Examining students’ reflections on a collaborative online international learning project in an ICLHE context

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ABSTRACT

This paper explores students’ reflections towards the application of language and content, along with cross-disciplinary skills and cultural awareness, when participating in the Virtual Business Professional (VBP) international project. It examines the experience of 23 learners, from different nationalities, enrolled in a business-related master’s degree. This experience combines the ICLHE (Integrating Content and Language in Higher Education) and the COIL approaches (Collaborative Online International Learning). The study has been conducted through a mixed methods perspective based on two questionnaires, distributed to all participating students before and after the project, together with follow-up semi-structured interviews to four students. Students were asked about their expectations (before) and perceptions (after) from the VBP project, respectively. Results support the view that this project applying a COIL approach may help students to consolidate their master’s degree training and gain self-confidence when applying their knowledge in a real experience. The combination of these two approaches, ICLHE and COIL, seem to benefit students since they have used everything learnt and feel that the master’s degree contents are widely implemented in the VBP project. However, results also reveal that students’ expectations were higher than their final perceptions, which leads to pedagogical implications at the local and global level.

1. Introduction

The emerging growth of technologies within the educational world has offered the opportunity to integrate them in different ways being COIL an example. According to Swartz and Shrivastava (2021, p.3) “researchers refer to global virtual teams and COIL projects interchangeably, as their outcomes are the same”, but also “telecollaboration” is used in this current article to refer to the same concept (Esche, 2018; Helm & Guth, 2016; Júnior & Finardi, 2018; O’Dowd, 2016). This approach promotes online academic mobility and virtual international collaboration, fosters the learning of foreign languages and content, and enhances intercultural communicative competence and the internationalisation of higher education (HE) institutions.

On the other hand, ICLHE (no distinction is made between ICLHE, CLIL (Content and Language Integrated Learning) or EMI (English as a Medium of Instruction) in this paper) promotes primarily the learning and teaching of languages and content simultaneously, but also the use of technology (one of COIL’s priority), intercultural awareness raising or the internationalisation of HE (Helm, 2020). The specific goals both approaches share could lead to a positive merge that could benefit students in their learning.

Thus, this study presents a case in which 23 master’s students, within an ICLHE academic environment, are involved in an
international virtual project (within the COIL approach). This research tries to study the benefits a group of master students learning in an ICLHE context can obtain when applying their knowledge to a COIL experience. The main focus of this paper is to explore students’ perceptions before and after participating in a real business-like experience regarding the implementation of their English language skills, business-related content knowledge, intercultural competence, and cross-disciplinary skills (technological, teamwork ability, decision-making, communication, problem-solving, negotiation, interpersonal, analytical, research ability, critical thinking, collaborative writing and cooperative work) learned along the master’s degree.

Hence, in this article the theoretical foundations of the study are followed by a contextualisation of the environment in which this case occurred the English Language for International Trade (ELIT) master’s degree and the VBP international project. Then, the methodology employed is described, including participants and data collection analysis. The following section discusses the results obtained regarding language level, content, interculturality, and cross-disciplinary skills. Finally, concluding remarks, pedagogical implications, limitations and proposals for further research are elaborated.

2. ICLHE and COIL in higher education

The ICLHE and COIL approaches share interests in the internationalisation of HE, the promotion of (foreign) language proficiency and the fostering of interculturality competence. ICLHE is a challenge for both students and lecturers. Students are confronted with a wide array of expertise in particular disciplines and many fields in which learning the content and acquiring the language occurs simultaneously (Wilkinson & Zeegers, 2008). Within this apprised context, ICLHE lecturers should promote learners’ communicative competence (apart from the content) to help them to practise the acquired language successfully, with users of several linguistic backgrounds (Taguchi, 2009). Macaro, Curle, Pun, An, and Dearden (2018) presented an overview of EMI in HE. They concluded that much research on the topic involve teachers and/or students’ “beliefs, perceptions and attitudes towards its introduction and practice” (p. 64). They report on several positive contributions of EMI, such as “instrumental advantages for home students (improving English and opportunities to study abroad); high value placed on international English” (p. 64). Pérez-Vidal (2015) also showed how different CLIL approaches to education “represent international experiences in themselves”, many times complementing students’ mobility programmes, which may help them in their future labour experiences in a global market (p. 44).

Nonetheless, there are two main pitfalls which hinder ICLHE’s implementation in university classrooms. One refers to the reasons for the lack of well-designed EMI curricula (Wilkinson, 2013). In some HE institutions “there are no specific linguistic or methodological pre-requisites for teaching in English”, and as a result, “faculties operate their own practices autonomously” (Ellison, Araújo, Correia, & Vieira, 2017, p. 66). The second one denotes a reluctance of content specialists to collaborate with language experts. This deficiency of cooperation is identified as a much-needed area of improvement in ICLHE implementation (Ruiz de Zarobe & Cenoz, 2015).

COIL is mentioned by recent studies on internationalisation and ICLHE (de Wit, 2016; Fortanet-Gómez, 2020; Guimarães & Kremer, 2020) as an important means to support the international character of the university classroom, by enhancing interaction or “virtual exchange” among faculty members and students from all over the world. It “fosters […] collaborative teaching and learning with the use of digital technology, more specifically, the internet” (Júnior & Finardi, 2018, p. 4), and promotes language proficiency and intercultural communication. Moreover, COIL must employ “the pedagogical principles of co-developed instruction, shared learning goals and deep collaboration” (Wojenski, 2021, p. 2) and it can be applied to subject activities or to whole subjects (O’Dowd, 2016), which places this approach closer to ICLHE.

Despite the potential contribution of telecollaboration, Bueno-Alastuey and Kleban (2014) summarise its drawbacks in foreign language education, which can be divided into four levels (Bueno-Alastuey & Kleban, 2014, or; Helm & Guth, 2016, following; O’Dowd & Ritter, 2006):

• Individual: different participants’ level of communicative competence, motivation, expectations, backgrounds, or objectives.
• Classroom: miscommunication, task-type selection, or group dynamics.
• Socio-institutional: external factors, such as technological tools or students’ access to them, time and organisation constraints, academic calendars, students’ different workload depending on their own institution, or situations affecting the whole world (e.g., the COVID-19 pandemic).
• Interactional: these aspects “involve issues concerning different views of appropriate discourse behaviour and culture specific discourse norms” (Bueno-Alastuey & Kleban, 2014, p. 152, p. 152)

Many European universities have favourable circumstances to integrate new collaboration with international universities and cooperate in different projects, taking advantage of technology (Helm & O’Dowd, 2020). Indeed, the European Commission’s Digital Education Action Plan (2021–2027) claims that education requires an innovative use of digital technologies. Riasati, Allahyar, and Tan (2012), for example, summarise some advantages of technology in language education, such as students’ motivation and engagement (enhancing their self-confidence), shift to a more learner-centred approach, or (international) collaboration and communication encouragement in the learning process. Additionally, several works support the contribution of technology to EMI, together with internationalisation at home (Wächter, 2003). Following Ratheeswari (2018), in this research the role of technology is

approached as a medium of instruction and communication, rather than as a learning outcome. As he states, information and communication technology refers to technologies that provide access to information through telecommunication focusing primarily on communication.

In summary, ICLHE and COIL common position contextualises the present study: students from different backgrounds, nationalities, and cultures, who have a common business-related goal and must work virtually to achieve it, by means of communication technologies, using the English language. We have learned from previous research about the advantages and disadvantages of applying each approach. In the present study, we try to go further providing information about the challenges when applying what learners have learnt within an ICLHE context to a COIL project, according to their own views.

3. Contextualisation of the case study: ELIT master and VBP project

Our research context involves both approaches. On the one hand, this experience has taken place in the ELIT master’s degree, taught at Universitat Jaume I (UJI), Spain, as an example of ICLHE (Ruiz-Garrido & Palmer-Silveira, 2008) since over the years, the national accreditation processes that the master’s degree has undergone have proved that the transversal integration of content and language is certainly fulfilled. The ELIT master, consistent with Slepicka (2004), contributes to the teaching of languages for specific purposes, by integrating content, general language, communication skills and cultural awareness, taking also into consideration the collaboration between content and language lecturers. Hence, the aim of the master is to make students competent communicators in English in the business field.

On the other hand, ELIT master students have been part of a COIL project (the VBP project) since 2017. The six-week project, organised by the USC (University of South California) Marshall School of Business, gives students real-world experience using communication and collaboration technologies as they are employed in today’s corporate environment (“Learning with VBP”, 2020). Through a social collaboration platform, “students plan and hold virtual meetings, collaboratively conduct research, co-author documents, and use project management tools” honing their cross-cultural and collaboration skills (“Learning with VBP,” 2020). As already stated and influenced by Helm and O’Dowd (2020, p.1), this COIL project “involves engaging learners in sustained online international collaboration and communication with online peers under the guidance of trained facilitators or educators”.

Furthermore, both contexts, the ELIT master’s degree and the VBP project, are interconnected in multiple ways (as Appendix A shows). First, they promote the international collaboration of culturally diverse groups in a business-related setting. Second, they put into practice (during the project) knowledge acquired along the master’s course related to subject matters, such as meetings, negotiations, or intercultural awareness (SAR002), socialising (SAR004), international marketing (SAR006), international management (SAR007), business writing (SAR017), persuasive language (SAR006), language of marketing and business promotion (SAR009), and telephoning and new technologies (SAR008). Third, they get familiarised with incidental cross-disciplinary skills which are also practised: technological, teamwork ability, decision-making, communication, problem-solving, negotiation, interpersonal, analytical, research ability, critical thinking, collaborative writing and cooperative work. Moreover, ELIT master students face an additional challenge and objective: practising the English language learned in a business setting, even though this is not a specific objective of the VBP project, since for some students, English is their mother tongue. Lastly, they make learners aware of interculturalism in a business context, meaning “the existence of a relation based on mutual understanding and interaction between the people who belong to various cultural groups” (Kim, 2009, p.295). As Swartz and Shrivastava (2021, p. 6) add, “[m]easurement of intercultural competence involves investigating the level of understanding that differences do exist among people of different cultures, that this awareness facilitates empathy and tolerance, and that adjustments to behaviour can facilitate successful collaboration”. Such experimental learning experience gives insight on how students hone essential skills in intercultural competence.

As far as the development of the project is concerned, this study refers to the VBP that took place in spring 2019 and involved over 500 students from 16 universities located in 7 countries (Finland, France, Germany, India, Lithuania, Spain, and several states of the USA). During six weeks, students were asked to work on a client-based project for one of three well-known companies, Google, Starbucks and Amazon. They got involved in a collaborative business writing competition with the aim to enhance the chosen company’s online reputation management. In particular, they had to conduct the following tasks in groups: (1) identify the company’s online presence; (2) analyse the quality of online presence in terms of building and maintaining the company’s reputation and reach major conclusions about the company’s online presence; and (3) write a 2500-word report that introduced the company’s online communication tools, provided an analysis of its online presence, and offered recommendations for its improvement. The three highest rated reports, aiming at developing language and content competence, were forwarded to the selected company for their review and consideration and finally, the company selected the winning team. The document was graded according to the following criteria: (1) relevance of the report, rigor of analysis, and audience orientation; (2) recommendations; (3) content, organising and professionalism; (4) language, style and tone. Furthermore, students did not receive explicit instruction in terms of content along the project. Instead, they were required to read 4 compulsory documents (see Appendix B) and watch 4 videos, recorded by the faculty participating in the project and shared with students from the very beginning of the project, about virtual team collaboration, cross-cultural collaboration, corporate reputation management and collaborative writing. The instructors’ task involved selecting and developing the material explained but no other common requirements were established and instructors could integrate the VBP project in their courses in the most suitable way. In our case, apart from the common instructions (e.g., how to write a report) and the monitoring of our own

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2 Codes refer to the subjects in the ELIT master.
students’ schedule (i.e., recommended short weekly meetings), no additional instructions or resources were added. Regarding the team composition, each participant was randomly assigned a global team comprised of 6 students from different universities across the world to ensure cultural diversity.

Concerning the communication platform, the project promoted experience of real-world situations using well-known worldwide communication technologies, Slack and Zoom, operating in the business world, since nowadays companies are increasingly depending on virtual teams to combine the required knowledge needed to deal with complex international issues and reach high-quality decisions (Fleischmann, Aritz, & Cardon, 2019). Simulating real business online communities, students were asked to meet once per week; they could exchange and edit documents, hold virtual meetings and use its messaging system. To prove the existence of those meetings, one of the members was assigned the task to write the minutes and upload them to the Slack workspace and on their local course management system (ELIT’s virtual platform - Moodle). These weekly online meetings shed light to the development of intercultural competence. The total grading was based on the participation in the project and completion of all the assigned steps (50%), and the quality of the report (50%).

Therefore, the VBP project, supported by the COIL approach, fits with the ICLHE context. Students are exposed to acquire specific business content and apply it in real situations, implement the awareness raising of intercultural competence, use technological tools to communicate, and work in a collaborative environment. Additionally, in our case, there is a clear promotion of the English language skills which is also an objective of the COIL approach.

4. Objective and research questions

This study aims at finding out the students’ perceptions about how much the ELIT master’s degree supports their performance in the VBP project by putting into practice what they have learned along the master’s degree in terms of language, content, intercultural competence and cross-disciplinary skills, so that we can assess the benefits of ELIT master students’ participation in this COIL project. Hence, the research questions are:

RQ1 Do master students perceive they have been able to transfer the language and content knowledge acquired in the master subjects to the VBP project?

RQ2 Are master students aware of the development of their intercultural competence when communicating with international students?

RQ3 Do master students think they have effectively applied cross-disciplinary skills (technological, teamwork ability, decision-making, communication, problem-solving, negotiation, interpersonal, analytical, research ability, critical thinking, collaborative writing and cooperative work) in this project?

5. Method

5.1. Participants

The study is based on the experience of 6 male and 17 female students involved in the project between March and April 2019 (See Appendix C). Students participating in this study officially certified a high command of English (6 students had B2 level, 15 C1, and 2 C2), although the level required to enrol in the ELIT master’s degree was B1. This international and plurilingual group of students was distributed in seven different nationalities: 16 Spanish, 2 Chinese, 1 South Korean, 1 Belarussian, 1 Dutch, 1 Moroccan and 1 Molovian, showing diversity concerning cultural backgrounds (some Spanish students also came from different backgrounds, brought up in families from other cultures but fully educated in Spain). Regarding education, most came from the humanities. Indeed, 18 students had obtained language-related degrees, English Studies (12), Translation and Interpreting (4), Spanish Philology (1) and Cultural Studies (1). On the other hand, 4 students came from business degrees, International Business Management/Administration (2), Accounting, Analysis and Auditing, and Human Resources Administration), and one from Law.

5.2. Data collection

This study combines quantitative and qualitative methodological approaches as “mixed methods research has become increasingly common in the last decades and continues to expand, both theoretically and in practice” (Guest & Fleming, 2014, p. 581). The research tools for collecting the data were two Google Form questionnaires (edited and shortened for the purpose of this paper), an initial one (Appendix D) and a final one (Appendix E), and 4 students were interviewed. The appropriateness of this kind of data collection is supported by previous research (e.g., Arribas, 2004), proving that the survey is a reliable method when dealing with learner’s impressions (e.g., Ellison et al., 2017, pp. 59–76; Yang & Kim, 2011).

The two surveys were developed by four experts (including the authors of the study, who were also instructors in the project) and consisted of 5 main sections: students’ background information (Section 1); language skills, that is, writing, reading, listening, and speaking (interaction) (Section 2); content subjects of the ELIT master (Section 3); cultural diversity (Section 4); and cross-disciplinary skills (Section 5). As we were aware that cultural diversity could be decisive for students’ participation in the VBP project, the first survey included an additional question about previous contact with other cultures. The cross-disciplinary skills’ selection was based on three main sources: (1) the criteria of the ELIT master related to the tasks involved in the project; (2) the list of skills developed by instructors based on the previous years’ surveys and past projects; and (3) a certain number of works on generic capabilities for
graduates (e.g., Kember & Leung, 2005; Marbach-Ad, Hunt, & Thompson, 2019; Spencer, Riddle, & Knewstub, 2012). The initial and final questionnaires were developed in parallel, following a similar organisation: 2 questions of multiple answers, 5 with a 5-point Likert scale, and 6 open questions in the initial survey and 5 in the final one. They were distributed two weeks before the experience started (the initial one) and one week after the end of the project (the final one). They took approximately 10-min each to be answered and were followed by a non-anonymous procedure in case we needed to ask students for clarification.

The purpose of collecting data in both surveys was to compare students’ general conceptualization of the international project before starting, with their actual experience. All this helped us to analyse the students’ sense of progression during the VBP project by showing to what extent language, content, culture and cross-disciplinary skills were enhanced.

As far as the data analysis is concerned, results were collected in spreadsheets and then transferred to SPSS and processed in version 26.0. The questionnaires were found to be reliable and internally consistent with a Cronbach alpha coefficient of α = 0.943. This result is within the scope of the acceptable coefficient values. All variables were analysed using a Shapiro Wilk test to perform the normality test. The results of the normality test of the variables studied using the Shapiro Will test of less than 50 groups was 0.000, because the data was not normally distributed. A descriptive analysis of the sample was performed using measures of central tendency and dispersion, for quantitative data, and measures of frequency distribution, for qualitative data. The Wilkinson Match Pairs Test was used being considered appropriate to observe the relationship between the variables (p < 0.05).

Considering the idea of complementing the survey data collection tool, semi-structured interviews were integrated since “both the interviews and the questionnaires base their information on the validity of the verbal information of perceptions, feelings, attitudes or behaviours that the respondent transmits, information that, in many cases, is difficult to contrast and translate into a measurement system, a punctuation” (Arribas, 2004, p. 2). We selected students with different language levels, different gender groups and different cultural backgrounds, but also with different views in their replies to the two surveys (e.g., showing better or worse values). Four interviews (to S10, S12, S17, and S23) were conducted through a phone call one month after participants completed the final questionnaire, and they were recorded. These interviews lasted 10 min and were based on five open-ended questions (Appendix F), related to the main topics of the questionnaires, contributions to participants’ future job and their overall impression. The principal goal of conducting those interviews was to allow the interviewees to value the ELIT master effects (ICLHE approach) on the VBP project (COIL approach).

6. Results and discussion

The findings of the study are presented according to our three research questions on language and content transfer, interculturality awareness, and the effective application of cross-disciplinary skills. Statistically speaking, no significant differences have been found regarding the students’ English level or gender in relation to any other variable. We chose those two variables as relevant for the possible results. Other variables pertinent to the research questions have been analysed and they are explained in each section below.

6.1. Language and content: perceived transfer of knowledge

As mentioned above, this study focuses on how a group of master students within an ICLHE context has been able to transfer their content and language knowledge into an international COIL project.

6.1.1. Language

Concerning language, there were few differences between students’ expectations at the beginning of the project and their impressions once the project had finished. First, students were asked to rate the degree of language improvement they thought they would achieve during the development of the VBP project by focusing on the four language skills. As illustrated in Appendix G, listening and speaking (interaction) were rated as the most likely skills to be enhanced (87% and 82.7%, respectively, when adding the two highest values for each skill); if values are considered individually, students expected improvement in speaking to be highly probable. Reading (69.6%) and writing (65.3%) were considered skills to be developed to a minor degree. Thus, all initial expectations were for a higher increase in their communicative skills, in line with the idea that the COIL approach promotes language proficiency as literature supports (Fortanet-Gómez, 2020; O’Dowd, 2016).

Nevertheless, when those initial expectations were compared to the students’ actual perception (Appendix G), results showed statistically significant differences in speaking (interaction) (56.6%) (p = 0.009) and listening (43.4%) (p = 0.005), considering the two highest values. The other two skills followed the same decreasing tendency as well as the previous expected valuation: 39.1% in writing and 30.5% in reading. Statistically speaking, there is no proved correlation between these results and any other variable (e.g., learners’ English level).

Regarding the results on language transfer from the ICLHE to the COIL approach, they show that the students’ perceptions were lower than their expectations. In the description of the participants we could see that most students had a C1 level of English, which is a proficient user of the language. Although there is not a clear correlation between students’ English level and their expectations or perceptions, the overall results may support the idea that higher proficient learners may consider their linguistic development as irrelevant (Bueno-Alastuey & Kleban, 2014).

Despite all this, in the interviews, students were asked to evaluate to what extent their participation in the VBP project had affected their English level. Students had the overall feeling that the effect of their participation in an international project was positive as it reinforced their self-confidence in their language performance (Riasati et al., 2012). So, even though our results and the fact that students may not perceive any linguistic development (as mentioned above), some research also supports that higher proficiency
students tend to show a higher linguistic self-confidence (Moratinos-Johnston, Juan-Garau, & Salazar-Noguera, 2018), which seems to be our case. One student summarised that idea and confirmed students’ beliefs about the value of this international project as a positive influence on their oral skills and on being exposed to international English (Note: no student quotation has been edited and some mistakes may be found in them):

(1) “it’s true that due to the fact that we spoke with people from other countries helped me to discover new accents and to get used to them” (S23).

6.1.2. Content

The ELIT master includes an extensive variety of business knowledge (as seen in the subjects’ presentation in section 3), but there was no specific preparation in any subject to improve the performance of the students in the VBP project. Even so, all subjects could contribute to the students’ performance in the international project because of their contents and methodologies employed (See Appendix B).

We were aware that some subjects could have more relevance than others (e.g., SAR002). In fact, in the initial survey (Fig. 1 – see expectation columns), students ranked the subject SAR002, which includes specific content on intercultural communication and meetings, as the most relevant after combining the two highest values (22 students (95.6%)). This relevance was confirmed in the final survey (Fig. 1 – see perception columns), as students ranked this subject as very valuable (20 students (86.9%)), although there was no statistically significant difference.

As for the rest of the subjects, content transference behaved as in language transference, also revealing a downward tendency when comparing the expectations and the final perception about content contribution to the VBP project, although most students chose values that ranged from moderate to high contribution. Those results can meet our initial expectations that most content subjects could contribute somehow to the students’ participation in the VBP project.

Among all the subjects, only three showed statistically significant differences: SAR017 (p = 0.049), SAR004 (p = 0.043), and SAR008 (p = 0.017), even though over half of the students valued their significant contribution. These subjects deal with writing (SAR017), socialising (SAR004) or communication technologies (SAR008) in the business world. The results on the subject of writing (SAR017) seem to be consistent with the results about writing skills, though there is no statistically significant difference. Interviews and informal chats imply that the final task (a written report) might not be too demanding, matching some possible pitfalls in the COIL approach, such as the task-type selection (Bueno-Alastuey & Kleban, 2014). As for socialising (SAR004), this may provide key information about the results of the project: students did not try to get to know each other during the project; they stuck to their work, without paying attention to the socialising aspect of meetings (Asmuß & Svennevig, 2009; Poth, 2018). Social contact is considered part of business meetings and promotes the creation of the right atmosphere to do the job. As Poth summarises regarding virtual learning environments, “[d]etermining how to develop an individual’s “social presence” […] is key to promoting a more engaging and supportive educational experience, in which students become more motivated and can attain more success (Richardson, 2015)” (2018, p. 89).

Finally, another low result is offered by the subject SAR008, which is related to the use of technology in business environments. One of the aims of the VBP project (and the COIL approach) was to promote the use of communication through technology, and the subject was expected to be more useful for their participation in the VBP project. As it will be confirmed in section 6.3., students found the

![Fig. 1. Expectation vs. Perception of the relevant master’s degree subjects (Exp. = Expectation; Perc. = Perception).](image-url)
technological tools used in this project easy.

A further open question on contents in general was made to students, and the results (derived from the grouping of students’ answers) can be seen in Fig. 2. They confirm the previously mentioned relevance of intercultural aspects (26% of the replies) and meetings (22%). Two issues like internationalisation and business are concepts students felt that allowed them to participate satisfactorily in the project. Although students perceived socialising as not so significant as expected, 15% consider it important due to the development of their international relationships.

When follow-up interviews were conducted, some COIL drawbacks were mentioned, such as problems derived from other students’ lack of commitment or non-fulfilment of tasks, and those caused by the time zones differences (in line with the shortcomings mentioned by the literature – e.g., Bueno-Alastuey & Kleban, 2014). However, there were no negative responses on the language and content transference of the students. They tended to highlight the international dimension of the project, including the status and prestige of the universities the project is twinned with, but also the nature of the topics addressed in the VBP project, and their degree of alignment with the disciplinary field of their master’s program, as the following testimonials confirm:

(2) “Also being able to participate in a project mainly sponsored by a university in California gives it status and prestige. Finally, the topics were related to our field in the master”. (S17)

(3) “Improving a high-quality company in terms of their managing system seems pretty challenging and effort-requiring.” (S12)

One of the interviewees (S23) clarified her reply to the questionnaire. She valued her expectations of the use of the subject SAR004 as very low (2) while she valued it higher (4) in the final survey. She explained that she confused the subject as she thought of the first part of its name (Business trips) rather than of the second section (socialising).

Thus, those results may suggest that master’s degree contents can positively contribute to the students’ participation in this COIL project, but most importantly, it makes them aware of the importance of the international nature on business and of their future jobs. Despite that, a further reflection is required at the local level of instruction as well as on part of the global vision of the VBP project.

6.2. Intercultural competence awareness

Although the students’ most valued subject (SAR002) also includes specific content on intercultural communication and competence, this topic cannot be ignored in other subjects, such as socialising or international business. This fact along with the international and intercultural experience involved in the VBP project required some queries about how our students felt about this content when applied in the COIL experience.

In the initial survey, students were asked about their previous experience with other nationalities and/or cultures, and how much they felt cultural diversity would affect the atmosphere among the members of the group in the implementation of the VBP project. Students’ replies showed a statistically significant difference when compared to the learner’s nationalities (p = 0.028) basically because most of them (12 out of 23) were of Spanish origin and their expectations of how much cultural diversity can affect their VBP experience was high (as Fig. 2 shows). In fact, most participants admitted they had previously collaborated with people from different countries and cultures. Their diversity of background origins (10 different ones as Appendix C shows) proves the international character of the group, suggesting a certain degree of awareness of the possible effects cultural diversity may have. However, this correlation does not appear in the final survey.

Fig. 3 shows that learners’ expectations were higher than the real perception after finishing their participation in the VBP project, which is statistically significant (p = 0.000). As we have seen in the previous section, the social contact with the other students was not

![Fig. 2. Concepts involved in the master’s degree.](image-url)
strongly developed. This downward tendency may reflect the lack of social commitment to the teamwork in the VBP project. However, the students’ experience with other cultures or their different origins/backgrounds or their master preparation on the topic made the original degree of expectation adjust to a more balanced view. Since cultural awareness can be a learning experience in itself, VBP students were provided with the opportunity to integrate and become more aware of other cultures and discourage possible negative attitudes, if they happened to exist (Swartz & Shrivastava, 2021). Results suggest that although ELIT students were prepared for working with other cultures, they may not be fully aware of how to make the most of this opportunity.

Follow-up interviews confirmed students’ awareness of cultural competence and how relevant they consider this issue. A few drawbacks were also mentioned (as presented in the previous section), but nothing to do with cultural diversity. Testimonials referred to the positive effect of the master’s degree on the VBP project regarding this topic:

(4) “It was very interesting to interact with students from different countries.” (S17)
(5) “I think it [subject SAR002] was useful in general with the VBP project because we’ve been in contact with different nationalities and we’ve been working with different students who were from different countries, so we had to understand how they work, to adapt ourselves to their time zones, to their writing skills.” (S10)
(6) “I have liked the experience and learned how is to work with people from other countries with different timings, even though we had some problems, and some people sometimes didn’t seem very interested in the project.” (S12)

Therefore, despite the positive feedback, results imply that students need further guidance on how to take more advantage of their participation in a COIL project to strengthen their cultural competence awareness.

6.3. Effective application of cross-disciplinary skills

The third research question referred to how the previously selected cross-disciplinary skills learned in the master’s degree had been implemented in the VBP project. Although results show that the effectiveness of each one is different, all of them seem to be at least moderately relevant.

**Fig. 4** shows the results of each cross-disciplinary skill in both surveys, (adding the two highest values). In the initial survey, most students (between 17 and 22) considered all skills and abilities could be used in the VBP project. When those results were compared to the final survey, the final impressions were lower than the initial expectations, as in previous results. Despite that, on average, the graph shows that most skills were used largely in the VBP project (over 16 students). However, two skills were not considered as practical for students’ participation in the project (13 students over 23), which were negotiation skills and analytical skills. When statistics correlations were applied, most skills (9 out of 12) showed statistically significant changes, both the most practised ones (technological skills (p = 0.37), teamwork abilities (p = 0.004), communication skills (p = 0.031), problem-solving skills (p = 0.049), interpersonal skills (p = 0.019), collaborative writing (p = 0.008) and cooperative work (p = 0.018)), as the least used ones (negotiation skills (p = 0.013), and analytical skills (p = 0.017)).

Results show that students found that the COIL project gave them the opportunity to put into practice most of the skills as the VBP project required them all at certain degrees (as shown in Appendix A). Students seem to have highlighted those skills that usually lead to take decisions and think critically, but also the ones promoting interpersonal communication, without forgetting working in harmony in groups, as reported by S23 in (7):
It was a very unique and challenging experience. Working with international students was something that I never did before, but I learned a lot from this project regarding international communication and collaboration. (S23)

However, two skills are seen as undervalued or not used (analytical and negotiation). Apparently, students may not have understood the terms or instructors may not have made those terms clear. Analytical skills refer to being able to select information and use it properly when making decisions or solving problems, for example, and those skills are explicitly used in the VBP project. Likewise, negotiations skills are needed when students must reach a time and weekday agreement to hold their meetings from the very beginning of the VBP project, as one example. Therefore, the ways skills are approached and dealt with in the VBP project probably need to be revised and improved to make students more aware of their use. In some cases, they do not find challenging the task (as said earlier) or the tools, as it happens in the technological ones (Slack and Zoom) as a student confirmed: “the platform and tool used in the VBP project are not so different to the ones we already know.” (S17)

7. Conclusions

Language and content learning, especially within an ICLHE context, involves most of the aspects analysed in this study: communication, interculturality and cross-disciplinary skills. This study aimed at exploring students’ perceptions in those issues when participating in a business-related collaborative online international project.

Initially, the compatibility and complementarity of a COIL project (VBP) within an ICLHE context (ELIT master) has been acknowledged. We have tried to illustrate the common aspects that can be transferred from a specific ICLHE course to a COIL project and how valuable can be to get students involved in this project when it comes to implementing and consolidating their master’s degree training, gaining experience and self-confidence. Merging those two approaches makes students double their opportunities to improve their training: increase language exposure, practise the business contents they have acquired in real international situations, improve their intercultural communicative competence, and transfer several cross-disciplinary skills. This new combination can contribute to the positive attitude and motivation students showed prior to their participation, confirmed by literature in section 2.

According to the results, the effectiveness of the ELIT master applied to the VBP project seems to be positive but not as significant as both learners and researchers expected. All research questions proved students had a higher level of expectations than their final perception of transference of their knowledge.

The ELIT master students’ original English level was mainly proficient, and most of them (three out of four) admitted a certain degree of improvement. They also confirmed an increase in their self-confidence in linguistic skills (mainly the oral ones, as also
noticed by Moratinos-Johnson et al., 2018). Contents have also contributed moderately to the appropriate implementation of the VBP project, especially the topics of meetings, interculturality, internationalisation, business and socialising. The international character of the VBP project and the possibility to apply this experience to their future work enhances students’ motivation.

Regarding the intercultural competence and intercultural diversity, neither clear negative effects nor positive ones were perceived. Probably, the diverse cultural background of the learners involved in the study and their master’s degree training are crucial and reinforce the importance of this issue when dealing with real situations in a globalised world. Both approaches have shown to help students to always be aware of the cultural issues.

Likewise, cross-disciplinary skills were considered as moderately effective in their application to the VBP project. Some skills (especially negotiation and analytical ones) need greater attention and awareness-raising instructors’ commitment to promote their further development before the project starts.

As for the key COIL element of technology, also promoted in EMI settings, students proved to have the proper digital competence to participate in the project. It seems that less challenging tasks can lead to lower levels of motivation and, consequently, students felt they gained less in their learning process (in line with Bueno-Alastuey & Kleban, 2014). In this study, technology was just a means of communication rather than an outcome, without any additional benefit for students but the online communication skills needed to develop the project.

Students also pointed out some COIL drawbacks already mentioned by the literature in section 2, such as the implication/motivation of the team members or the group dynamics, the language and content requirements through the project, students’ intercultural communication competence, the final task itself, or the technological tools required. Interviews confirmed some of those results, but they also proved that sometimes students were not fully aware of certain contents and skills they implemented. Instructors may have to reflect on the possibility of including specific tips for the ELIT master subjects that can minimise those difficulties, but also, in a global view, revise aspects related to the development of the VBP project that can make it more demanding for students who are linguistically, culturally or digitally more competent.

Nevertheless, the study is not free from limitations. In particular, the data collected is restricted considering that the sampling was only based on 23 participants, as we only had full access to those students who belong to UJI. Moreover, the study focused on students’ perceptions of the applicability of their ELIT master training to their participation in the VBP project. Consequently, we found it difficult to provide any stronger evidence on attainment due to the subjectivity of the questions. Further research involving participants from other universities may help to complement the present study.

From a pedagogical standpoint, this innovative experience is relatively fresh and motivating for our students and has the advantage of offering the possibility of working internationally with people from diverse cultural origins and backgrounds and practising their English communicative skills in a real context. Learner’s language development or consolidation is at the core of the whole experience, enhancing other aspects that, even accepted as part of the language learning, may not always be practised or implemented at the same level as communication (e.g., content, interculturality, and cross-disciplinary skills). Students were asked during the follow-up interviews about their (present or future) working life or internship, and if the VBP project could be beneficial, considering that one of the main concerns of this study was to ensure students an active learning environment to help them to start a successful working life. The general feedback participants provided can be summarised in the following comment that confirms the fulfilment of these aims:

(9) “I think it helped because for example in my case I’m working in an intercultural and international environment, so, somehow I have to adapt myself and to know how to behave in order to work together and during the VBP we have worked together, so I think it was useful and it’s a good experience for all people that are willing to be in an international working environment.”

(S10)

As further research, it could be useful to integrate objective sources of measuring data, such as students’ language tests (before and after the VPB project) and written reports, to verify their evolution in both content and language. It is necessary to study deeper how learners’ level or task difficulty affect their actual language or digital improvement. Different tools to confirm intercultural competence should also be considered. It could be useful to investigate the distinct skills that can be developed in technologically-based learning environments aiming at language learning. A good practice guide could be developed for students at local level, making use of our results in this article, but also a common set of instructions that could help students to improve their participation in the VBP project.

Credit authors contribution statement

María Ángeles Mestre-Segarra: Methodology, Formal analysis, Investigation, Writing - Original Draft, Writing - Review & Editing, Visualization, Project administration. Miguel F. Ruiz-Garrido: Conceptualization, Methodology, Investigation, Writing - Review & Editing, Visualization, Supervision, Project administration, Funding acquisition.
Funding

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Appendix A. ELIT master subjects: contents, skills and connection to VBP

<table>
<thead>
<tr>
<th>Code</th>
<th>Subject</th>
<th>Contents related to VBP</th>
<th>Skills related to VBP</th>
<th>VBP tasks</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAR002</td>
<td>Intercultural Communication, Meetings and Negotiations</td>
<td>Business meetings, business negotiation, intercultural awareness</td>
<td>Regarding the skills used in the ELIT master’s degree which are linked to the development of the VBP we can include all of them as our previous selection was based on that. There is no one skill that can be more salient than others or one skill that can be used in one subject or in another. All subjects require students:  • to work in groups (small and large teamwork) and cooperate in the development of certain tasks  • to collaborate in written essays as a group  • communicate and develop their interpersonal skills (by listening to others, leading sometimes or adapting others, and so on)</td>
<td>Through the participation in the VBP project and the implementation of the planned tasks, our previous experience gave us evidence that students are able to use the contents and the skills shown in the previous two columns:  • students hold meetings, negotiate issues that leads them to make decisions but also to solve the problems they may find during the process  • students communicate and interact (as part of their socialising), use the specific recommended technological tools, but they also use other messaging systems  • students must analyse, search for information, and make recommendations about the social reputation (social media) certain companies use. They can apply the knowledge they have about culture, international marketing, marketing promotion and web 2.0, company organisation, and so on</td>
</tr>
<tr>
<td>SAR004</td>
<td>Business Trips and Socialising</td>
<td>Socialising</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SAR005</td>
<td>Persuasive Language and Business Presentations</td>
<td>Promoting an idea or a product</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SAR006</td>
<td>International Marketing</td>
<td>International marketing, globalisation and marketing, business culture, international market research and selection, international marketing strategies, product and brand decision in international markets, and international communication policies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SAR007</td>
<td>International Business Management</td>
<td>Management, organizational culture and environment, social responsibility and managerial ethics, business decision making, organizational behaviour, leadership and motivation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SAR008</td>
<td>The Language of Telephoning and Other Communication Technologies</td>
<td>Telephoning and its etiquette, diverse phone situations, email marketing, web tools and apps for businesses based on companies’ advice, including the use of messaging services or communication channels</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SAR009</td>
<td>The Language of Marketing and Product Promotion</td>
<td>Promotional language and the Web 2.0: analysis, development of own products, use of viral devices, client-oriented products</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SAR017</td>
<td>Business Writing</td>
<td>Business writing, formal vs informal styles, positive and negative messages</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Appendix B. Compulsory readings

Appendix C. ELIT master students VBP Spring 2019

<table>
<thead>
<tr>
<th></th>
<th>AGE</th>
<th>GENDER</th>
<th>PREVIOUS STUDIES</th>
<th>ENGLISH LANGUAGE LEVEL</th>
<th>NATIONALITY</th>
<th>ORIGIN/BACKGROUND</th>
</tr>
</thead>
<tbody>
<tr>
<td>S1</td>
<td>24</td>
<td>Male</td>
<td>Law</td>
<td>B2</td>
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<td>Spain</td>
</tr>
<tr>
<td>S2</td>
<td>23</td>
<td>Female</td>
<td>Translating and Interpreting</td>
<td>C1</td>
<td>Spanish</td>
<td>Spain</td>
</tr>
<tr>
<td>S3</td>
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<td>Female</td>
<td>Translating and Interpreting</td>
<td>C1</td>
<td>Spanish</td>
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</tr>
<tr>
<td>S4</td>
<td>24</td>
<td>Female</td>
<td>English Studies</td>
<td>C1</td>
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<td>Romania</td>
</tr>
<tr>
<td>S5</td>
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<td>English Studies</td>
<td>C1</td>
<td>Spanish</td>
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<tr>
<td>S6</td>
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<td>Female</td>
<td>English Studies</td>
<td>C1</td>
<td>Spanish</td>
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</tr>
<tr>
<td>S7</td>
<td>22</td>
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<td>Spanish</td>
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</tr>
<tr>
<td>S8</td>
<td>22</td>
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<td>English Studies</td>
<td>C1</td>
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<td>Romania</td>
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<tr>
<td>S9</td>
<td>22</td>
<td>Female</td>
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<td>C1</td>
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<td>Syria</td>
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<td>C1</td>
<td>Spanish</td>
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<td>S11</td>
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<td>C1</td>
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<td>S12</td>
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<td>C1</td>
<td>Spanish</td>
<td>Spain</td>
</tr>
<tr>
<td>S13</td>
<td>26</td>
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<td>Translating and Interpreting</td>
<td>C1</td>
<td>Spanish</td>
<td>Ukraine</td>
</tr>
<tr>
<td>S15</td>
<td>23</td>
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<td>Translating and Interpreting</td>
<td>C1</td>
<td>Spanish</td>
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<tr>
<td>S16</td>
<td>26</td>
<td>Female</td>
<td>Cultural Studies</td>
<td>B2</td>
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<tr>
<td>S17</td>
<td>23</td>
<td>Male</td>
<td>Business Administration</td>
<td>C2</td>
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<td>Netherlands</td>
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<tr>
<td>S18</td>
<td>33</td>
<td>Female</td>
<td>Accounting, Analysis and Auditing</td>
<td>B2</td>
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<td>Belorussia</td>
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<tr>
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<td>22</td>
<td>Female</td>
<td>Human Resources Administration</td>
<td>B2</td>
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<tr>
<td>S20</td>
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<td>International Business Management</td>
<td>C1</td>
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<tr>
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<td>C2</td>
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<tr>
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<td>23</td>
<td>Female</td>
<td>Spanish Philology</td>
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<tr>
<td>S23</td>
<td>22</td>
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<td>English Studies</td>
<td>C1</td>
<td>Spanish</td>
<td>Spain</td>
</tr>
</tbody>
</table>

Appendix D. Initial survey VBP

**SECTION 1: PERSONAL DETAILS**

1. Age
2. Gender
3. Nationality
4. English language level
5. Origin/Background
8. Previous studies

**SECTION 2: LANGUAGE**

9. How much improvement do you think you can have in the four skills (writing, listening, reading, speaking (interaction))?
   Language skills: writing, listening, reading and speaking (interaction).
   5-Likert-scale: (1) No improvement, (2) Little improvement, (3) Improvement, (4) Some improvement, (5) Great improvement

**SECTION 3: CONTENT**

10. Which subjects do you think have provided you with some knowledge/skills that may help you to better manage your functions/tasks in the project?

   Subjects: SAR001, SAR002, SAR004, SAR005, SAR006, SAR007, SAR008, SAR009, SAR011 and SAR017.
   5-Likert-scale: (1) No contribution, (2) Little contribution, (3) Moderate contribution, (4) Significant contribution, (4) High contribution

11. What general concepts of the master would facilitate your satisfactory participation in the project? Specify.

**SECTION 4: CULTURE**

12. How do you think cultural diversity can affect the members of the group?
   5-Likert-scale: (1) No effect, (2) Low effect, (3) Moderate effect, (4) High effect, (5) Very high effect

13. Have you ever had any experience with people from other nationalities? And other cultures? If so, specify the nationalities, the cultures and the type of experience (working, studying, travelling, etc.)

**SECTION 5: CROSS-DISCIPLINARY SKILLS**

14. How much do you think the following skills/abilities will be practiced in the project?

   Cross-disciplinary skills: technological skills, teamwork ability, decision making skills, communication skills, problem-solving skills, negotiation skills, interpersonal skills, analytical skills, research ability, critical thinking, collaborative writing and
cooperative work
5-Likert-scale: (1) Not much, (2) Slightly, (3) Moderately, (4) Much, (5) Very much
15. General expectation: to which extent are you interested/motivated in this project?
5-Likert-scale: (1) Not at all, (2) Only a little, (3) To some extent, (4) Rather much, (5) Very much

Appendix E. Final survey VBP

SECTION 1: PERSONAL DETAILS

1. Age
2. Gender
3. Nationality
4. English language level
5. Origin/Background
6. Previous studies

SECTION 2: LANGUAGE

7. How do you think you have improved in the four skills (writing, listening, reading, speaking (interaction)?
Language skills: writing, listening, reading and speaking (interaction).
5-Likert-scale: (1) No improvement, (2) Little improvement, (3) Improvement, (4) Some improvement, (5) Great improvement

SECTION 3: CONTENT

8. Which subjects do you think have provided you with some knowledge/skills that helped you to better manage your functions/tasks in the project?
Subjects: SAR001, SAR002, SAR004, SAR005, SAR006, SAR007, SAR008, SAR009, SAR011 and SAR017.
5-Likert-scale: (1) No contribution, (2) Little contribution, (3) Moderate contribution, (4) Significant contribution, (4) High contribution
9. What general concepts of the master have facilitated your satisfactory participation in the project? Specify.

SECTION 4: CULTURE

10. How did cultural diversity affect the members of the group?
5-Likert-scale: (1) No effect, (2) Low effect, (3) Moderate effect, (4) High effect, (5) Very high effect

SECTION 5: CROSS-DISCIPLINARY SKILLS

11. How much have you worked the following skills/abilities during the project?
Cross-disciplinary skills: technological skills, teamwork ability, decision making skills, communication skills, problem-solving skills, negotiation skills, interpersonal skills, analytical skills, research ability, critical thinking, collaborative writing and cooperative work
5-Likert-scale: (1) Not much, (2) Slightly, (3) Moderately, (4) Much, (5) Very much
12. Overall, how would you rate the VBP experience?
5-Likert-scale: (1) Not satisfying, (2) Dissatisfying, (3) Neither satisfying nor dissatisfying, (4) Satisfying, (5) Very satisfying (valuable)

Appendix F. Interview questions

1. Do you think that your English level has improved or consolidated due to this project? Why?
2. What aspects from the ELIT master have been more helpful and which ones you think should be included for future students?
Any skill or ability you would have needed to practice in advanced?
3. Do you think that the subject dealing with “intercultural communication” was useful in order to participate in the project? Why?
4. Do you think this project can help you to manage in international meetings and collaborative tasks in a future work environment?
5. What is your degree of satisfaction with your participation in this project?
Appendix G. Expectations and perceptions about linguistic skills

Expectations (Initial Survey)

Perception (Final Survey)
References


