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TELECOLLABORATIVE DEBATES IN ESP: LEARNER PERCEPTIONS AND PEDAGOGICAL IMPLICATIONS

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Abstract. *This article reports on an empirical study analyzing the development and use of effective multimodal communication strategies to deliver a telecollaborative debate as the core activity for upper-intermediate learners of English for Specific Purposes (ESP) from two far afield Spanish universities, one located in Gran Canaria and the other in Valencia. The pedagogical project not only focused on preparing and conducting an online debate through telecollaboration, but also on developing communicative skills based on discussion, argumentation, justification, critical thinking and explanation using academic and scientific language. Through a pre-task and a post-task survey, the results highlight, on the one hand, that telecollaboration is an experiential approach for ESP learners that necessarily has to involve pragmatics within a well-organized debate scenario and, on the other, that this two-way collaborative task demonstrates that telecollaborative debates are an innovative and engaging means of exploring not just content but communication and performance strategies while simultaneously helping to increase multimodal communicative fluency in the foreign language. The findings also underline the fact that elements such as motivation and self-confidence are variables that influence the learners' performance in both conducting the necessary research to adequately debate the given topic and seeking efficient multimodal communication strategies.*

Key words: *English for Specific Purposes, telecollaboration, debating, communication strategies*

1. INTRODUCTION

Today's education pursues experiential situations to achieve learning gains rather than grades (Butler, Church & Spencer, 2019; Campbell & Cabrera, 2014). Learning English for Specific Purposes (ESP) implies not only constant acquisition of knowledge related to a particular profession, but also the development of communicative skills and several transversal abilities that university students must endeavor to comprehend to become international citizens. It is precisely this increasingly globalized world that we live in today that has largely influenced the growing demand for students to be able to speak accurately and communicate skillfully in English in international, academic, and professional settings (Arnó-Macià et al., 2020).

A telecollaboration project that pursues the exchange of work and ideas among distant participants who communicate online with a variety of virtual tools to solve a problem or to create a product can provide an appropriate setting to develop these skills (Belz, 2002; Dooly, 2017; Helm & Guth, 2016; O'Dowd & Eberbach, 2004, O'Dowd, 2015, 2018). Furthermore, research into telecollaboration exchanges whereby participants use a foreign language common to all of them, a "lingua franca", rather than communicating with native speakers, has been reported to cause less anxiety when learners interact with non-native speakers, and that the use of a contact language can cement participants' feelings of proximity and mutual support (Guarda, 2013).

To this end, a solid pedagogical design addressing enquiry-based learning, collaboration and multimodal communication must be considered to build arguments. An ESP telecollaborative debate is a real-life task that can denote the full commitment of the participants and the will to cooperate with fellow team members in order to build on and share useful information for the preparation phases of the debate, while being open to new information intake and becoming, to a certain extent, aware of their lacks. A variety of individual and team tasks that can be performed either in or out of class is the basis to engage the learners in doing so. A telecollaborative debate requires appropriate technology and multimodal-multimedia communication, set in a ubiquitous learning environment. This individual and collaborative commitment relies heavily on adequate motivations and self-confidence when communicating messages in English.

This paper is thus grounded on the premise that an ESP-based telecollaborative debate can help university students gain content knowledge while providing a meaningful language learning environment. To this end, the study focuses on the benefits of conducting a threefold classroom experience; that is, a) drawing on debating as a technique to improve both linguistic and life skills such as critical thinking, teamwork, etc.; b) collaborating through virtual exchange with fellow university students while sharing ideas, knowledge and experiences, and c) expanding knowledge in a given field of ESP.

The ESP telecollaborative debate described here is a class-assignment that combines knowledge input and output, with an argumentative discussion conducted in the foreign language. The task requires two opposing teams of debaters who must prepare arguments in favour or against the resolution under scrutiny, in compliance with a set of rules that are controlled by a moderator and witnessed by an engaged and participatory audience. In order to succeed, all parties are actively involved through multimodal online communication to build their arguments and defend their positions within the debate. This study thus sets out to respond to the following research questions which touch upon the three elements mentioned above (ESP, debate, and telecollaboration):

RQ. 1. Did learners perceive the telecollaborative debate as being beneficial in terms of language intake and communicative development?

RQ. 2. How did learners perceive that the telecollaborative debate had helped them improve their life skills?

2. LITERATURE REVIEW

The Pedagogical Gains of Telecollaborative Debates for Language Learners

In this study, the definition of debate is determined by the exchange of argumentative information and multimodal, verbal and nonverbal communication shared between two opposing teams of learners, who are guided by another student moderator, and the

contributions of the learners representing the audience. In terms of a student-centered task, a debate implies dialogical argumentation of exchanged information, provided by a variety of assertions, examples and evidence. In order to succeed, participants must demonstrate having acquired the appropriate skills to find information that can verify, reinforce or disapprove a statement, which, in telecollaboration, must be supported by a collaborative ubiquitous learning environment (CULE) enabling debaters to interact inside and outside the classroom during the preparation phases of the task (García-Sánchez, 2014; O'Dowd, 2018). The debate also promotes the development of argumentative literacy, which Gudkova (2021) has indicated is a key soft skill that ESP university students must present and defend properly and logically when communicating in English. This is in line with enquiry-based learning where the learners/enquirers identify and research issues to develop knowledge or solutions (Escalante Arauz, 2013).

In line with previous research (Belz, 2002; Dooly, 2017; Helm & Guth, 2016; O'Dowd & Eberbach, 2004), the telecollaborative debate implies several pedagogical gains. It pursues the exchange of information and ideas among distant language learners who communicate online with a variety of multimodal virtual tools to solve a problem or to create a product. Moreover, not only digital literacy is needed but an upper-intermediate language level is advised to perform the telecollaborative debate. If the discourse is produced in a foreign language, the intonation patterns, the vocal variation and even the body language would be modified to match that of foreign language. In Fortanet-Gómez and Ruiz-Madrid's (2016) words: "Spoken discourse is multimodal in nature, since it involves the use of different semiotic modes such as words, gestures, intonation" (2016: 58).

Authors such as Anker-Hansen & Andrée (2015) and Cai (2017), who have analyzed debating for scientific purposes in EFL/ESP education, have also pointed out its benefits in developing transversal skills in addition to purely improving communicative competence. Likewise, research has demonstrated that debate can be depicted as an authentic pedagogical task for dealing with a real-world situation that requires learners logically using the foreign language for practical communicative purposes, such as agreeing, disagreeing, explaining or discussing, among others (Cinganotto, 2019). As Lee et al. argued (2013), when learners are adequately supported to 'do' specific things with language, both knowledge building and language learning are promoted. Furthermore, if the telecollaborative debate is set in an ESP scenario in higher education, university learners are encouraged to build their knowledge, discuss their views and develop successful communication skills applied to topics oriented to their future professional careers (García-Sánchez, 2020).

Argumentation Theory and Communicative Performance for ESP

Argumentation Theory (AT) focuses on formal and informal discourse, and how statements and arguments are delivered in oral and written forms. Adding argumentative tasks into ESP courses allows learners to present and build arguments successfully with supported evidence, and to identify flaws so that counterarguments can be formulated and enrich the discussion (Gudkova, 2021). Kaewpet's review (2018) of the criteria and scale of argumentation reported that English standardized tests (TOEFL, IELTS, TOEIC) include reasoning, language use, organization and the authorial voice, which Kaewpet linked to the speakers' authority and self-confidence in his proposed argumentation quality rubric. How EFL learners perform, face, adapt and communicate their messages in English during the debate necessarily establishes connections with pragmatics, which considers argumentation in conjunction with multimodal and multimedia communication (González-Lloret, 2013) that learners can confidently adopt.

Both terms, multimodal and multimedia, are necessary part of the communicative performance of a telecollaborative debate since debaters reinforce verbal content with body language and other multimedia resources (visuals, graphics, videos, external resources or links) as required in a telecollaborative scenario. Multimodal refers to the different manners or forms that contribute to a clearer message, to how our body language or our video presentation contributes to delivering the message successfully. A multimodal analysis will be weighty in a communicative approach since it considers words together with body language affordances produced by the foreign language speaker (Peng et al., 2017). Telecollaborative debates therefore require participants not only to be able to produce but also to interpret complex multimodal and multimedia communication that can prove challenging for them (Fuchs, 2016; Helm, 2015; O'Dowd & Eberbach, 2004), whilst they enrich their interactions with gestures or turn-taking, for instance.

Researchers such as Cinganotto (2019), Ellis (1984), and Xu (2018) have also claimed that assessing communicative performance in English is paramount in a debate task because it entails dealing with content and the strategies used when delivering successful messages. Furthermore, in an ESP debate, language is used to express propositions to model arguments. The reinforcing or attacking argument, delivered coherently and in a timely fashion, implies performing the appropriate role with accurate language, and correct verbal and non-verbal communication strategies, two concepts that are in turn directly linked to public speaking in English as a foreign language (Polacsek & Cholvy, 2011; Van Eemeren & Henkemans, 2016). This study, supported by AT and a multimodal-multimedia communicative approach to learning English, pursues to analyze the strategies needed by foreign language learners to convey effective and evidence-based oral arguments in a debate conducted telecollaboratively.

3. PEDAGOGICAL DESIGN: THE ESP TELECOLLABORATIVE DEBATE

To design this project, a number of pedagogical considerations were identified prior to the carrying out the debate task. The mentor-teachers from both Spanish universities discussed the content and language skills to be included, the digital communication tools to be used, as well as the aims and capabilities pursued in the telecollaborative debate. The syllabi of both ESP courses were analyzed to identify common goals and abilities in English language. The following common abilities were depicted: (1) the ability to communicate knowledge, reasoning and conveying conclusions clearly and unambiguously; (2) effective written and oral communication; and (3) the ability to communicate accurately in a specific discipline in English. Common content and activities designed to foster communication skills and the preparation for the telecollaborative debate were selected. Some examples include a) extensive reading to reflect on the life-long benefits of debating; b) developing oral presentation skills and techniques for public speaking; c) argumentation: strong vs weak reasons (individually/in teams); d) improvisation and speaking of topic X in 1 minute; e) communication strategies, cultural differences and language barriers, and f) common pronunciation hurdles for Spaniards.

The researchers (who were also the instructors) integrated the debate project as a graded task-based activity within each of the target ESP courses. The Universitat Politècnica de València (UPV) awarded 60% of the final grade to the project and the Universidad de Las Palmas de Gran Canaria (ULPGC), 30%. After a brainstorming session, both cohorts proposed several topics relating to their field of specialization and selected one for the debate

through an online poll. The topic was relevant to both industrial sectors, i.e., Telecommunications Engineering and Aerospace Engineering. Consequently, the learners were required to use technical vocabulary in their oral contributions. Additionally, to prepare their argumentations, either in favor or against, the students conducted research –using authoritative websites– to defend their position, thus acquiring new knowledge and supporting their background knowledge with convincing evidence-based arguments.

At the outset of the project, sessions were delivered in each university to a) help them understand the scope and purpose of the telecollaborative task; b) train them in developing debating skills, and c) establish the teams so they could start working individually, in local teams and together with their telecollaboration partners. The students from both universities were divided equally into mixed groups to comprise the team in favor (10 members) and the team against (10 members). The audience was made up of students from UPV only (4 members), and the moderator was a student from ULPGC who had prior debating experience in English. Some strategic steps were vital to fulfil this telecollaborative task, as indicated below.

Initial introductions and interaction

To help learners become acquainted and open to working with fellow students from another university, two synchronous 20-minute online sessions were carried out between each instructor and the other's students. The learners were also requested to create their digital profile on *Google+* and include personal information about themselves, as well as a 2-minute introductory video so everyone could be identified (Figure 1). Several studies support the idea that collaboration is established more easily in virtual environments when friendly, relaxed and supportive relationships are adopted (Vinagre & Corral, 2017), conditions that also have a favorable influence on the communicative dynamics generated (Bañados, 2006; García-Sánchez, 2016).
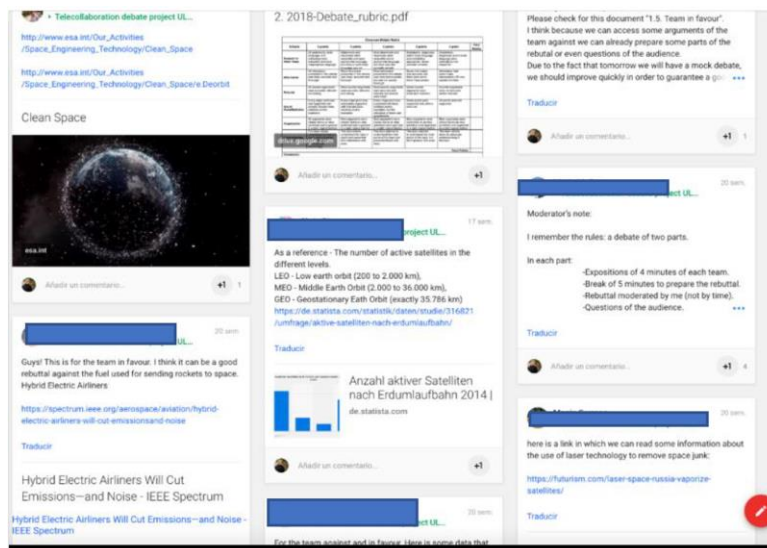

Fig. 1 *Google+* Community for the telecollaborative preparation of the debate

Individual/Team research, and ESP vocabulary

Students conducted research, based on enquiry-based learning, on the topic of debate both individually and in teams according to their role (moderator, team in favor, team against, audience). In addition, learners were requested to collaboratively create a glossary –common to both cohorts– and compile a list of words in English linked to the topic of debate. Each entry had to include term, definition, example in context written by the student, a link to an image (where possible), and the phonetic transcription or a link to a site with a sound file of that word. Students also received a 1-hour training session on becoming more skilled in looking up words in context and learning to select appropriate online dictionaries.

Individual writing and oral practice for intervention

Each learner was responsible for researching the topic under discussion and for developing their own arguments (independent learning) before joining forces with the other team members to organize all the information (collaborative learning). The moderator contributed toward this organization by allocating the time slots to the different turns in the debate.

This step implied individual justification and argumentation in written form according to their role in the debate but the students were also advised to practice these aloud, record themselves and listen back. This exercise encouraged debaters to practice their speaking performance to overcome unnecessary mishaps during the live debate.

Telecollaborative team interactions using adequate platforms

The selection of appropriate tools was paramount to the success of the project. Platforms were sought that would allow synchronous (*WhatsApp, Skype, Google Hangouts*) and asynchronous (*Google+, Google Forms*) communication between the teams, that would favour written collaboration, and encourage instant messaging to support quick decision-making. Prior drills were conducted between both institutions before the debate was scheduled to take place to avoid communication breakdowns during the live event.

Table 1 Tools used in the telecollaborative debate

Preparation Phases	Delivery Phase	Concluding Phase
Google+ platform	*Skype*	*Google Forms* (Post-Survey)
Google Docs	*Google Hangouts*	
Google Forms (Pre-Survey)	*WhatsApp*	
WhatsApp		

Team planning, scriptwriting, and corrections

Scriptwriting was one of the crucial and most critical stages of the project. After investigating the issue at hand, students were instructed to write their argumentations to support and defend their position providing strong evidence, according to role (in favor, against or audience member). A model script was distributed to help them understand the structure of the debate (see Figure 2).

Topic: *How will technologies change society: Is space garbage justified for connecting the world/for communications?*				
Introduction of the debate + rules (Moderator)				
Actions	(+) Team (persons)	(-) Team (persons)	Audience (persons)	Time (minutes/person)
Introduction (Moderator)				
Arguments	2 pers.	2 pers.	0 pers.	4 mins./team
Break to prepare rebuttal	-	-	-	5 mins.
Rebuttal	3 pers.	3 pers.	0 pers.	No limit
Questions	All	All	3 pers.	2 mins./pers.
End of the debate (Moderator)				
Total: 10 in favour, 10 against, 5 audience				

Fig. 2 Structure of the debate

The moderator, whose role was to act as a neutral participant –keeping time limits and preventing participants from straying off the topic–, was the only person to have access to all 3 scripts (that of the positive team, the negative team, and the audience). Turn-taking was thus strictly controlled by the moderator and all the interventions, timed. This exercise also meant that participants had to be as clear and succinct as possible in conveying their position.

Live Telecollaborative Debate

Given the time difference between the Canary Islands and the Peninsula, the live telecollaborative debate was scheduled at a convenient time for all parties involved outside classroom hours. It took place in appropriately equipped meeting rooms in both universities and was recorded for future reference and reflection on behalf of the students in order to be able to self- and peer-assess the task.

4. RESEARCH METHODOLOGY

Context and participants

This qualitative-quantitative case study took place during a 15-week semester with a total number of 25 students. Seven of these were male 2nd-year students enrolled in *English for Telecommunications* within the Master's Degree in Telecommunications Engineering at the Universidad de Las Palmas de Gran Canaria (ULPGC) and 18 (3 female and 15 male) were 3rd-year students enrolled in *Specialised English* within the Aerospace Engineering Degree at the Universitat Politècnica de València (UPV). The latter included 4 Erasmus students from Germany (1), France (2) and Poland (1). The learners all completed a commercial performance test; their level of English ranged between B1+ and B2 (according to the Common European Framework of Reference for Languages). Most students were male (86.4%). Over two thirds (72.8%) were aged 21 to 25, while slightly under one third (27.3%) were between 18 and 20. All students typically spent 90 minutes of in-class project groundwork per week.

Instruments and procedures for data collection and analysis

The qualitative and quantitative research instruments used aimed at measuring English language acquisition, development of debating skills and communicative performance levels

(Table 3). The instruments used for qualitative analysis comprised the researchers' observation of face-to-face and online group discussions.

Table 3 Research instruments and procedures

Research questions	Instruments used and Data collection	Analytical method
1. Did learners perceive the telecollaborative debate as being beneficial in terms of language intake and communicative development?	Pre- and post-project surveys	Qualitative & Quantitative
2. How did learners perceive that the telecollaborative debate had helped them improve their life skills?		

For the quantitative analysis, two anonymous surveys designed exclusively for this study were administered. The online pre-project survey gathered information regarding learners' expectations and attitudes towards learning English and how they felt about participating in a telecollaborative project with other non-native speakers of English. The pre-survey therefore served as a diagnostic test. It had 21 questions of different type (Multiple choice, Likert scale), organised in 4 sections: A. Demographics; B. Debates; C. Language Learning; D. Telecollaboration The post-project survey, which was filled out after the delivery of the debate and before students received their grades, referred to the extent to which the project had boosted their communicative skills in English, their motivations and self-confidence in speaking in a real-life task such as debate and their satisfaction upon conclusion. This survey was structured in 3 sections (A. Demographics; B. Debates; D. Telecollaboration) with 18 questions in total. The questions addressing the 2 research questions of this study will therefore be analyzed in the Results section.

Together with the surveys, the instructors' reflections of the entire process and of the debate were all taken into account as discussed in the Results and Discussion sections.

Digital tools

As shown in Table 1, the digital tools used to support telecollaboration were *Google+* [1] *Google Hangouts, Google Forms* and *Google Docs. Google+* was the platform chosen to create a community for students to introduce themselves, to interact and exchange ideas or multimedia information and to help the teams and the moderator plan the debate. *Google Hangouts* was used to perform the debate and *Google Forms* to create and administer the pre- and post- surveys. Lastly, the collaborative writing tool used by each team to share findings about the topic and useful sources of information was *Google Docs.* The instructors had access to their respective students' collaborative documents to enable assessment of written output. The online platforms were managed by the instructors and strictly restricted to the participants of the project.

Instant text and voice messaging systems such as *WhatsApp* and *Skype* were also used to communicate efficiently with team members. These were also used for synchronous video conferencing during the live debate for the remote team members to prepare rebuttals.

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[1] *Google+* is no longer available but other platforms such as mewe.org may serve the same purpose.

Ethical consideration

The debate was recorded for educational and research purposes with prior consent from all the participants involved, thus allowing students to examine their performance critically, both individually and as a team.

5. RESULTS

This section deals with the qualitative-quantitative results of the project elicited from the data collected through the instruments mentioned above in terms of knowledge building, linguistic and life skills and multimodal communicative performance.

5.1. RQ1. Did learners perceive the telecollaborative debate as beneficial in terms of language intake and communicative development?

5.1.1. Comparative Data: Pre- and Post-project Surveys

The surveys provided comparative data of the learners' opinions before and after the ESP telecollaborative task took place. The pre-project survey responses revealed that only 40.9% of the students had no prior experience in participating in a debate although a significant 81.8% agreed that taking part in one would be a good way to demonstrate their knowledge of English. More than half of the students mentioned that it was their first time working with other students through telecollaboration (68.2%) and most of them referred to telecollaboration as a valuable learning community (81.6%) to experience online interaction (81.9%). The post-survey provided valuable insights with respect to the learners' degree of satisfaction in participating in the telecollaborative debate and queried the impact that the whole experience had had on their communicative skills.

Despite having measured the students' language level via commercially available EFL achievement tests, Question 4 in the pre-survey requested informants to identify their language level using the CEFRL grid. As shown in Figure 3, about two thirds of the students perceived they had progressed from B1 (intermediate) to B2 (upper-intermediate). In the pre-survey, nearly half of the students identified their initial language level as intermediate B1 (45.5%) compared to just over one third (36.4%) of them who chose B2, the target level in both ESP courses. The post-survey showed that 60% of the respondents believed they had progressed to a B2 level compared to 32% who still considered themselves at level B1.
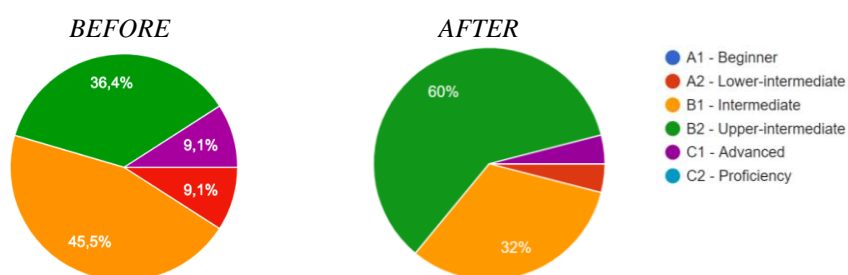

Fig. 3 English level according to students

Two questions addressed the learners' perceived improvement in language skills. On the one hand, through participating in a debate (Figure 4, dark brown illustrating pre-debate data compared to light brown for post-debate data) and, on the other, through participating in a telecollaborative project with fellow non-native students (Figure 5). Regarding the former, the data does not reveal a significant difference since their expectations matched their perceived gains. Figure 4 shows students felt they would improve their speaking skills (N=21, 95.5%) and enrich their vocabulary (N=21, 95.5%) and were under the impression that they, in fact, had done so after the project had taken place (N=25, 84% in speaking skills and vocabulary). The students placed listening comprehension in second place, both as a prediction (N=21, 81.8%) and as an assertion after the debate (N=25, 80%). However, although half of the respondents predicted their progress in grammar (N=11, 50%), only approximately half of that amount (N=6, 24%) acknowledged having improved in that area. Despite their lower expectations in terms of reading comprehension (N=4, 18.2%), twice as many responded having improved this skill (N=8, 32%). About writing, their initial thoughts (N=8, 36.4%) and their afterthoughts (N=9, 36%) practically coincided.
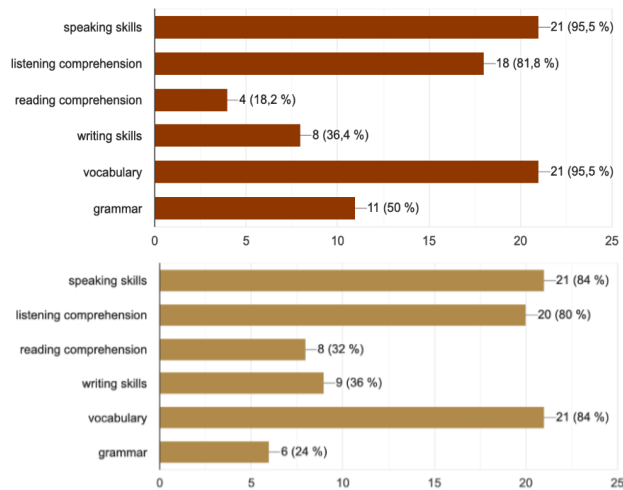

Fig. 4 Perceptions in language skill improvement, according to pre- & post-surveys

When asked whether students foresaw telecollaboration could (pre-survey) or had helped them (post-survey) develop their communicative skills, participants also reported favorable gains. If we add up the number of those who expected their language skills to improve (i.e., those who answered 5, 6 or 7 on a 7-point scale), these amounted to 76%, exactly the same as the gains reported after the project (Figure 5). The learners' expectations matched the outcomes.
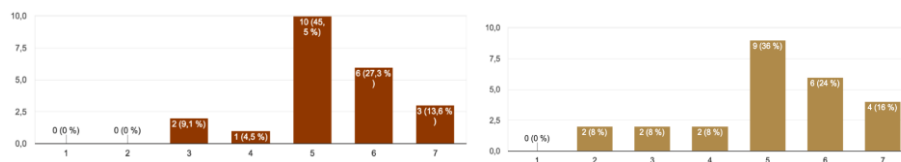

Fig. 5 Perceptions in communicative skill progress, according to pre- & post-surveys

5.1.2. Teachers' discussion

Additionally, it seems that having chosen such a complex topic for the debate provided participants with ample options to demonstrate critical thinking abilities and find appropriate propositions and scientifically supported data to explain, justify or refute their arguments confidently. Figure 6 shows the structure for the first part or subtopic of the debate ("Energy and environmental reasons"), specifying all the interventions for the three teams (in favor, against and audience), guided by the moderator's mediations and time limitations:

TOPIC: "How will technologies change society: Is space garbage justified for connecting the world/for communications?" SUBTOPIC 1. Energy and environmental reasons	
(+) Team	(-) Team
Moderator introduces topic, teams and subtopic	
▪ Arguments in favor (2 mins.) (1 ULPGC student)	
	▪ Arguments against (2 mins.) (1 UPV student)
▪ Arguments in favor (2 mins.) (1 ULPGC student)	
	• Arguments against (2 mins.) (1 UPV student)
5-minute break for each team to prepare **rebuttals** (in two separate break-out rooms via video-conference calls)	
	▪ Rebuttal 1 - (1 UPV student) ▪ Rebuttal 2 - (1 ULPGC student) ▪ Summary of rebuttals - (1 UPV student)
▪ Rebuttal 1 - (1 UPV student) ▪ Rebuttal 2 - (1 UPV student) ▪ Summary of rebuttals - (1 UPV student)	
Audience poses 2 questions to the + Team ▪ (1 UPV student) ▪ (1 UPV student)	
▪ Answer Q1 ▪ Answer Q2	
Audience poses 2 questions to the - Team ▪ (1 UPV student) ▪ (1 UPV student)	
	▪ Answer Q3 ▪ Answer Q4
Moderator makes concluding remarks and closes session	

Fig. 6 Structure for the first subtopic of the telecollaborative debate

5.2. RQ2. How did learners perceive the telecollaborative debate had helped them improve their life skills?

5.2.1. Comparative Data: Pre- and Post-Surveys

Learners reported how they expected the telecollaborative debate to help them (Figure 7) and how they perceived it had in fact helped them after the project took place (Figure 8). On the one hand, the skills relating to public speaking were primarily targeted before the debate and acknowledged as having succeeded upon completion by most learners. An overwhelming 95.5% (N=21) of the respondents hoped they would gain skills in public speaking, however, 68%, (N=17) reported having achieved this. Although all the skills queried about were, to a greater or lesser extent, selected (Figure 7), the other skills that the learners most expected to improve were:

- Being a better critical thinker (72.7%)
- Articulating their thoughts (72.7%)
- Thinking on their feet (learning to think and react quickly) (72.7%)
- Controlling their emotions when speaking in public (72.7%)
- Improving their presentation skills (72.7%)

Additionally, just over half of the students (59.1% N=13) hoped to learn to collaborate with others. This indicates that even at the outset, they were aware that team effort would be necessary to accomplish successful outcomes.
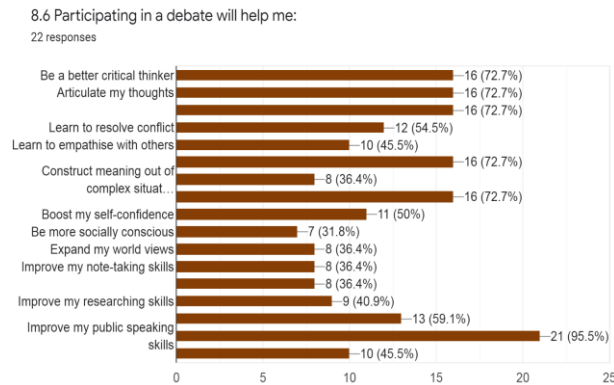

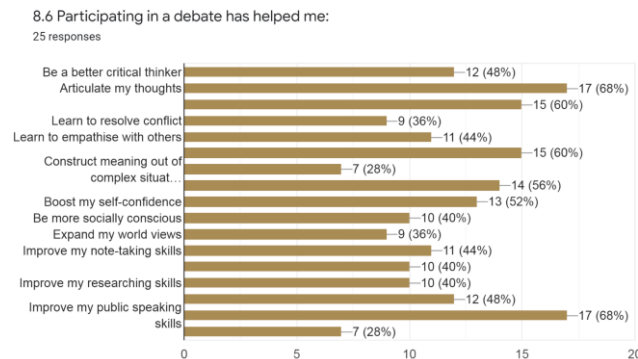Fig. 7 Responses to pre-survey Q8.6

Fig. 8 Responses to post-survey Q8.6

The results of the post-survey were satisfactory although slightly more realistic. Learners nevertheless reported gains in all the skills queried about (Figure 8). As well as public speaking, the students also acknowledged having improved in the following areas:

- Articulating their thoughts (68%)
- Controlling their emotions when speaking in public (60%)
- Thinking on their feet (learning to think and react quickly) (60%)
- Improving their presentation skills (56%)
- Boosting their self-confidence (52%)

The other reported gains were below the 50% mark. Comparing both graphs, we can see that "being a critical thinker" has one of the highest expectation rates in the pre-survey, whereas it did not reach the midpoint in the post-survey. Conversely, whereas boosting their self-confidence was not initially expected, the results showed the reverse.

The students' motivation to learn English and their self-confidence in speaking the language was addressed in both surveys. We can safely say that students were highly motivated to learn English through the debate project since 90.8% (N=20) of them selected option 5, 6 or 7 out of the 7-point scale. Additionally, upon completing the project, the respondents considered their level of confidence to perform in English was in the middle range, categorizing it as *fine* (68%, N=17), followed by 20% (N=5) who described it as being *poor,* and 12% (N=3) who reported being highly confident in English (Figure 9).
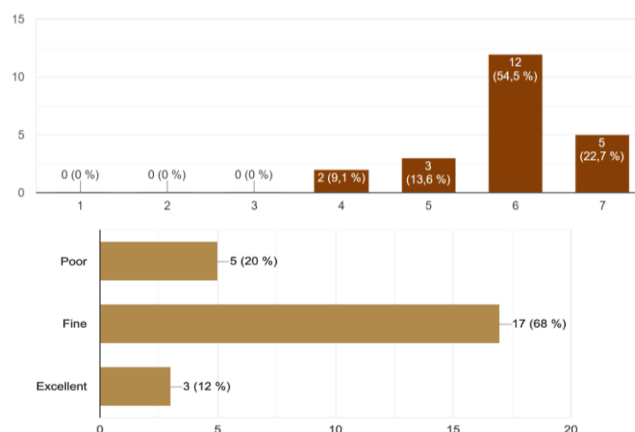

Fig. 9 Motivation (*before the debate*) and Self-confidence (*after the debate*)

6. DISCUSSION

6.1. RQ1. Did learners perceive the telecollaborative debate as beneficial in terms of language intake and communicative development?

The observed learning outcomes suggest that the activities that should be put into practice to enhance language acquisition in a telecollaborative debate are primarily based on interaction and multimodal communication, considering both input and output. The findings lead us to believe that the following activities should be included:

- Exposing learners to specific/contextualized vocabulary
- Reading academic/scientific articles

- Watching/Listening to educational sources of information
- Becoming acquainted with formal language
- Becoming acquainted with language to elaborate on argumentations and explanations
- Becoming acquainted with the rhetoric of persuasion
- Practicing techniques to argue/explain/justify and rebut/refute/disprove
- Practicing public speaking and presentation skills

Moreover, a few soft skills were also brought in and performed by the participants; namely, engaging in dialogue, using tools effectively to access and exchange information, displaying people skills (i.e., talking effectively and empathizing accurately), argumentative literacy, communicative and social skills (i.e., to facilitate interaction and communication). All enabled these ESP learners to navigate within a given communicative environment and work well with others, perform the telecollaborative debate task, and achieve their goals onsite and offsite (Radosavlevikj, 2020).

The results confirm that what is innovative in this telecollaborative debate task is not so much how the learners acquired argumentation skills, but how they delivered the message and how this message was presented and conveyed in a contextualized real-life remote communicative scenario, supported by a collaborative ubiquitous platform. The findings underline that designing the communicative procedures for the telecollaborative debate is as important as the final delivery. As revealed by García-Sánchez's research (2020), the main goal of the debate was to develop a rich discussion based on solid arguments, interventions and rebuttals, using different forms of multimodal and multimedia communication (Figure 10). Moreover, as pointed out by Polacsek and Cholvy (2011), we can state that the three features characterizing an argument (*a proposition, an agent or the person who states the argument, and the evidence)* have been at the heart of the telecollaborative ESP debate, as evidenced by the written documentation produced by the teams to prepare the live debate, which was logically structured by the opposing teams, the audience and the moderator (Van Eemeren & Henkemans, 2016). Through scrutinizing each of the teams' written collaborative scripting of the debate for the purpose of building their arguments, it seems that students had progressively included instances of persuasion geared towards leading their opponents and the audience to believe their theories.

Fig. 10 Real-time telecollaborative interactions during the live debate

The language gains reported by learners, especially in terms of vocabulary acquisition and communicative oral skills (listening and speaking) are in line with those reported by Gimeno (2018) in a telecollaboration project with Spanish learners of English and North American learners of Spanish. Developing communicative skills and collaborative aptitudes were necessary to face the telecollaborative task successfully. This leads us to believe that using English as a lingua franca as it was the case here, does not hinder or deter improvement of the target language, nor does it prevent them from further developing their communication skills.

6.2. RQ2. How did learners perceive the telecollaborative debate had helped them improve their life skills?

The results support the fact that scientific knowledge can be represented in various multimodal forms, without forgetting the importance of verbal and nonverbal communication in the foreign language. Multimodal communication today is a necessary lifelong learning skill that has become an integral part of current interactive learning environments where we have become knowledge builders at a local or global sphere (Danielsson & Selander, 2016; O'Dowd & Eberbach, 2004; Plastina, 2013; Taguchi & Ishihara, 2018).

The findings clearly encompass a combination of knowledge acquisition, argumentation, collaboration, enhancement of 21st century life skills and reassurance of metacognition and reflection in education (Altıok et al., 2019; Bell, 2007; Haukås et al., 2018). These findings are consistent with those of Castillo Losada et al., (2017), Dörnyei (2009), Dörnyei and Muir (2019), and Zimmerman (2008). When students engage in authentic, contextualized tasks with challenging topics they find appealing, they are more receptive and motivated.

The results also reveal that the telecollaborative debate provided participants with more opportunities to interact with fellow learners and collaborate in planning and preparing their argumentations and rebuttals. Moreover, the debate task went a step further than having learners present clear ideas and provide supporting evidence, they also had to use English domain-specific vocabulary, question and refute arguments, which in all probability boosted their efficacy and self-confidence, not just regarding content but also in terms of body language and pragmatics (Zhang & Ardasheva, 2019).

As reported by the students themselves, participating in this semester-long project helped them articulate their thoughts in order to build convincing arguments, it had aided them to overcome the fear of having to speak in public, and to learn to think on their feet and react swiftly to an opposing opinion. The experience was seen as beneficial to construct meaning out of conflict and control one's emotions in public.

In line with Alvarado's study (2017) on the use of drama techniques to encourage speaking in English, a debate requires preparation and, to a certain extent, training and performative skills that combine verbal and nonverbal communication. Besides, García-Sánchez (2019) underlined the challenges that ESP learners necessarily encounter when delivering English public speaking presentations in terms of linguistic, paralinguistic and sociolinguistic verbal and nonverbal communication.

The life skills students reported having gained from the project derived from two interconnected sources: the telecollaboration project itself with students from another university and, within it, the process leading to the debate. The participants acknowledged having become better critical thinkers, more socially conscious, more empathetic with

others through the debate task, as well more proficient in digital skills and a sense of belonging to a learning community, the members of which were all collaborating to reach a common goal. This is consistent with the findings reported in Gimeno (2018) where students participating in a telecollaboration project from Spain and the USA perceived having improved research, team-working and organizational skills.

7. CONCLUSIONS, LIMITATIONS AND FUTURE WORK

This research has comprised three related areas: telecollaboration, ESP and the development of multimodal communicative skills through building arguments in a debate. The study has attempted to analyse the learning activities needed to scaffold a telecollaborative debate, aiming to boost learners' communicative performance when using argumentative language in English for engineering purposes. Moreover, this experiential, collaborative, student-centred, task-based project was planned according to Argumentative Theory and guided by a communicative/performative approach to ESP through the means of a telecollaborative ubiquitous environment.

The study reports that both communicative competences and several language and life skills are required to perform well in a debate in English. An ESP telecollaborative debate needs to be well-structured with fully responsive members in their collaborative learning tasks, which, at the same time, entail individual and teamwork both online and face-to-face. A telecollaborative debate also implies integrating soft skills such as critical thinking and creativity by means of well-built arguments, well-processed rebuttals and a correct organization of the debate with clear turns and time slots so that everyone can contribute to this real-life task, which will vary depending on the topic and the level of communicative dexterity of the participants.

The analysis investigated the different modes of communication used by the learners, paying special attention to the language and life skills required to scaffold a successful telecollaborative debate, on the one hand, and to increase students' communicative, linguistic performance, on the other. As Fortanet-Gómez and Ruiz-Madrid (2016) pointed out, speaking implies argumentative multimodal discourse and this telecollaborative experiential debate has provided the Spanish ESP debaters an authentic foreign language scenario to interact and perform different semiotic multimedia modes by means of verbal interaction, images and non-verbal communication.

The study, however, also has a number of limitations. First, the sample size is limited to a single case study of university students in the field of English for engineering purposes from two Spanish universities. It would not be possible to generalize the results to learners in other ESP fields and in other international universities, so it would be interesting to compare how the debate would be influenced by intercultural communicative awareness in future studies. Secondly, the predominance of male students, in contrast to a balanced mix of males and females, does not accurately reflect differences in communicative performance towards the ESP telecollaborative debate. Finally, a detailed examination of the most common structures used by ESP debaters to elaborate arguments and persuasive instances will offer analytical findings regarding language acquisition and communicative performance.

To conclude, more extensive research in telecollaborative debates for English language learning is needed. The authors of this article intend to extend their research on a larger scale and apply Kaewpet's Argumentation Quality Criteria & Scale rubric (2018)

to telecollaborative debates for global EFL and ESP learners. Ultimately, Activity Theory (i.e., understanding human activities as systemic and socially situated phenomena), together with a goal-oriented teaching framework to conduct telecollaborative debates can be developed into a practical tool for international students in different professional ESP contexts. Synchronous telecollaborative interactions could then be analyzed in a comparative study, using the debate as a task that comprises not only knowledge building, but also the development of multimodal and multimedia communicative skills in English language acquisition.

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