

CLIL in Pandemic Times: Students' perceptions of teaching-learning strategies and methodologies in emergency remote education in Tourism and Hospitality

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Abstract

Education, at all levels, has undergone major changes since March 2020 with the COVID-19 outbreak. Onsite learning was replaced by emergency remote sessions for which neither teachers nor students were prepared. Since then, pedagogical strategies and teaching-learning methodologies have been thoroughly adapted to both synchronous and asynchronous modes of interaction and supported by video conferencing software and a proliferation of online tools that try to emulate, in the best way possible, onsite student-centred and collaborative activities. CLIL classes have not been an exception. The present chapter analyses the implementation of a group of CLIL curricular units on undergraduate degrees in tourism and hospitality in an online context. Based on the data provided by a quantitative survey of students who participated in these CLIL sessions, we will describe

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learners' perceptions of CLIL online sessions by analysing aspects that relate to the methodologies and strategies adopted throughout the teaching-learning process, the materials provided, the articulation between language and content, and their motivation to engage in online CLIL activities, among others. This chapter aims to contribute to a wider discussion of best practices in implementing distance learning CLIL, in this case in an emergency remote context.

Keywords

Content and language integrated learning (CLIL); higher education (HE); tourism and hospitality (T&H); teaching-learning strategies and methodologies; emergency remote education (ERE); learning motivation.

Resumo

A educação sofreu, a todos os níveis, grandes mudanças desde março de 2020 com a pandemia COVID-19. A aprendizagem presencial foi substituída por sessões remotas de emergência para as quais nem professores nem alunos estavam preparados. Desde então, as estratégias pedagógicas e as metodologias de ensino-aprendizagem foram totalmente adaptadas aos modos de interação síncrona e assíncrona e apoiadas por *software* de videoconferência e uma variedade de ferramentas *online* que tentam reproduzir, da melhor forma possível, as atividades presenciais colaborativas e centradas nos alunos. As aulas CLIL não têm sido exceção. O presente capítulo analisa a implementação de um conjunto de unidades curriculares CLIL em licenciaturas de turismo e hotelaria em contexto *online*. Com base nos dados fornecidos por um inquérito quantitativo aplicado aos estudantes que participaram nestas sessões CLIL, iremos descrever a perceção dos alunos sobre as sessões CLIL *online*, analisando os aspetos que se relacionam com as metodologias e estratégias adotadas ao longo do processo de ensino-aprendizagem, com os materiais disponibilizados, com a articulação entre língua e conteúdos, e com a sua motivação ao participarem em atividades CLIL *online*, entre outros. Este capítulo visa contribuir para uma discussão mais ampla das melhores práticas na implementação do ensino à distância CLIL, neste caso em contexto remoto de emergência.

Palavras-chave

Aprendizagem integrada de conteúdos e língua estrangeira (AICLE); ensino superior; turismo e hotelaria (T&H); estratégias e metodologias de ensino-aprendizagem; educação remota de emergência; motivação para a aprendizagem.

1. Introduction

In 2016, the European Commission (EC) launched *A New Skills Agenda for Europe* which acknowledged the need for people to develop “a broad set of skills to fulfil their full potential both at work and in society” (p. 4) and stated that skills acquisition is a lifelong process where learners develop “literacy, numeracy, science and foreign languages, as well as transversal skills and key competences such as digital competences, entrepreneurship, critical thinking, problem solving or learning to learn, and financial literacy” (p. 5). In 2018, this perspective was strengthened by a revised European Reference Framework for the key competences for lifelong learning which stressed “multilingual competence”, “personal, social and learning to learn”, and “cultural awareness and expression” as part of the eight key competences “which all individuals need for personal fulfilment and development, employability, social inclusion, sustainable lifestyle, successful life in peaceful societies, health-conscious life management and active citizenship” (EC, 2018/C 189, p. 8). In addition, at the Higher Education (HE) level, *A Renewed EU agenda for Higher Education* adopted by the EC in 2017 reinforced the increasing need for people “to be entrepreneurial, manage complex information, think autonomously and creatively, use resources, including digital ones, smartly, communicate effectively and be resilient” (p. 2).

The implementation of Content and Language Integrated Learning (CLIL) can contribute to the development of the key competences highlighted above and, especially in the context of HE, can further support the international mobility of students and teachers, in addition to contributing to the development of other transversal skills such as autonomy, critical thinking and problem-solving capabilities which are seen as “increasingly crucial attributes” (EC, 2017, p. 4).

CLIL in Portuguese HE is relatively recent when compared to the use of English as a medium of instruction (EMI), which does not adopt an integrated perspective on teaching and learning content and language. Indeed, the implementation of CLIL in Portuguese HE began in 2014 with a pilot project undertaken by ReCLes.pt, the Network Association of Language Centres in HE in Portugal that aimed to train subject specialist teachers “how to apply CLIL, using scaffolding and a terminology-based approach, so that they, in turn, can successfully implement CLIL modules in their own classrooms” (Arau Ribeiro *et al.*, 2016, p. 31).

The Estoril Higher Institute for Tourism and Hotel Studies (ESHTE) was one of the institutions in the Portuguese polytechnic HE subsystem participating in this pilot project and has been implementing the CLIL approach in different curricular units in undergraduate degrees in tourism and hospitality (T&H) for the past five academic years. This chapter, therefore, looks at this implementation retrospectively, focusing specifically on students' perceptions.

However, the COVID-19 pandemic, which has seen lockdown measures imposed in many countries worldwide since March 2020, has been responsible for the introduction of a paradigm shift in education that came to be known as “emergency remote education” (ERE) since all onsite classes had to be temporarily transferred and adapted to online synchronous and asynchronous contexts, with all the challenges which that shift entailed for institutions, teachers, staff, and learners. Online conferencing platforms and collaborative electronic tools have proliferated since the adaptation to the online environment became part of teachers’ and students’ everyday priorities.

This chapter specifically analyses students’ perceptions of CLIL classes in relation to collaboration and soft skills development, materials, language, content learning, motivation, difficulties, internationalisation and global assessment by focusing on the results obtained from a survey conducted with students involved in CLIL curricular units, both onsite and online. From a wider perspective, it also aims to contribute to a broader discussion of best practices in implementing CLIL in HE and of how CLIL may foster learners’ motivation, even in distance learning contexts.

2. Fostering learners’ motivation through CLIL: From onsite to emergency remote education

2.1. CLIL and learner motivation

Literature on CLIL suggests its positive effects (Lorenzo *et al.*, 2010; Nieto, 2017), namely that content and language are better acquired through an integrated approach. CLIL also positively impacts on socio-affective variables such as attitudes to language, motivation, and anxiety (Lasagabaster & Sierra, 2009). Motivation has been widely studied in education and foreign language (FL) learning. The relationship between motivation and CLIL learning is also not new (Sylvén & Thompson, 2015; San Isidro & Lasagabaster, 2020). It has been analysed in relation to students’ socio-economic status and geographical context (urban vs rural settings) (Alejo & Piquer-Píriz, 2016) although it is understudied in the context of HE. Thus, this presents a gap in the literature since motivation is a key element in academic performance (Cardozo, 2008), and several scholars acknowledge the interaction between motivation and language achievement (e.g., Lasagabaster & Sierra, 2009, 2011; Lasagabaster *et al.*, 2014; Pfenninger, 2016). Motivation is an active, sustained behavioural process focused on a goal (Pintrich & Schunk, 2002);

it relates specifically to the individual’s thoughts and beliefs that are transformed into action and is not a function of stimuli and reinforcement (Dörnyei, 2009).

When considering motivation towards learning, there are two relevant theories. The first influential theory is Gardner and Lambert’s (1972), based on motivational goal theories, which aims to explain how some people can learn a FL quickly and expediently while others, given the same opportunities, do not. The second influential theory is Dörnyei’s (2005; 2009) L2 Motivational Self System. L2 motivation is conceptualised within a framework of three distinct levels: language level, learner level, and the learning situation level. The learning situation level refers to course-specific, teacher-specific, and group-specific motivation components.

Other theories related to motivation (De la Fuente Arias, 2004), advance the concepts of “selves”: self-efficacy; self-concept; self-esteem; and self-confidence. Self-efficacy beliefs refer to one’s views on whether each person can perform a given learning task (Bandura, 1986). They are, therefore, future-oriented. Self-concept beliefs are related to past experiences and are broader evaluations of one’s general self-worth or esteem (Burns, 1979; Shavelson *et al.*, 1976). Self-esteem implies security, selfhood, affiliation, mission, and competence (Borba, 1989). Self-confidence is the belief that a person can achieve results, accomplish goals, or perform tasks in a competent way (Clément, 1980). The introduction of the “selves” concepts into the field of language learning motivation can open new insights (Navarro-Pablo & García-Jiménez, 2018). In the case of CLIL studies, it has indeed led to relevant results.

Studies concerning CLIL programmes indicate that this educational approach that integrates language and content fosters positive attitudes towards language learning (Lasagabaster & Sierra, 2009), that CLIL students are significantly more enthusiastic than those in traditional language classrooms (Lasagabaster, 2011) and have more intrinsic motivation, are more instrumentally oriented, and show a higher interest in FL than students in non-CLIL classes (Doiz *et al.*, 2014). Furthermore, even when a low self-concept in FL is present, CLIL learners have a strong motivation to learn (Seikkula-Leino, 2007). Motivation is an important factor for learning a second language (L2), but it plays a more important role in CLIL than in non-CLIL settings (Navarro-Pablo & García-Jiménez, 2018), although, as these authors have stated, further research should be conducted in order to understand “which motivational factors affect more noticeably students’ language attainment in CLIL settings, but also the degree to which they do so” (p. 88).

However, other studies present more nuanced results. Lasagabaster and Doiz (2015) suggested a motivational decline in some of the affective dimensions of younger CLIL students. Navarro-Pablo and García-Jiménez (2018) suggest that significant differences favouring CLIL learners increase with educational level. This supports the idea put forward by Doiz *et al.* (2014, p. 222) that students’ motivation

“diminishes progressively with time”. Therefore, since learning motivation decreases with age, CLIL strategies become even more necessary and relevant at later stages. On the other hand, Arribas (2016) found no statistically significant differences between CLIL and non-CLIL environments as to their attitudes towards English. However, this stemmed from the irregular implementation of the CLIL programme in the context studied. Navarro-Pablo and García-Jiménez (2018) concluded that CLIL has a lower effect on listening and reading (receptive skills) than on speaking and writing (productive skills). For Pfenninger (2016, p. 137), the reason for the higher effect of CLIL on productive skills is a result of the “oral-based, communicative, pedagogical approach used in CLIL programmes”.

Navarro-Pablo and García-Jiménez (2018) argued that the differences observed when considering motivational factors independently of other factors could explain the results of previous studies such as those of Lasagabaster and Doiz (2015) and Arribas (2016). When the methodology is considered an independent variable and motivational aspects are encompassed within it, there are differences between CLIL and non-CLIL learners which favour the former.

In the specific case of HE, the implementation of CLIL has been found to increase linguistic competences (Benito *et al.*, 2020). The authors found evidence that writing, speaking and listening skills improved, as well as other skills related to business, economics, accountancy, and the history of art. CLIL has also been found to increase ‘knowmad’⁵ competences, or the so-called ‘soft skills’, such as teamwork, creativity, and research capacity. These results corroborate Pérez-Cañado’s study (2018), which proposes that CLIL programmes are the variable that best explains differences detected between students, especially as they progress in education.

2.2. CLIL in distance learning contexts

Although some Higher Education Institutions (HEIs) used remote learning before the COVID-19 pandemic, it was rarely mandatory. Therefore, in many HEIs, the shift to distance learning (DL) after the coronavirus outbreak came abruptly and was understood as temporary, hence the term ‘emergency remote education’. Many different platforms and means of communication were used to replace onsite classes (Young *et al.*, 2020). Microsoft Teams, Zoom, Webex or similar synchronous video conferencing software were the most frequently used DL formats, whereas asynchronous strategies, such as sending presentations to students, video

⁵ The term knowmad (Moravec, 2013) is a neologism derived from the words ‘know’ and ‘nomad’ and is used to refer to the set of abilities and knowledge that today’s society requires for employability.

recording, and written communication using forums and chats, were the second most widely used (Aristovnik *et al.*, 2020; Barada *et al.*, 2020).

In a study conducted by Cicha *et al.* (2021), the strongest external predictors of perceived usefulness and perceived ease of use of the DL tools during the pandemic situation were enjoyment and self-efficacy. These authors observed that students were happy and comfortable participating in classes from their homes and were confident when following different tasks using computer software for DL. However, factors such as material design and preparation, teacher engagement and the possibility of lecturer–student or student–student interactions still prove to be crucial for learning effectiveness (Aristovnik *et al.*, 2020).

The change to ERE due to the pandemic, forced both lecturers and students to adapt rapidly to distance teaching–learning. CLIL programmes were no exception. However, the use of distance CLIL learning in ERE raised even more issues than in the case of traditional classes focusing either on language or on content, since the implementation of CLIL in DL contexts had not been extensively explored.

Although the term ‘distance education’ has been evolving, it is often used to mean that “some form of instruction occurs between two parties (a learner and an instructor), it is held at different times and/or places and uses varying forms of instructional materials” (Moore *et al.*, 2011, p. 130). In distance education, communication between teachers and learners occurs remotely and is usually mediated or assisted by technology (Garrison & Shale, 1987), both synchronously and asynchronously.

Some studies claim that no significant differences in learning outcomes exist between online and onsite courses; however, some researchers have proposed that the effectiveness of DL may not be as expected (Brown & Liedholm, 2002; Ni, 2013; Swan, 2003; Williams, 2009). DL differs greatly from onsite classrooms regarding learners’ interaction with course content, instructors, classmates, and course interfaces (Swan, 2003). Garrison (2003) proposes that the core feature of distance education is its self-directed and learner-controlled learning activities. Some researchers point out that online teaching may not be effective in all courses and situations (e.g., Ni, 2013). In 1995, James and Gardner advised that without a proper design of electronic delivery to fit different learning styles, DL could not be effective nor efficient. Moreover, assessing entry behaviour, specifying behavioural objectives, learning units and procedures, presenting learning units and tasks, and evaluating student performance is crucial in the online context (Verduin & Clark, 1991).

Although some researchers suggest that future CLIL education should take place via a mixed-media distance model to fit learners’ characteristics, regardless of their place of residence (Marsh, 2002), research is scarce on whether CLIL, which greatly relies on face-to-face interaction and collaboration with peers, can work

well in a DL model. Usually, when technological resources are introduced in CLIL programmes, they are not expected to replace the actual classroom teaching entirely but rather to assist it (Carloni, 2012).

Studies available so far present mixed results. Pellegrino *et al.* (2013), who applied a series of collaborative and communicative technology-based activities to a CLIL programme, concluded that students actively engaged in meaningful communicative practice and content exchange, and eventually developed learning autonomy and awareness. In a study by Titova (2017) of a situation that blended a Massive Open Online Courses (MOOC) course with the CLIL approach, undergraduates reported better familiarity with the subject matter, interactive experience sharing, and the development of writing skills and digital literacies. Notwithstanding, less positive impacts also arose, such as the additional time requirement or the overloaded schedule of the online course. Other issues, such as the lack of consideration about learners' experiences, interests, and styles, and a shortage of proper training on integrating Information and Communication Technologies (ICT) offered to practitioners, were reported by Fürstenberg and Kletzenbauer (2012).

An experimental study by Marenzi and Zerr (2012) evaluated two online CLIL courses. In this study, users generally reported a positive attitude towards the supporting, sharing, and collaboration functions. However, some limitations were presented; for instance, the reliability of the system (e.g., internet speed) and users' expectations in different cultures. Yang and Yang (2021), who conducted a study in the context of the pandemic situation, suggest that CLIL may not work well in a DL situation due to decreasing motivation, greater distraction, lack of actual interaction, peer pressure, teacher monitoring, and practitioners' cognitive fatigue. Learners in the study expressed a moderately good attitude towards the effectiveness of DL CLIL, but the degree of agreement decreased gradually over time. Students were mainly concerned with communication, interaction, peer pressure, and learner autonomy.

3. CLIL Experience at ESHTTE

The remainder of this chapter focuses specifically on the implementation of CLIL at ESHTTE. This implementation was initiated under the ReCLes.pt CLIL applied research project which took place in six HEIs in Portugal's polytechnic subsystem and adopted an "innovative approach in the Portuguese context [which] reflects the scarcity of the use of CLIL in HE" (Arau Ribeiro *et al.*, 2018, p. 63). A pilot project undertaken at ESHTTE in October 2014 included the organisation of a CLIL learning

and practice community, following the principles defined by the ReCLes.pt *CLIL Training Guide* (Morgado *et al.*, 2015), and involved five content teachers in T&H, namely in the Events Management, Tourism and the Environment, Microbiology, Business Strategy, and Nutrition curricular units, all at B2/C1-CEFR⁶ level in English. These content teachers completed a 10-hour collaborative training course with an English as a Foreign Language (EFL) teacher, with CLIL expertise, who facilitated the sessions guiding them through CLIL, using the resources and methodologies also outlined in the above-mentioned ReCLes.pt *CLIL Training Guide*. Between January and April, 2015, six CLIL modules were implemented at ESHTTE in five different curricular units, for a total of 18 hours, and involving 151 students from the undergraduate degrees in Cookery and Food Production (1st year), Hotel Management (3rd year), and Tourism Management (3rd year). All these modules were monitored either by the supporting EFL teacher or by one of the peer content teachers, who provided feedback and presented suggestions for improvement.

Since the 2015/2016 academic year, four to six CLIL curricular units have been regularly offered to students every year. Curricular units such as Market Studies, Hotel Architecture and Design, and Commercial Management, were progressively added to the list of curricular units initially integrated in the pilot project.

In order to clearly define which curricular units are offered in English following a CLIL approach, ESHTTE's policy has been to: i) open this possibility only to curricular units divided into classes A and B, where one is taught in Portuguese and the other one in English, and each student decides which class he/she enrolls in; ii) open a class in English only when there is a minimum of 20 students enrolled; iii) ensure that students decide which language (English or Portuguese) they want to be assessed in, even if they have initially enrolled in the English medium class; iv) offer this option to Erasmus students; and v) acknowledge the completion of curricular units in English on students' final diploma.

In addition, in 2019 two other training courses were conducted with ESHTTE's lecturers from different areas of expertise. As of 2020, ESHTTE has 25 lecturers fully trained in CLIL, representing 16% of the number of lecturers (from a total of 155 full and part-time lecturers).

Very fruitful discussions and reflections arose during the training sessions with content teachers. Concerns have been raised especially regarding the changes needed in syllabi, class preparation and assessment methods to accommodate more interactive and student-centred strategies without neglecting the need to integrate language and content learning. Many lecturers showed their apprehension towards the time-consuming preparation of classes and anticipated that different scaffolding activities would be needed given students' heterogeneous

⁶ Common European Framework of Reference for Languages.

learning styles, ‘multiple intelligences’ (Gardner, 1983), and levels of language competence. Despite their B2-C1 level of English, some teachers also admitted having difficulties in using classroom language in English, unlike knowledge of technical vocabulary in their areas of expertise, as most of them already made class material available in English, similar to what has been found by Piquer-Píriz & Castellano-Risco (2021) in EMI contexts.

Throughout the training sessions, CLIL trainees also had the opportunity to bring specific examples from their classes, adapt them to the CLIL approach and receive some feedback from their peers (e.g. the integration of content and language, the adequacy of the language level, the need to take cultural aspects and the specific context of Portuguese T&H into consideration, student-centred strategies that could more easily foster interaction and communication in the FL, and the selection of activities that would contribute to the development of students’ ‘higher order thinking skills’ (HOTS), following Bloom’s taxonomy (1956)). In general, content teachers valued these CLIL sessions because of the breadth and depth of the discussion about pedagogical strategies and teaching-learning methodologies, which most of them had never experienced, having had no previous pedagogical training, which is not uncommon in Portuguese HE. In addition, these communities of learning and practice have fostered the cooperation of different teachers at ESHTe. This supporting environment was very helpful, when in March 2020, lecturers had to adapt to a reality that was unknown to most of them: an ERE context with synchronous and asynchronous modes of communication with students and a plethora of online tools and platforms.

Students’ perceptions of CLIL implementation at ESHTe and motivation levels have been regularly assessed through surveys conducted at the end of each semester, in both onsite and online learning contexts. The next section presents the methodology of the study. The findings are presented in section 5.

4. Methodology

4.1. Research instrument and sampling

For this study a cross-sectional survey was designed, which was adapted from a previous survey developed under the ReCLes.pt project in 2014. The survey includes 30 questions, divided in two sections. The first section contains questions related to degree year and curricular unit. The second section assesses data about CLIL classes, namely content learning, motivations, soft skills, difficulties, materials,

language, and global assessment, all of which are evaluated in a five-point (1 to 5) Likert scale.

Two convenience samples were defined, corresponding to two different groups of students from ESHTe, who were taught different curricular units using CLIL and differed in terms of how classes were taught. One group attended classes onsite, on the school premises and had face-to-face contact with teachers, from the 2016/2017 academic year to the 1st semester in 2020, whereas the other group corresponding to the 2020/2021 academic year, was taught online in an ERE context and using video-conferencing platforms.

4.2. Data collection and analysis

The CLIL assessment survey was applied through an online platform (Google Forms) at the end of each semester. Data were analysed using R software version 4.0.3. Descriptive statistics were used to examine all the data collected. Due to the absence of a normal sample distribution, as well as the presence of nominal, ordinal and scale variables, non-parametric analysis was considered the best choice (Marôco, 2018), namely Spearman’s correlation and Mann-Whitney’s U test. Results, analysis, and their discussion are presented in the next section by grouping questions by type: collaboration and soft skills; materials; language; content learning; motivation; difficulties; internationalisation; and global assessment.

5. How students perceive CLIL in an online setting: findings

Our findings show that from a total of 259 students who completed the cross-sectional survey, 182 belong to a group of students who took onsite (OS) classes, between 2016/2017 and 2019/2020, and 72 belong to a group of students who took online (OL) classes during the 2020/2021 academic year.

CLIL curricular units included Market Studies, Nutrition, Events Management, Business Strategy, Hotel Architecture and Design, and Commercial Management Techniques, corresponding to 1st (30%), 2nd (10%), and 3rd (60%) year undergraduate students from different T&H degrees – Tourism Management; Cookery and Food Production; and Hotel Management.

Data from the survey were organised into eight sections and main results from each section are presented below and summarised in Appendix 1.

5.1. Collaboration and soft skills

For both groups, 65% of students report having participated in more interactive and student-centred activities than what is common in similar curricular units in Portuguese, with no significant differences found ($p = .823$). A higher proportion of students in the OS group (86%) states having done collaborative work with other colleagues when compared to the OL group (68%), which results in a significant difference ($p = .046$). Even though there are studies that show that students find it easier to collaborate and work together through online platforms than face-to-face (Chester & Gwynne, 1998), in this case we can hypothesise that students may have difficulties using technology that hinders their ability to work collaboratively, and teachers may have not asked for this type of work. In fact, a study by Hughes and Hagie (2005) on the challenges of learning online and in traditional face-to-face classrooms found that only 5% of the students reported the use of computers and the internet as a positive learning experience. In addition, a recent study has identified that more than 60% of students have a strong preference for face-to-face instruction, in terms of engagement, enjoyment and the effectiveness of learning material (Dodson & Blinn, 2021).

Nevertheless, more students in the OL group (82%) find it easier to integrate foreign students in the class, when compared to the OS group (67%). This may be because online communication is less constrained by behavioural and social norms, non-verbal communication, and a tendency to use native language with other colleagues, among other aspects, and this makes learning conditions more alike for all students.

Both groups, however, consider that the CLIL approach contributes to stimulating critical thinking (OS – 72%; OL – 71%), which supports other authors' perspectives (e.g., Hanesová, 2014; Morgado *et al.*, 2015).

5.2. Materials

In relation to the materials provided, both groups were very pleased (OS – 97%; OL – 94%) with them and considered them appropriate to their language level, with no significant differences found ($p = .706$). Students also considered that the materials were adequate for the study of the content subject, with a higher percentage among the OL group (OS – 84%; OL – 95%; $p = .003$). This increase may not be related to the online context, but to the fact that most CLIL lecturers have been applying this methodology since 2016, having had the time to develop and improve their materials according to previous student feedback.

5.3. Language

Most students consider that the techniques used to explore texts have facilitated their understanding of the language and that the curricular unit has contributed to facilitating communication in the FL. Nevertheless, a significant difference is observed between the two groups, as the OL group reports a higher rank in terms of language learning and use, when compared to the OS group ($p = .002$). Chester and Gwynne (1998) found that students report that not being observed contributes to their increased confidence and participation, and Hughes and Hagie (2005) also identified that students feel it is easier to make comments in the online context. We also speculate that online classes allow for better participation management because participants tend to wait longer for their turn to speak, and do not interrupt the other speaker.

5.4. Content learning

For most of the questions related to content learning, no significant differences were observed between the two groups. More than 75% of students report that the adopted teaching methodologies, strategies, and the CLIL approach have facilitated the integrated learning of language and content and that the techniques used to explore texts have facilitated the understanding of the content (OS – 73%; OL – 74%). A slight, but not significant ($p = .194$) difference was found in relation to how they perceive the mother tongue (Portuguese, in most cases, although a few ERASMUS students also responded to this survey) and English relate to one another, with a slightly lower percentage in the onsite context reporting positive perceptions (OS – 58%; OL – 65%). However, since there is not a significant difference in the answers provided by the two groups of respondents, and there is no clear evidence that CLIL curricular units foster the development of students' intercultural awareness in the articulation between their mother tongue and English, this topic presents evidence worthy of further analysis.

5.5. Motivation

A significant difference was found, however, between onsite and online students concerning motivation: 79% of onsite students considered that learning content subjects in a FL was motivating, compared to 93% of online students ($p = .010$).

More online students report that learning content subjects in a FL made them more aware of their needs, both in relation to the content and to the FL (OS – 68%; OL

- 74%) and find that CLIL curricular units help them to better understand FL learning needs (OS – 63%; OL – 76%), the latter being significant in terms of rank ($p = .006$).

The COVID-19 pandemic has forced education to move online. This may have made students more aware of how globalisation works and how interconnected individuals are, thus making students realise how the ability to communicate in a FL can generate increasing academic and professional opportunities all around the world. The results presented in this section also support the study of Doiz *et al.* (2014), which proposes that CLIL students are generally more motivated. Finally, the difference in this respect might have been strengthened by the pandemic itself: CLIL classes and teachers are usually more adaptable to new contexts and use ICT on a regular basis. Therefore, the impact of ERE might have been less striking in CLIL contexts.

5.6. Difficulties

The percentage of students that report difficulties in the learning process is lower in the online setting. Nearly 20% more of OL students report that learning content subjects in a FL is not time-consuming, 10% fewer consider that it is more difficult to study content in a FL, 9% fewer find it more difficult to express ideas effectively in a FL, and 18% fewer feel uneasy about participating in a FL class. The first and the latter differences are significant ($p < .05$). This also relates to findings by Chester and Gwynne (1998) that the online context facilitates learning. In addition, Hughes and Hagie (2005) suggested that because some content is delivered asynchronously, students feel they can study and learn at their own pace. An hypothesis advanced by the teachers involved in this study is the fact that, when teaching online, teachers tend to speak slower, question students on a more regular basis about their understanding and tend to reduce syllabus content.

5.7. Internationalisation

The percentage of students that considers that curricular units in English may facilitate internationalisation is lower among onsite students (OS – 96%; OL – 90%), although this difference is not statistically significant. What is worth highlighting, however, is the high percentage of students agreeing with this topic, which supports the idea that CLIL can contribute to the internationalisation of HE and of its students (Luprichová & Hurajová, 2017), though what it means to be ‘international’ nowadays is different after the impact of COVID-19: internationalisation is inevitably less ‘face-to-face’ and more ‘digital’, less ‘offline’ and more ‘online’, less

‘individualised’ and more ‘collaborative’, less ‘local-global oriented’ and increasingly forged *within* and *for* the global context.

5.8. Global assessment

Both groups of students find CLIL to be important for their future career (OS – 91%; OL – 88%) and relevant in the context of Portuguese HE (OS – 95%; OL – 85%). Most students would like to experiment with more curricular units with the CLIL approach, with onsite students presenting a slightly higher percentage (OS – 89%; OL – 83%). Overall, the CLIL learning experience was regarded as positive by the vast majority of students (OS – 92%; OL – 94%), which again might relate to their motivation in these classes.

Based on the understanding of internationalisation mentioned in the previous section, foreign languages, and especially communicating in English, might increasingly be seen as a core skill to be developed. The need to communicate in English has become important and is not specific to a given national context but rather a mandatory skill for any global citizen.

6. Conclusions

This chapter has analysed and presented different explanations that may justify students’ perceptions of CLIL curricular units in Portuguese T&H higher education. Topics such as the development of soft skills, FL acquisition, content-based knowledge, internationalisation, and their motivation to learn have been assessed, and most of these present very positive results. Yet a clear limitation of the study is that sample compositions are different, since the students in each of the groups are not the same; differences between the two groups might relate to additional and intangible aspects that do not necessarily pertain to the CLIL experience itself. In addition, when comparing the OS with the OL groups, samples are clearly uneven in terms of size (OL – 72 students; OS – 182 students), not to mention that the OS group has students from a wider range of curricular units, degrees, and years.

The findings resulting from a survey applied to students over a five-year period, the diversity of the curricular units assessed, and the advantage of applying this survey to both OS and OL CLIL groups within the recent context of ERE provide an insightful understanding about the implementation of CLIL at ESHTe and contribute to a broader discussion about how CLIL may foster learners’ increasing motivation, even in DL environments in HE, in general. There is clear evidence in

the literature that motivation plays a key role in the process of learning a FL (or L2) (e.g. Dörnyei, 1998; Ollero Ramírez, 2014; Lasagabaster *et al.*, 2014; Guerrero, 2015). Following a CLIL approach, this may also apply to specific content learning and, as we have seen, in the context of HE where students tend to be less motivated than in previous levels of education, CLIL implementation in increasing students' motivation might also be considered pivotal.

This chapter has also attempted to contribute to the yet limited literature on CLIL in DL contexts. The analysis focused specifically on students' perceptions, though future lines of enquiry should also include CLIL lecturers' understanding of how they have adapted teaching-learning strategies and methodologies to online education and what has dictated their course of action.

7. Recommendations for implementing CLIL in Higher Education

The benefit of hindsight from several years of CLIL implementation at ESHTe, the diversity of T&H curricular units involved, and the results of the survey analysed in this chapter offer a very acute perception of what has worked particularly well in this implementation, what have been the main constraints felt, and what would significantly improve results, considering the experience in both onsite and online teaching-learning contexts. Therefore:

- (1) it is particularly important that each HEI adopt a sound and robust language policy where the institution's strategies and the requirements for the implementation of CLIL are clearly defined, where students are provided with the necessary information about CLIL, and where the guiding principle should be the benefits that the CLIL approach brings to students' learning;
- (2) it is essential to guarantee that all CLIL lecturers have a minimum B2-CEFR level in order to ensure language competence standards;
- (3) a community of practice and learning should be created and sustained over time as a safe place for FL and content lecturers of different areas of expertise to collaborate with one another and reflect on their pedagogical practices and on different teaching-learning methodologies;

- (4) the support of a FL teacher with expertise in CLIL to content teachers should be constantly provided to help in the process of session planning, selection of materials, decisions regarding appropriate tasks and activities to conduct with students, as well as assessment methods adequate to students' language skills;
- (5) the continuous assessment of the CLIL implementation must be ensured by conducting surveys, interviews, focus groups or other methods, with learners and lecturers alike, so as to strengthen the continuous improvement of the work undertaken;
- (6) as many HEIs share similar realities, challenges, and constraints, though in different areas of expertise, it is important to continue sharing the results of implementing CLIL with peers.

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Appendix 1

Presentation of results from the cross-sectional study applied to CLIL Students at ESHTE between 2016/2017 and 2020/2021

	Online (OL)					Onsite (OS)					Mann-Whitney U test	Proportion test
Collaboration & Soft Skills	1	2	3	4	5	1	2	3	4	5		
1. In this curricular unit I have participated in more interactive and student-centred activities than what is common in similar curricular units in Portuguese.	2.8	5.6	26.4	41.7	23.6	2.3	7.9	25	42	22	.8225	1
2. This curricular unit has allowed me to develop collaborative work with other colleagues.	4.2	13.9	13.9	29.2	38.9	1.1	3.2	10	53	32	.3222	.0461
21. The CLIL approach contributes to stimulating my critical thinking.	1.4	1.4	26.4	47.2	23.6	1.1	2.2	25	48	24	.9243	.9777
18. Learning content subjects in a foreign language benefits the integration of students in the class.	1.4	1.4	15.3	38.9	43.1	0.5	7.1	25	32	36	.05608	.0304
Materials												
3. The materials provided have been appropriate for my level of the foreign language.	0	0	2.8	36.1	61.1	0.5	1.1	4.8	28	65	.706	.3933
4. The materials provided have been appropriate to the study of the content subject.	0	0	5.6	40.3	54.2	0.5	3.2	12	29	56	.6357	.002633
Language												
7. The techniques used to explore texts have facilitated my understanding of the language.	2.8	1.4	25.0	27.8	43.1	2.2	6.1	30	38	24	.01311	.2313
9. This curricular unit has contributed to facilitate my communication (language learning and use) in the foreign language.	1.4	2.8	12.5	36.1	47.2	2.7	5.4	22	42	28	.001817	.03914
Content learning												
6. The techniques used to explore texts have facilitated my understanding of the content.	2.8	4.2	19.4	38.9	34.7	1.1	2.8	23	51	22	.2379	1
8. The teaching methodologies and strategies have facilitated the integrated learning of language and content.		2.8	19.4	38.9	38.9	0.5	2.7	19	46	31	.4277	1

	Online (OL)				Onsite (OS)					Mann-Whitney U test	Proportion test	
10. The CLIL (Content and Language Integrated Learning) approach adopted in this curricular unit has contributed to facilitating learning of the content subject.	1.4	22.2	38.9	37.5	1.6	6	17	47	28	.1938	.9259	
11. This curricular unit has fostered the development of my intercultural awareness because I understood better how my mother tongue and English relate to one another.	8.3	26.4	43.1	22.2	2.7	5.5	34	39	19	.1938	.3487	
Motivation												
17. Learning content subjects in a foreign language is motivating.	1.4	5.6	50.0	43.1	0.6	3.3	18	41	38	.08077	.01032	
19. Learning content subjects in a foreign language has made me more aware of my needs, both in the content and in the foreign language.	2.8	23.6	36.1	37.5	3.2	7.5	21	43	25	.05866	.4932	
5. This curricular unit has helped me understand better my foreign language learning needs.	2.8	2.8	18.1	29.2	47.2	3.8	9.7	24	32	30	.005985	.05227
Difficulties												
13. Learning content subjects in a foreign language is time-consuming.	15	25.0	29.2	26.4	4.2	29	31	20	14	6	.006837	.008233
14. It is more difficult to study content in a foreign language.	19	29.2	25.0	19.4	6.9	24	34	19	18	4.8	.2382	.2185
15. It is more difficult for me to express my ideas effectively in a foreign language.	11	27.8	22.2	26.4	12.5	18	29	19	25	9.1	.1609	.262
16. I feel uneasy to participating in class in a foreign language.	25	31.9	18.1	16.7	8.3	35	41	15	7.6	2.2	.004064	.005068
Internationalisation												
20. Curricular units in English may facilitate the internationalisation of students.		9.7	30.6	59.7	0.5	1.1	2.1	28	68		.1489	.1097
Global												
22. CLIL is important for my future career.		12.5	31.9	55.6	0.5	1.6	7	36	55		.9606	.5754
23. I consider CLIL to be important in the context of Portuguese higher education.	5.6	9.7	34.7	50.0		1.1	3.9	36	59		.06192	.01356
24. I would like to experiment more curricular units with the CLIL approach.		16.7	31.9	51.4		1.1	9.8	28	61		.1281	.3007
12. Overall, my learning experience in this curricular unit has been positive.	2.8	2.8	45.8	48.6	0.5	1.6	5.9	41	51		.8692	.6698