interested and meet all the requirements, send your CV to Josh Bale, Human Resources Manager, Technical Services. Falkirk Street 29, London TW56721.

Lookingforjobs.com

1   The UCL is holding the 30th international IT conference next year in London with more than 2,000 visitors from Russia and China. The event management team is looking for
5   Russian and Chinese **TRANSLATORS** and **INTERPRETERS**.

Requirements:
- Proficiency (C2) in English, Russian and Chinese (Official certificate required)
10   - Good understanding of Computer Science terms
- Good physical appearance

Contact: itconferenceucl30@xmail.com

JOB OPPORTUNITY

1   **TELECOM ENGINEER** required in Dubai. STC Company. Full-time job. Monthly salary: 4,000- 6,000 AED with variable bonus.

We are looking for a Telecom Engineer with a degree in Electronics and Communication.
5   The candidate should have at least 2 years of experience in Networking, Telecom and CCTV Systems. Fluency in Arabic is also necessary for the position.

The candidate should be residing in Dubai for
10   a long-term project.

Send your CV to Khalid Bin Mubarak, Emirates Road 311, Bur Dubai (UAE).

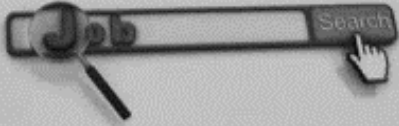**2** Read the three advertisements and comment the following ideas with your partner:

- Which job would you apply for? Why?
- Which job would you never apply for? Why not?
- What are the requirements for each job? Mention them.
- Do you find any requirement too difficult to meet?
- How can applicants contact the employers?
- Which advert do you like the most in terms of content and clarity?

B9 *Examples of Non-Authentic Task with Authentic Web-Based Texts*

B101 *Job-Application Programme*

Pre-instructional stage – S1	
T1	Pre-test 1
T2	Pre-test 2
T3	Pre-test 3
T4	Pre-questionnaire DIG
T5	Presentation of the project.
T6	Create the main page on the wiki.
T7	Write pre-test 1a and upload it to the wiki.
T8	Record pre-test 1b and upload it to the wiki.
T9	Video: 6 biggest myths about job-application videos (4:52)
T10	Modelling: job-application video of previous students
Instructional stage – S2 – Pre-production	
T1	Read vacancies and choose one. List 6 skills.
Objective	
T2	Reading comprehension.
T3	Write an objective for your résumé.
Education	
T4	List formal and non-formal education.
T5	Reflection questions: scholarships and relevance of information.
Skills	
T6	Take a Quizlet on skills.
T7	Analyse vacancy by taking a survey. List 6/7 main skills.
T8	Take the DISC questionnaire on a personal profile.
T9	Summarise the results of the DISC and give your opinion.
T10	Video "No work experience"/ Skills-based CV > standard CV.
T11	Match skills required in the vacancy with personal qualities.
T12	Video: expressions to talk about skills and talent (12:09)
Interests and hobbies	
T13	Reading comprehension
T14	Questions to help decide the relevance of hobbies
T15	Input on when to include hobbies
T16	Modelling listing résumé interests
Language skills	
T17	Self-assessment of Language knowledge (EU)

Digital skills	
T18	Tasks to analyse the relevance of digital skills for the position
T19	Collect information: objective, skills, education, interest and personality
T20	Modelling job-application video scripts of previous students
T21	Outline parts of job-application video script
T22	Welcome, introduction, objective
T23	Decide the order of information according to strong and weak points.
T24	Multimodal draft: information as on-screen text: contact details
T25	Video: expressions to talk about skills and talent (12:09)
T26	Draft text by following writing steps.
T27	Revise draft against suggested action verbs.
T28	Revise draft against suggested adjectives.
T29	Check it out: top words: are they in your résumé?
	Feedback on draft job-application video script
T30	Second draft of the script - Feedback
T31	Writing final version
T32	Self-assessment checklist SCRIPT
T33	Coaching session: challenges, body language and motivation
T34	Survey on the coaching session
T35	Filming tests, familiarisation with equipment and process
T36	Rehearsal, pronunciation support
T37	Filming
T38	Self-assessment checklist II FILMING
Instructional stage – S2 – Post-production	
T39	Editing
T40	Post-production
T41	Final survey and viewing
Post-instructional stage – S3	
T1	Post-test 1
T2	Post-test 2
T3	Post-test 3
T4	Post-questionnaire DIG
T5	FINAL questionnaire
T6	Viewing

B11 *DISC Personality Test*

DISC Personality Test

1a Las personas me respetan	15a No me asusto fácilmente.
1b Tiendo a ser una persona amable.	15b La gente encuentra mi compañía estimulante.
1c Acepto a la vida como viene.	15c Siempre estoy dispuesto a seguir órdenes.
1d La gente cree que mi personalidad es fuerte.	15d Soy más bien una persona tímida.
2a Encuentro difícil relajarme	16a Siempre estoy dispuesto a cambiar de opinión.
2b Tengo un círculo muy amplio de amigos.	16b Disfruto de una buena discusión.
2c Siempre estoy listo para ayudar a otros.	16c Soy una persona fácil de llevar.
2d Me gusta comportarme correctamente.	16d Siempre miro el lado positivo de la vida.
3a Tiendo a hacer lo que se me pide.	17a Soy una persona muy sociable.
3b Me gustan las cosas limpias y ordenadas.	17b Tengo bastante paciencia.
3c Las personas no pueden rebajarme.	17c Soy del tipo de personas auto−suficiente.
3d Disfruto haciendo cosas divertidas.	17d Raramente alzo mi voz.
4a Respeto a mis mayores y a la autoridad.	18a Siempre estoy listo y dispuesto.
4b Siempre estoy dispuesto a tomar riesgos.	18b Siempre busco probar cosas nuevas.
4c Creo que las cosas resultarán bien.	18c No me gustan las discusiones.
4d Siempre estoy dispuesto a ayudar.	18d Las personas me describen de espíritu alegre.
5a Soy una persona limpia y ordenada.	19a Disfruto asumiendo un riesgo.
5b Soy activo en el trabajo y en mi ocio.	19b Soy receptivo con las ideas de los demás.
5c Soy una persona tranquila y calmada.	19c Siempre soy cortés y educado.
5d Generalmente hago las cosas a mi manera.	19d Soy más moderada que extrema.
6a Estoy contento con la vida.	20a Soy un persona más bien indulgente.
6b Confío en las personas.	20b Soy una persona sensible.
6c Me gusta la tranquilidad y el silencio.	20c Tengo mucha energía y vigor.
6d Tengo una actitud muy positiva.	20d Me puedo mezclar en cualquier ambiente.
7a Tengo mucha fuerza de voluntad.	21a Disfruto conversando con las personas.
7b Pongo atención a lo que dicen los demás.	21b Controlo mis emociones.
7c Trato de ser servicial.	21c Soy muy convencional en mi apariencia.
7d Estoy siempre contento.	21d Tomo decisiones rápidamente.
8a Soy seguro de mí mismo.	22a Tiendo a guardar mis emociones para mí.
8b Las personas dicen que soy comprensiva.	22b La precisión es muy importante para mí.
8c Tengo una actitud tolerante hacia la vida.	22c Me gusta decir lo que se me viene a la cabeza.
8d Expreso mis opiniones con seguridad.	22d Soy muy amigable.

9a Nunca pierdo mi temperamento.	23a Me gusta manejar las cosas con diplomacia.
9b Me gustan las precisas y correctas.	23b Soy una persona muy osada.
9c Soy una persona muy segura de mí misma.	23c A la mayoría de las personas les caigo bien.
9d Disfruto de las bromas y chistes.	23d Me siento satisfecho con la vida.
10a Mi comportamiento es bien disciplinado.	24a Soy una persona obediente.
10b Las personas me ven como alguien amable.	24b Siempre estoy dispuesto a intentarlo.
10c Estoy siempre en movimiento.	24c Lealtad es una de mis fortalezas.
10d Persevero hasta que consigo lo que quiero.	24d Soy una persona atractiva para los demás.
11a Disfruto competir.	25a Tiendo a ser del tipo de persona agresiva.
11b No me tomo la vida muy seriamente.	25b Me gusta divertirme y tengo personalidad.
11c Siempre considero a los demás.	25c La gente me ve como fácil de conmover.
11d Soy una persona simpática.	25d Soy más bien una persona tímida.
12a Soy muy persuasivo.	26a Soy bueno motivando a los demás
12b Me veo a mí mismo como alguien calmado.	26b Paciencia es una de mis mayores fortalezas.
12c Tengo una actitud de modestia.	26c Soy cuidadoso en decir la frase correcta.
12d Usualmente se me ocurren ideas originales.	26d Tengo un fuerte deseo de ganar.
13a Me gusta mucho ayudar a otros.	27a Soy una persona fácil de llevar.
13b No me gusta tentar al destino.	27b Me da bastante satisfacción ayudar a otros.
13c No me rindo fácilmente.	27c Siempre pienso las cosas muy bien.
13d Las personas disfrutan mi compañía.	27d Prefiero hacer las cosas ahora que después.
14a Tiendo a ser una persona precavida.	28a Soy bueno analizando situaciones.
14b Soy una persona muy decidida.	28b Me vuelvo inquieto fácilmente.
14c Soy bueno convenciendo a los demás.	28c Pienso cómo mis decisiones afectan a otros.
14d Usualmente soy una persona amigable.	28d La gente me ven como relajado y fácil de tratar.

Appendix C – Instruments for Data Collection

C1 *DIG Questionnaire on Digital Skills*

Area 1. Information and Data Literacy

1.	Distingo un pendrive, memoria externa, disco duro externo, CD o DVD, entre otros.
2.	Guardo información en diferentes soportes (pendrive, CD, tarjeta memoria, etc.).
3.	Paso información de un ordenador a un móvil, cámara de fotos, MP3 u otro.
4.	Conecto móviles, ordenadores, impresoras o auriculares con cable, wifi o bluetooth.
5.	Identifico tipos de conexión de móviles u otros dispositivos (USB, RCA, HDMI, VGA, etc.).
6.	Reconozco terminología de cámaras de foto o vídeo (contraste, zoom, megapíxel, etc.).
7.	Grabo vídeos con cámaras digitales.
8.	Conecto una cámara de foto o video al ordenador.
9.	Identifico modos de escena en cámaras de video o foto (blanco/ negro, soleado, etc.).
10.	Paso fotos y videos de la cámara al ordenador.
11.	Instalo programas en un ordenador o móvil.
12.	Bajo o descargo programas a un ordenador.
13.	Utilizo programas para comprimir o ver archivos (WinZip, Adobe Acrobat, etc.).
14.	Reconozco el programa para abrir un archivo viendo su formato (pdf, jpg, mp3, doc, etc).
15.	Cambio el formato de un archivo para convertirlo en otro.
16.	Identifico formas de bajar música o películas.
17.	Diferencio distintas páginas web para enviar archivos grandes (WeTransfer, Sendspace).
18.	Bajo o descargo programas, fotos, música o películas.
19.	Cargo o envío archivos a través de enlaces o hipervínculo.
20.	Subo archivos, fotos, música, películas a páginas web.

Area 2. Communication and collaboration

21.	Reconozco programas para hacer presentaciones.
22.	Reconozco términos de presentaciones (diapositiva, fondo, efecto, transición, etc.).
23.	Hago, guardo e imprimo una presentación con PowerPoint u otro programa.
24.	Doy formato a una presentación cambiando el fondo, tipo de letra o añadiendo imágenes.
25.	Añado música, vídeo o animaciones a una presentación.
26.	Hago presentación con enlaces a un vídeo música o archivo de texto.
27.	Hago presentaciones con enlaces a un vídeo o música.
28.	Reconozco programas para ver vídeos o películas.
29.	Reconozco programas para editar vídeos o películas o archivos de texto.
30.	Reconozco las palabras más comunes de los programas de edición de video.
31.	Añado música, transiciones o títulos a un video.

Area 3. Digital content creation

32.	Reconozco cuando navego por blogs o wikis.
33.	Diferencio qué es una wiki, un blog y una red social.
34.	Identifico qué es y para qué sirve una wiki.
35.	Reconozco las palabras más comunes de una wiki (editar, página, historial, menú).
36.	Creo una wiki y edito una página.
37.	Añado una imagen, una canción o un vídeo en una wiki.

C1 *The SCRIPT Questionnaire*

Have you included the following?
1. Introduction
2. Objective
3. Current studies
4. Previous relevant studies
5. Work experience.
6. Interests and hobbies.
7. Language skills
8. Communication skills
9. Organisational skills
10. Problem-solving skills
11. Decision-making skills
12. Confidence
13. Motivation
14. Responsibility
15. Autonomy
16. Computer skills
17. Personal attributes
18. Closing: Suggest interview
19. Closing: Thanks for the time
20. Closing: Contact Information

Script
21. Do you see substantial differences between the first draft and the latest one?

Strategies
22. Have you translated from your mother tongue?
23. Have you used online dictionaries? Which ones?
24. Have you asked a classmate for help? What for?
25. Have you asked for help outside the classroom? What for?
26. Have you consulted examples of video applications? In which languages?

C2 *The FILM Questionnaire*

To what extent have you been aware of the following?

1. Look at camera
2. Rehearse
3. Keep right pace
4. Memorise the script
5. Expression (smile, gestures)
6. Body language (not too many gestures)
7. No filling words (um, ah...)
8. Body position (shoulders well placed)
9. Accurate pronunciation

Open questions

10. Briefly explain how you prepared for the filming.
11. Did you change any part of the script to make it simpler to film?
12. What was the most difficult part of the filming?
13. What aspects of the coaching session were useful to you in dealing with the recording?

C3 *The FINAL Questionnaire*

This course has helped me improve …

1.   vocabulary.
2.   writing skills.
3.   listening comprehension.
4.   Pronunciation skills.
5.   spelling.
6.   grammar.
7.   communicative competence.
8.   employability skills.
9.   autonomy.
10.   responsibility (meeting deadlines, tasks, etc.).
11.   problem-solving skills.
12.   self-knowledge.
13.   skills to create a multimodal text (using different types of formats like image, sound, video).
14.   skills to use collaborative platforms (wiki).
15.   skills to use tools for managing files in different formats (drive, WeTransfer, etc.).
16.   skills to use different digital tools.

How useful, difficult and satisfactory has the course been?

1.   The course has been useful.
2.   The course has been difficult.
3.   The course has been satisfactory.

Open questions

1.   What I liked the most about this course is…
2.   What I liked least about this course is …
3.   My overall satisfaction with the course is …

The most difficult part of this course has been…

1.   Lack of time
2.   Failure to understand instructions
3.   Technical problems
4.   Linguistic problems
5.   Motivation problems
6.   Other

C4 Test 2

Test 2a. Collocations

Complete with one of the following prepositions: of, for, in, with, at, on, about, under, to

---

1. I would like to apply … the vacancy.

2. I am fluent … two languages: Spanish and English.

3. I pay attention … small details.

4. I am aware … the importance of work experience.

5. I feel proud … my achievements.

6. Thank you very much…. your time.

7. I am interested … getting more experience.

8. I adapt … new situations easily.

9. I give worth … fellowship.

10. I like to work … teams.

11. I work well … pressure.

12. I am keen … video games.

13. I am responsible … technical documentation.

14. I am specialised … Electronics.

15. I am good … solving problems.

16. I am trained … Robotics too.

17. I am certified … Electronics.

18. I am committed… my work.

19. I am looking … a full-time job.

20. I am in charge … technical documentation.

21. I feel passionate … Electronics.

22. I have experience … customer service.

23. I have taken a course … customer service.

24. I am not very flexible … extra hours. I can only work at certain hours.

25. I would like to apply … the vacancy.

Test 2b. Professional vocabulary

26. Formación Profesional
27. Grado Superior
28. Grado Superior en (incluye el grado que cursas)
29. Grado Medio
30. Curso de acceso
31. Bachillerato
32. Educación Secundaria
33. Prácticas
34. Beca
35. Cursillo
36. Electrónica
37. Robótica
38. Automoción
39. Informática
40. Técnico
41. Mantenimiento
42. Reparación

C5 *Test 3*

Test 3a. Self-knowledge

Discipline-specific skills

1. ¿Qué significa "empleabilidad"?
2. ¿Qué competencias/habilidades profesionales generales puedes nombrar?
3. ¿Qué competencias crees que se valoran en el mercado laboral en tu especialidad?

Self-knowledge

4. ¿Qué competencias profesionales has desarrollado?
5. ¿Cuál es tu punto fuerte?
6. ¿Cuál es tu punto débil?

Meaning of skills

7. professional skills
8. individuality
9. time management
10. resourceful
11. hard-working
12. work well under pressure
13. multi-tasking
14. proactive
15. reactive
16. self-motivated
17. team player
18. confident
19. reliable
20. easy-going
21. problem-solving
22. decision-making
23. risk-taking
24. assertive
25. fast learner
26. goal-oriented

Test 3b. Transition learning

Non-verbal communication

27. ¿En qué consiste la comunicación no verbal?

28. ¿Qué aspectos relacionados con la comunicación no verbal son recomendables en una entrevista de trabajo?

CV

29. En un CV, ¿cómo se puede compensar la falta de experiencia laboral?

30. ¿Se deben mencionar los intereses o aficiones en el CV? Justifica tu respuesta.

31. ¿Se debe mencionar la experiencia deportiva, como jugar o haber jugado en un equipo (baloncesto, fútbol, etc.)? Justifica tu respuesta.

Rhetoric

32. Hablo inglés, pero no tengo buen nivel.
I speak English but my level is not advanced.

33. No me gusta estudiar.
I don't like studying.

34. Soy buen compañero, sincero, flexible y sociable.
I am a sincere, flexible and sociable team–player.

35. Las TIC no se me dan bien.
ICTs aren't my strength.

36. Detesto las entrevistas. Me ponen nervioso.
I hate interviews, I get nervous.

37. No tengo experiencia laboral.
I don't have any work experience.

38. ¿Mi debilidad? Soy demasiado perfeccionista.
My weak point? I am too perfectionist.

39. No encontraréis a ningún(a) candidato(a) mejor cualificado(a).
You won't find a candidate better qualified than me.

40. Cumplo los requisitos del puesto.
I meet the requirements for the position.

Appendix D – Standard Deviation Results for Research Question 1

D1 *Standard Deviation of the data shown in Figures 7, 8, 9 and 10 (Move Analysis)*

	Pre-Test				Post-Test			
	EG		CG		EG		CG	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Step 1 Listing hard skills and knowledge	0.3	0.67	0.125	0.35	0.6	0.70	0.125	0.35
Step 2 Listing qualifications	1	0.82	1.5	0.535	1.8	0.79	1.5	0.53
Step 3 Listing transferable skills	0.2	0.42	0.25	0.46	0.8	1.40	0	0
Step 4 Stating how skills were obtained	0.8	1.22	0.25	0.46	1.4	1.90	0	0
Step 5 Stating work experience	1.3	1.49	2.5	1.41	0.9	1.20	2.25	0.71
Step 6 Stating objectives	0.5	0.71	0.125	0.35	0.8	0.63	0.25	0.46
Step 7 Stating personal hobbies, interests	0.5	1.27	0.375	0.52	1.4	0.84	0.375	0.52
Step 8 Expressing positive self-evaluation	0.6	0.70	0.625	1.19	1.1	1.10	0.375	0.35
Step 9 Predicting success	0.13	0.58	0.1	0.3	0.26	0.64	0	0.32

D2 *Standard Deviation of the data shown in Figures 11 and 12 (Step Distribution)*

	Pre-Test		Post-Test	
	EG	CG	EG	CG
Step 1 Listing hard skills and knowledge	3	2	5	6
Step 2 Listing qualifications	17	26	19	29
Step 3 Listing transferable skills	9	4	10	0
Step 4 Stating how skills were obtained	21	4	21	0
Step 5 Stating work experience	20	41	9	46
Step 6 Stating objectives	10	4	10	7
Step 7 Stating personal hobbies, interests	6	7	12	5
Step 8 Expressing positive self-evaluation	12	11	12	7
Step 9 Predicting success	2	1	4	0
Standard Deviation	6.54	13.91	4.78	16.39

D3 *Table 23 Test 3 Career Management Skills (Max = 36; Test 3a = 18; Test 3b = 18)*

| | Pre-Test | | | | Post-Test | | | |
| | EG | | CG | | EG | | CG | |
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Test 3a Self- and opportunity awareness	9.09	3.06	8.95	2.11	11.17	3.20	8.65	1.82
Self-knowledge	3.10	1.20	3.25	1.28	3.50	1.72	3.13	1.25
Discipline-specific skills	3.80	1.55	3.75	1.28	4.80	1.03	3.38	0.92
Skills meaning	2.19	1.20	1.95	0.81	2.87	1.47	2.15	0.43
Test 3b Job-search skills	9.42	3.59	10.33	3.32	11.92	2.70	9.44	1.39
Job interview	3.15	1.80	3.38	1.92	4.35	1.49	2.06	1.12
CV design	4.10	1.79	4.63	1.51	4.40	1.35	4.75	0.71
Rhetoric	2.17	1.03	2.33	1.10	3.17	1.34	2.62	0.98
Test 3 Career Management Skills	18.51	6.23	19.80	6.05	23.09	5.50	18.09	2.60

D4 *Standard Deviation of the data shown in Figure 15 FINAL Questionnaire:*

Professional Skills Development

| | EG | | CG | |
	Mean	SD	Mean	SD
Employability	3.5	0.79	2	0.93
Autonomy	3.4	0.70	2.63	0.74
Responsibility	4.6	0.52	3	0.93
Problem-solving	4.2	0.92	3	0.93
Self-awareness	4.1	0.74	3	1.07

Appendix E – Standard Deviation Results for Research Question 2

E1 *Standard Deviation of the data shown in Table 26 Syntactic Complexity*

	Pre-Test				Post-Test			
	EG		CG		EG		CG	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Mean length of production unit	14.17	8.64	10.86	2.61	9.63	1.52	10.37	2.09
Subordination	0.77	0.34	0.55	0.33	0.67	0.26	0.42	0.15
Coordination	0.41	0.36	0.19	0.14	0.27	0.22	0.28	0.14
Particular structures	1.51	1.19	1.26	0.39	1.21	0.31	1.23	0.34
Syntactic complexity	4.22	2.60	3.22	0.64	2.95	0.58	3.07	0.64

E2 Table 27 *Mean Length of Production Unit with Standard Deviation*

		Pre-Test				Post-Test			
		EG		CG		EG		CG	
		Mean	SD	Mean	SD	Mean	SD	Mean	SD
Mean length of clause	MLC	9.52	2.73	9.14	1.56	7.83	1.45	9.3	1.05
Mean length of T-unit	MLT	18.82	15.03	12.58	3.65	11.43	2.39	11.45	3.43

E2 *Standard Deviation of the data shown in Table 28 Subordination*

		Pre-Test				Post-Test			
		EG		CG		EG		CG	
		Mean	SD	Mean	SD	Mean	SD	Mean	SD
T-unit complexity ratio	C/T	1.87	0.81	1.42	0.51	1.49	0.37	1.23	0.32
Complex T-unit ratio	CT/T	0.43	0.25	0.22	0.20	0.41	0.18	0.13	0.09
Dependent clause ratio	DC/C	0.26	0.11	0.20	0.17	0.29	0.13	0.13	0.09
Dependent clauses / T-unit	DC/T	0.51	0.34	0.35	0.45	0.48	0.37	0.18	0.18

E3 *Standard Deviation of the data shown in Table 29 Coordination*

| | | Pre-Test | | | | Post-Test | | | |
| | | EG | | CG | | EG | | CG | |
		Mean	SD	Mean	SD	Mean	SD	Mean	SD
Coordinate phrases / clause	CP/C	0.26	0.17	0.15	0.11	0.21	0.29	0.25	0.13
Coordinate phrases / T-unit	CP/T	0.55	0.57	0.22	0.19	0.32	0.16	0.30	0.15

E4 *Standard Deviation of the data shown in Table 30 Particular Structures*

| | | Pre-Test | | | | Post-Test | | | |
| | | EG | | CG | | EG | | CG | |
		Mean	SD	Mean	SD	Mean	SD	Mean	SD
Complex nominal / clause	CN/C	1.01	0.56	0.89	0.27	0.72	0.24	0.99	0.32
Complex nominal / T-unit	CN/T	2.16	2.46	1.24	0.52	1.07	0.45	1.23	0.51
Verb phrases / T-unit	VP/T	2.37	0.74	1.65	0.68	1.87	0.45	1.43	0.29

E5 *Standard Deviation of the data shown in Table 31 Lexical Complexity*

| | | Pre-Test | | | | Post-Test | | | |
| | | EG | | CG | | EG | | CG | |
		Mean	SD	Mean	SD	Mean	SD	Mean	SD
Lexical Density	LD	0.5	0.04	0.48	0.03	0.48	0.03	0.49	0.04
Lexical Sophistication	LS	0.15	0.10	0.25	0.14	0.22	0.13	0.23	0.20
Lexical Variation	LV	11.33	2.56	9.67	1.15	12.14	4.01	10.19	1.70

E6 *Standard Deviation of the data shown in Table 34 Number of Different Words (NDW)*

		Pre-Test				Post-Test			
		EG		CG		EG		CG	
		Mean	SD	Mean	SD	Mean	SD	Mean	SD
Number different words	NDW	76.30	27.18	57.62	8.80	93.30	51.35	62.88	14.85
NDW (First 50 words)	NDWZ	35.20	3.16	35.50	2.73	36.50	2.80	35.50	3.82
Expected random 50	NDWERZ	37.33	2.86	35.34	2.54	36.66	2.19	36.49	2.65
Expected sequence 50	NDWESZ	37.00	2.64	35.31	2.18	35.67	2.81	35.51	2.35

E7 *Standard Deviation of the data shown in Table 35 Type-Token Ratio (TTR)*

		Pre-Test				Post-Test			
		EG		CG		EG		CG	
		Mean	SD	Mean	SD	Mean	SD	Mean	SD
Type Token Ratio	TTR	0.62	0.08	0.60	0.05	0.57	0.06	0.62	0.04
Mean segmental TTR 50	MSTTR	0.73	0.06	0.71	0.05	0.71	0.05	0.72	0.06
Corrected TTR	CTTR	4.78	0.67	4.15	0.38	5.00	1.13	4.38	0.52
Root TTR	RTTR	6.76	0.95	5.87	0.53	7.06	1.61	6.19	0.74
Bilogarithmic TTR	LOGTTR	0.90	0.02	0.89	0.01	0.89	0.02	0.90	0.01
Uber Index	UBER	21.64	4.83	17.94	2.51	19.49	3.19	19.27	2.88

E8 *Standard Deviation of the data shown in Table 36 Part of Speech-related Variation*

		Pre-Test				Post-Test			
		EG		CG		EG		CG	
		Mean	SD	Mean	SD	Mean	SD	Mean	SD
Lexical Word variation	LWV	0.82	0.09	0.74	0.13	0.89	0.09	0.77	0.16
Verb variation – I	VV1	10.99	5.31	4.36	1.40	13.06	9.73	6.23	3.47
Squared VV1	SVV1	2.28	0.57	1.46	0.23	2.45	0.77	1.72	0.45
Corrected VV1	CVV1	0.83	0.06	0.81	0.07	0.82	0.07	0.84	0.04
Verb variation – II	VV2	0.21	0.05	0.13	0.02	0.19	0.04	0.16	0.07
Noun variation	NV	0.83	0.05	0.84	0.06	0.86	0.08	0.86	0.04
Adjective variation	ADJV	0.11	0.04	0.12	0.06	0.14	0.04	0.12	0.05
Adverb variation	ADVV	0.07	0.03	0.07	0.05	0.06	0.04	0.04	0.03
Modifier variation	MODV	0.18	0.06	0.19	0.06	0.18	0.07	0.18	0.08

E9 *Standard Deviation of the data shown in Table 37 Lexical Sophistication*

		Pre-Test				Post-Test			
		EG		CG		EG		CG	
		Mean	SD	Mean	SD	Mean	SD	Mean	SD
Lexical sophistication I	LS1	0.25	0.05	0.34	0.08	0.32	0.1	0.38	0.04
Lexical sophistication II	LS2	0.19	0.03	0.3	0.06	0.27	0.06	0.31	0.03
Verb sophistication I	VS1	0.07	0.1	0.13	0.11	0.07	0.06	0.15	0.15
Corrected VS1	VS2	0.1	0.13	0.22	0.24	0.19	0.22	0.37	0.45
Verb sophistication II	CVS1	0.15	0.17	0.27	0.21	0.24	0.21	0.32	0.31

E10 *Standard Deviation of the data shown in Table 39 Written Accuracy*

| | | Pre-Test | | | | Post-Test | | | |
| | | EG | | CG | | EG | | CG | |
		Mean	SD	Mean	SD	Mean	SD	Mean	SD
Error-free T-unit	EFT	3.70	2.89	3.63	1.77	7.50	4.60	3.13	1.25
Error-free T-unit ratio	EFT/T	0.57	0.56	0.49	0.27	0.44	0.18	0.39	0.27
Errors per T-unit	E/T	2.25	1.91	1.46	0.76	1.15	0.68	1.48	0.47

E11 *Standard Deviation of the data shown in Table 40 Grammatical, Lexical and Mechanical Accuracy*

| | | Pre-Test | | | | Post-Test | | | |
| | | EG | | CG | | EG | | CG | |
		Mean	SD	Mean	SD	Mean	SD	Mean	SD
Grammar error	GE	7.2	4.32	5.75	3.88	6.4	4.9	6.5	3.46
Grammar error ratio	GE/W	0.064	0.036	0.06	0.039	0.038	0.051	0.064	0.03
Lexical error	LE	0.5	0.71	1.87	0.99	0.9	1.1	1.5	1.51
Lexical error ratio	LE/W	0.004	0.005	0.02	0.011	0.005	0.011	0.015	0.015
Mechanical error	ME	5.7	4.14	3.37	1.51	6.2	4.05	5.9	4.61
Mechanical error ratio	ME/W	0.054	0.04	0.35	0.014	0.037	0.042	0.057	0.038
Total error	TE	13.47	6.93	11	4.87	13.50	7.18	13.9	6.9
Total error ratio	TE/W	0.122	0.056	0.115	0.042	0.081	0.075	0.137	0.05

E12 *Standard Deviation of the data shown in Table 41 Spoken Accuracy*

| | Pre-Test | | | | Post-Test | | | |
| | EG | | CG | | EG | | CG | |
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Consonants	0.002	0.009	0.013	0.085	0.001	0.006	0.018	0.092
Diphthongs	0.006	0.029	0.032	0.079	0.005	0.031	0.033	0.115
Suffixes	0.017	0.030	0.026	0.101	0.01	0.028	0.029	0.127
Vowels	0.011	0.024	0.045	0.092	0.005	0.013	0.044	0.090
Total	0.038	0.070	0.121	0.254	0.021	0.058	0.124	0.275

E13 *Standard Deviation of the data shown in Table 42 Written Fluency*

| | Pre-Test | | | | Post-Test | | | |
| | EG | | CG | | EG | | CG | |
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Text length	126.6	53.7	94.75	24.77	167.3	96.5	101.3	24.7

E14 *Standard Deviation of the data shown in Table 43 Test 2 (Max Total = 59; Test 2a = 25; Test 2b = 34)*

| | Pre-Test | | | | Post-Test | | | |
| | EG | | CG | | EG | | CG | |
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Test 2a Collocations	9.9	3.18	8.62	2.98	11.9	3.45	8.62	2.07
Test 2b Professional terms	22.53	3.6	19.5	3.5	26.1	2.2	21.5	3.4
Total Test 2	32.43	3.39	28.12	3.24	38	2.82	30.12	2.73

E15 *Standard Deviation of the data shown in Figure 16 FINAL Questionnaire: Language Development*

	EG		CG	
	Mean	SD	Mean	SD
Vocabulary	4.3	0.67	3.38	0.92
Writing	4.1	0.74	3.13	0.83
Listening	4.2	0.42	3.38	1.06
Pronunciation	4.4	0.52	3.38	0.52
Grammar	3.4	0.84	3.5	0.53
Communicative competence	3.9	0.74	2.88	1.13

Appendix F – Standard Deviation Results for Research Question 3

F1 *Standard Deviation of the data shown in Table 44 DIG Questionnaire (Max Total = 185; Area 1 = 100; Area 2 = 30; Area 3 = 55)*

| | Pre-Test | | | | Post-Test | | | |
| | EG | | CG | | EG | | CG | |
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Area 1 Information and data literacy	85.6	9.69	82.3	13.91	88	8.71	83.1	12.63
Area 2 Communication and collaboration	20.2	7.21	21.8	5.36	22	4.53	22.1	5.17
Area 3 Digital content creation	45.3	6.61	44.8	8.3	47.4	5.05	45.2	7.02
Total	151.1	17.99	148.7	26.47	157.5	14.90	150.5	23.84

F2 *Standard Deviation of the data shown in Figure 20 FINAL Questionnaire: Digital Skills Development*

| | EG | | CG | |
	Mean	SD	Mean	SD
Multimodality	4.3	0.48	2.1	1.25
File management	4.3	0.48	2.5	0.93
Digital communication	3.9	0.57	1.4	0.74
Digital tools	4.2	0.42	1.5	0.76
Creativity	3.8	0.51	2.8	0.65
Digital skills	4.1	0.48	2.06	0.6

F3 *Standard Deviation of the data shown in Figure 21 Students' Perceptions of the Course (Difficulty, Usefulness and Satisfaction)*

	EG		CG	
	Mean	SD	Mean	SD
Usefulness	3.9	0.74	2.8	0.99
Difficulty	2.6	0.52	2.6	0.74
Satisfaction	3.8	1.01	2.5	0.71