Learning sports initiation through CLIL dissemination

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ABSTRACT

This study aimed to teach students how to communicate and disseminate an idea linked to learning of sport education. Fifty-two students of Sport Science from a Pontifical University of Comillas, participated in a congress of sports sciences. The present work is based on learning of sport education and in a complementary way, it will improve learning of foreign languages through the CLIL methodology (content and language integrated learning). In this way, the use of new technologies must be added as a tool for research, communication and dissemination so required and used today in education, since our project aims to build meaningful learning, achieving a meta-learning that favors educational success. The results obtained suggest that the realization of this professional practice helped the students to create elaborate ideas, try to identify problems encountered by seeking plausible solutions, and build a personal autonomy that will help them to create knowledge.

KEYWORDS

AICLE; Scientific Dissemination; Communication; Learning of Sport Education

1. INTRODUCTION

The launch of the European Higher Education Area (EHEA) brought a new framework in European Universities that allowed to specifically tackle the language competences as part of the

curricula in Spain (Royal Decree 1393/2007, of October 29, which establishes the organization of official university education.). However, it has been after the Spanish Ministry of Education and Culture have approved a set of strategies towards internationalization in 2014, when a significant increase in the number of English-taught programmes has been observed (MECD; 2014). Among the different methodological approaches to integrate the foreign language learning and the competence acquisition, the CLIL methodology is increasingly present in higher education (Fortanet-Gómez, 2013; Abello-Contesse et al., 2013). This approach is defined as a "dual-focused educational approach in which an additional language is used for the learning and teaching of both content and language" (Marsh et al., 2010, p. 2). In the earliest publications, mentions were hardly found regarding its application at the university level (Coyle et al. 2010). However, in the last years this movement is gaining momentum in the Spanish university (Fortanet-Gómez, 2013) and many scholars advocate for strengthening this sort of initiatives (Halbach et al., 2013).

One of the fields that better adapts to the integration of language and content is the Sciences of Sport. Multiple studies show the benefit of combining physical activity with language learning: the support of the body language that helps oral communication (Coral, 2012); the authentic and practical character of the subjet that helps in the early stages of the language learning (Zindler, 2013; Devos, 2016) or the motivating factor of sport that boosts the language adquisition (Fernández-Barrionuevo & Baena-Extremera, 2018; McCall, 2011).

In consequence, the subject of "Sport Initiation" of the Pontifical University of Comillas is the perfect setting to put the integration of language and content into practice. Nevertheless, beyond the effortless and profitable integration, the fact of teaching through a foreign language is an asset itself for the students. Firstly, as most of the information about the topic is written in English language, the use of this language would give access to a wide range of resources that would be otherwise unreachable. That is especially relevant in this proposal built upon a congress in which the students need to gather information from various sources, as it has already been implemented in secondary education (González-Fernández et al., 2020). Secondly, as Ramos-García & Pavón-Vázquez (2018) affirm, this kind of initiatives might contribute to the student employability and to the improvement of the professional market in general.

One of the dimensions that deeply determine the quality of this type of initiatives is the one that concerns the role played by the participating students (Pavón-Vázquez, 2020). Precisely because of this, the aim of this proposal has been to provide students with an active function throughout the process. To guarantee an active role of the students, in addition to the CLIL methodology, two other

approaches have been in the foundation of this proposal: Flipped Learning and Blended Learning. Blended Learning is a combination of face-to-face and virtual training sessions (Morán, 2012). Similarly, in the Anglo-Saxon literature, the configuration of a so-called "hybrid" model was mentioned with great weight (Mariño, 2006). Flipped Learning or "a flipped classroom is named as such because the learning process is flipped from its traditional scheme. Instead of spending entire periods watching a lecture, students watch lectures online outside of class time and use class time to do activities" (Roach, 2014; p. 2). From a wider perspective, as this proposal takes part beyond the instruction time, blended learning provides the framework necessary for this "extended education". It is defined as a style of education in which students learn via electronic and online media as well as traditional face-to-face teaching. Therefore, multiple tools will be used in this lesson planning, such as videoconferencing or Learning Content Management system (LCMS), that will allow to put the student in the center of the procedure with an active and reflexive role.

More specifically, the flipped classroom is an instructional strategy and a type of blended learning which aims to increase student engagement and learning by having students' complete readings at home and work on live problem-solving during class time (Europass Teacher Academy, 2020). This model might include several active methodologies such as gamification or collaborative learning (Lopes & Soares, 2018; Tourón & Santiago, 2015). In this case, it would be combined with the CLIL approach in order to feed students with High Order Thinking (HOT) situations that would trigger their critical thinking.

Finally, it is worth mentioning that, as the whole project has been developed under the CLIL approach, the 4Cs from the Do Coyle et al. (2010) CLIL model has been considered, namely, *Content, Culture, Communication and Cognition.* Regarding the communication "C" and to fulfil a complete communicative approach that respects the guidelines of the European Framework of Reference for Languages (EFRL), all the "classic" communicative activities (listening, reading, speaking, writing) are specifically considered in this lesson planning. Moreover, the most updated communicative activities, such as mediation or the audio-visual reception present in the EFRL, have been addressed.

In short, this paper studies a proposal in which the student is placed in the centre of the learning process by making them responsible for a knowledge construction adapted to their needs. All that, integrated with the implementation of practical and authentic situations, will allow the usage of all the communicative activities in the foreign language. In fact, this activity aims to teach students how to communicate and disseminate an idea linked to learning of sport education, something that

will help them become familiar with the work they must do. To this end, it challenges students to orally present, the importance of learning of sports initiation to a non-specialized audience. Students must prepare an oral three minutes presentation in English language (some students work in English but perform the presentation in Spanish language), in which they explain, with a terminology adapted to the audience —as mentioned, with an intermediate level of specialization on the subject—, their research topics and its importance.

2. METHODS

2.1. Design and participants

The strategy in practice applied in this research is mixed (global and analytical). Specifically, the selected students will carry out the activity individually, as they will independently create the proposed video. Therefore, the presentation of results will also be provided individually by each of the teachers who will be part of this work and will provide while presenting the video, maintaining direct contact through the google classroom platform (concurrent feedback) and at the end (terminal feedback), through the grade proposed by their classmates in the self-assessment and with the duly completed rubric that they will receive in their email, that is, the feedback will be prescriptive, (the student will beware of their failures), explanatory (to know the reason for the incorrect execution) and comparative (to know the progression it is taking). Taking into account the teaching techniques, the inquiry will be used; in order for the students to investigate and interact with the problem and try to find the solution.

Fifty-two students of Sport Science from a Pontifical University of Comillas, Mallorca (Spain) participated in this educational innovation project. The sample design was non probabilistic of convenience. Of the fifty-two students [seven women and forty-five men (age: 20.16 ± 2.31; height: 177.42 ± 5.70; weight: 68.53 ± 8.70). In the present educational innovation practice, 4 participants did not complete the work [lack of will (n=2)]. Not all used the teachers or wrote regularly on the platform (more information in the procedure). Students did not have any partial/chronic injury, nor did they suffer from any neurological disorder that could affect the results of this intervention.

2.2. Materials and didactic resources of the proposal

To carry out this project, a mixed education (classroom and interactive, namely, "blended learning") has been chosen, based on information and communication technologies (technologies, telecommunications networks, videoconferencing, among others), which combines different pedagogical elements, classical instruction, practices, real-time contacts and deferred contacts.

However, the google classroom platform have been also used to keep in touch with all the teachers, share information and submit the final documents. Google classroom is a platform that provide many functionalities. Among them, the school's corporate email (associated with Gmail) can be highlighted, since students have much easier continuous access to our virtual classroom. On the other hand, the students are totally familiar with the Classroom and by automatically linking to the Gmail mail they usually have set up on their Smartphone makes them observe any notification automatically and quickly. In addition, the calendar that is created with the classroom keeps them informed of tests, deadlines for papers or other data of interest. Finally, it is worth mentioning that a website (see https://gonzalezfernandez.es, for more information) and an *Instagram* @congresocafyd were created so that the development of the proposal could be more widely disseminated and the students could interact with comments. In fact, to encourage the students, world experts in different sports made a brief presentation and sent messages for the students to participate in the event.

2.3. Questionnaire (own elaboration)

1. Rate 10 classmates with a score ranging from 1-10.

2. Self-assessment from with a score ranging from 1 to 10.

3. The following questions about the used methodology are asked to the students:

 - Did you like this work methodology in which you have to do research on a topic?

 - Do you prefer the teacher to provide you with the information and explain it to you?

4. The following question on teaching innovation is asked to the students:

 - What has this work given you?

5. The following questions are asked to the students in order to make them evaluate their work during the assignment:

 - What do you think was your level of involvement in the task?

 - If you were to do it again, would you approach it differently?

6. Finally, students are asked a question that helps us to self-evaluate and get real feedback from their experience: What would you recommend to the teacher to improve the congress in the next editions?

	Excellent 2	**Noteworthy** 1,5 n	**Approved** 1	**Insufficient** 0,5	**Does not appear** 0
FORMAL ASPECTS 20 % - Communication - Posture - Expression	-Adequate speed of speech and tone of voice throughout the presentation. -Correct posture during the presentation. -Natural visual contact with the public (screen).	-Adequate speed of speech and tone of voice (generally). -Correct posture during the presentation. -Natural visual contact with the public (screen).	-Adequate speed of speech and tone of voice (sometimes). -Correct posture during the presentation. -Natural visual contact with the public (screen). **1**	-Inadequate speed of speech (very fast or slow) and tone of voice (very high or low). -Difficulties in communicating naturally with the audience.	Not shown/ Not applicable/ Not attended.
SPECIFIC TERMINOLOGY 20 % - Scientific terminology - Adequate terminology - Explanation of terminology	-Appropriate use of terminology for the audience (adaptation of terminology to the level of specialization). -In-depth understanding of the terminology.	-Appropriate use of terminology for the audience (adaptation of terminology to the level of specialization). -Correct understanding of the terminology.	-Use of overly colloquial vocabulary (incorrect adaptation of terminology to the level of specialization). -Sufficient understanding of the terminology.	-Use of imprecise vocabulary. -Insufficient understanding of the terminology.	Not shown/ Not applicable/ Not attended.
CONTENT 25 % - Knowledge of the topic -Ability to resolve doubts	-Deep knowledge of the topic. -Ability to solve all doubts of classmates and teachers.	-Correct knowledge of the topic. -Ability to solve almost all doubts of classmates and teachers.	-Sufficient knowledge of the topic. -Ability to solve some doubts of classmates and teachers.	-Insufficient knowledge of the topic. -Inability to solve some doubts of classmates and teachers.	Not shown/ Not applicable/ Not attended.
PRESENTATION 15 % - Presentation tools - Originality - Informativeness for the receiver	-Use of efficient digital (or other) tools for the presentation of the topic. -The tool used and the presentation are very graphic.	-Use of efficient digital (or other) tools for the presentation of the topic. -The tool used and the presentation are graphic.	-Use of efficient digital (or other) tools for the presentation of the topic. -The tool used and the presentation are not graphic (generally).	-A digital tool is not used to present the topic. -The tool used and the presentation are not graphic	Not shown/ Not applicable/ Not attended.
PLANNING 20% - Previous work - Reference (authors/works) - Conclusions	-Presentation shows outstanding planning and work organization.	-Presentation shows quite planning and work organization.	-Presentation shows good planning and work organization.	-Presentation does not show good planning and work organization.	Not shown/ Not applicable/ Not attended.

Table 1. Evaluation rubric for the 3-minute video

	Excellent 3,33	**Noteworthy** 2.49	**Approved** 1,66	**Insufficient** 0,83	**Does not appear** 0
CONTENT - Approach to the topic - Development of the topic - Link with other topics	-Discussion questions are addressed. -Proposed resources or readings are correctly cited and related to the topic. -Incorporation of the selected information and links it to previous practical experiences. -Complementation with resources related to the topic that are not found in the assigned readings or guide texts. -Incorporation of prior learning on relevant topics.	-Discussion questions are addressed. -Proposed resources or readings are correctly cited and related to the topic. -Incorporation of the selected information and links it to previous practical experiences.	-Discussion questions are addressed. -Proposed resources or readings are correctly cited and related to the topic.	-Discussion questions are only partially addressed. -Resources or readings are mentioned but are not related to the topic.	-Discussion questions are not addressed. -No mention of readings or resources.
LINGUISTIC ASPECTS - Completed ideas - Correctly structured ideas - Argumentation	-Developed ideas are complete. -No grammar or spelling errors are observed. -Arguments are clear, concise, logical and compelling. -Contribution is made in a proper time frame. -Relevant references are correctly cited.	-Developed ideas are complete. -No grammar or spelling errors are observed. -Arguments are clear, concise, logical, and compelling. -Contribution is made in a proper time frame. -Relevant references are correctly cited.	-Developed ideas are complete. -No grammar or spelling errors are observed.	-Developed ideas are complete. -Grammar and spelling errors are observed.	-Developed ideas are incomplete. -Grammar or spelling errors are observed.
ANSWER - Correct answers - Consistent discussion - Content relation	-Answers in the discussion forum are timely and contain a complete discussion relevant to the topic. -Answers relate theory to practical application, personal or both. -Contribution demonstrates deep understanding and combines multiple ideas related to the topic.	-Answers in the discussion forum are timely and contain a complete discussion relevant to the topic. -Answers relate theory to practical application, personal or both.	-Answers in the discussion forum are timely and contain a complete discussion relevant to the topic.	-Answers in the discussion forum are timely but they are very brief and only provide a superficial discussion of the assigned topic.	-Answers in the discussion forum are superficial (e.g.: "I agree with..." without any explanation or discussion). -Contributions are late in relation to the deadline.

Table 2. Evaluation rubric for forum

2.4. Procedure

Before starting to describe the followed procedure, it is important to remember that at no time have we altered the usual class schedule. For all these reasons, the project has been carried out in the so-called third pedagogical time, that is, outside the usual class schedule.

In education, the term *innovation* refers to changes introduced in the EA process. Thus, educational innovation seeks the evolution of mechanical learning and memorization to the application of knowledge, so that students understand that if they actively participate in the educational process.

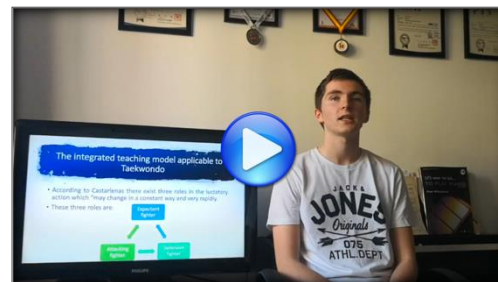**Figure 1.** Student using video software to support the videoconference presentation

Figure 2. Student presenting with a power point tool

Figure 3. Student using computer media: images, videos, and video software, among others

Figure 4. Student presenting the project with a real demonstration, additionally supported with subtitles

Precisely, the following figure illustrates the processes where the student occupies a central role in making decisions in each of the phases: choice of the subject, selection of the language of exposure, collaboration in the disclosure, among others. In this way, by involving the students we favor a greater understanding and awareness of the importance of content in health and well-being. A summary of the phases of our project and the processes carried out with the use of ICT communication can been seen. [Presentation phase (two days); Topic selection phase (one week); Presentation phase (two weeks); Assessment phase (one week) and dissemination phase (one week)]. For more information, see figure 5.
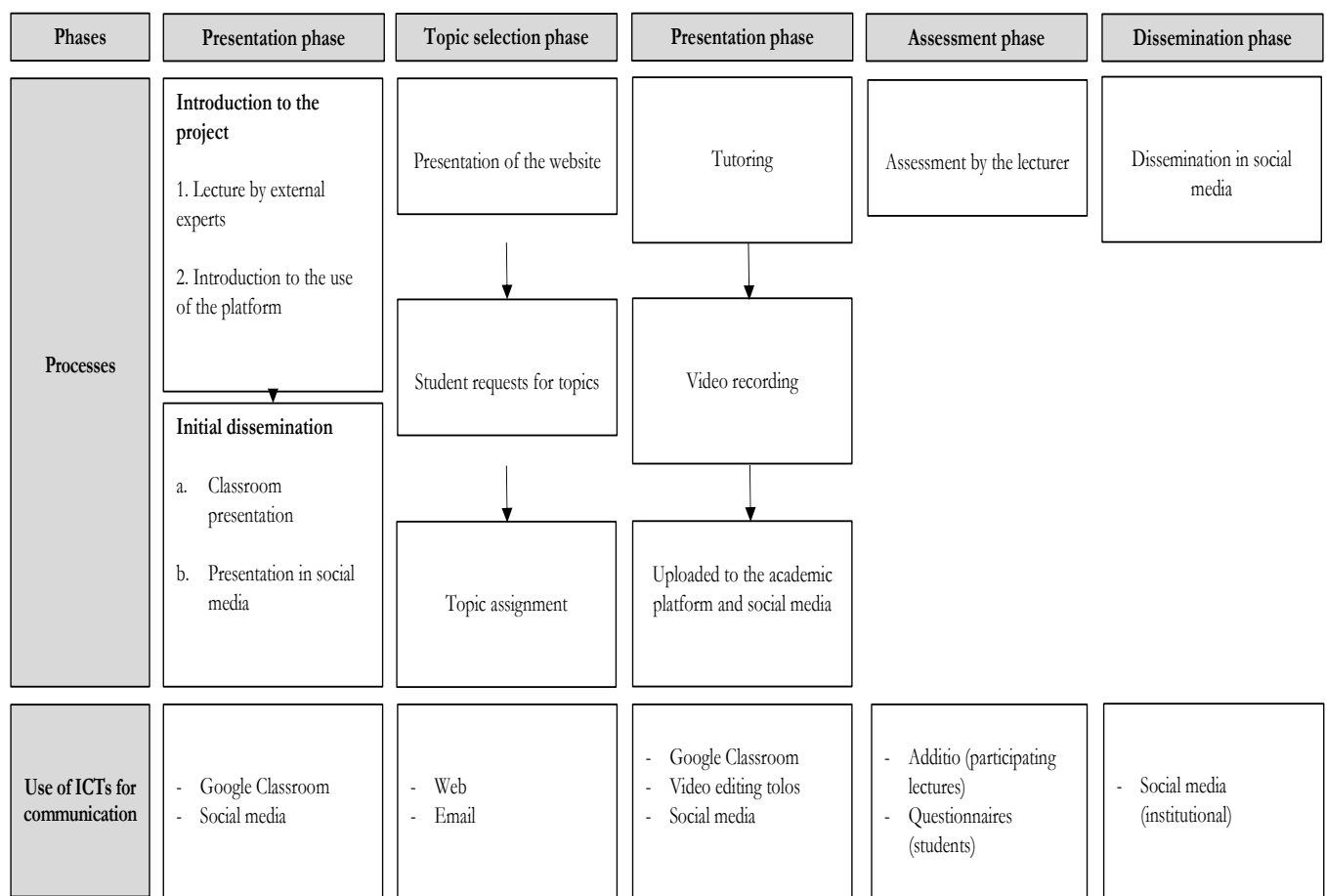
Phases	Presentation phase	Topic selection phase	Presentation phase	Assessment phase	Dissemination phase
Processes	**Introduction to the project** 1. Lecture by external experts 2. Introduction to the use of the platform **Initial dissemination** a. Classroom presentation b. Presentation in social media	Presentation of the website Student requests for topics Topic assignment	Tutoring Video recording Uploaded to the academic platform and social media	Assessment by the lecturer	Dissemination in social media
Use of ICTs for communication	- Google Classroom - Social media	- Web - Email	- Google Classroom - Video editing tolos - Social media	- Additio (participating lectures) - Questionnaires (students)	- Social media (institutional)

Figure 5. Phases of the methodological proposal

3. RESULTS

The results obtained in this proposal will be analyzed from two different points of view: 1) Results from the questionnaire carried out by the students and 2) Results obtained from the feedback of the faculty meetings.

3.1. Questionnaire

Beginning with the evaluation of the questionnaire, it is necessary to emphasize that the students are valued by their classmates (Point 1) and that this assessment is quite strict and critical, even more demanding than the evaluation of the teacher (Alvarez-Valdivia 2008), so, although on this occasion we have not considered the co-evaluation within the percentage obtained. In this same sense, the self-evaluation made by the students (Point 2), as with the co-evaluation made is quite strict by our students. In fact, they detect their errors and when they see themselves later on video, they reanalyze all the instructions or items that we provided at the beginning. Therefore, we can conclude by saying that the detailed description in the rubric and the exhaustive knowledge of it makes the students are aware of the importance of the evaluation process.

With regard to the methodology used (point 3) it can be suggested that the students have enjoyed doing this type of project, that the results are outstanding, and that the involvement has been extraordinary. However, at least a third of the total say that they prefer the traditional class and feel more confident about this type of work structure in which the teacher carries the heavy load of the class and the student becomes the receiver of information, coinciding with the research of Arráez-Vera et al., 2018 in which they showed that 73.9 % of students prefer the methodology used instead of the traditional class.

In relation to the question that refers to the contribution of this type of practice (point 4), most of the students agree on the same thing: the importance of sport sciences on general health and in our daily life. This answer confirms that our project worked and that it fulfilled the objectives set out at the beginning.

On the other hand, with respect to the issue related to autonomy and the search for information (point 5), a large part of our students affirm that they have learned to search for information more efficiently. In this same sense and linked to the autonomy in their work, many students understand that they show shyness when expressing information or exposing it and that this innovative practice has given them a security due to the virtual format that it has. In addition, by recording themselves in the place they preferred, it has provided them with security when it comes to

exposing themselves. Some answers obtained related to new technologies and everything they have learned, has made us rethink if the students really know everything about software related to video editing, recording, among others. In fact, we could suggest that taking into account that our students are digital natives, their mastery of new technologies, lends itself to raise questions regarding the domain of office tools and various software.

Another question we asked was about their work process and their involvement (point 6), to which most of them agreed that their work could be improved. In fact, after watching the videos of classmates, most of them consider other perspectives of presentation. This is positive, since for upcoming courses some different video conferences can be presented to give them ideas about how to structure it. In the same sense, the last question asked was how to improve the congress. The students emphasized that they prefer tutoring to answering by e-mail, they also ask for some free time to have it, since the university curricula (Sports Science) does not establish any gaps in their first year, so we have no time left for tutoring. Finally, it is necessary to emphasize that the positive assessment that students have made about the structure of the congress and its positive relationship with regard to the possibility of having the contents available on their Smartphone, improving the assessment of skills in most of the subjects involved in the proposal.

Feedback from department members for future editions

A meeting was organized to inform all the teachers of the Department about the work that had been carried out. The results obtained after the final meetings of the teachers involved, expressed a positive feeling about what was done in this project. The clarification of the calendar and the equitable distribution of functions were highlighted. This is very interesting, since it occurs at the beginning of the term and makes the different departments temporalize taking into account the specific needs of our proposal. On the other hand, it has been considered that the students have not taken advantage of us as much as they could, so perhaps in future editions we should establish the exchange of two emails or a face-to-face tutorial at least. The teachers would like to adapt it to their subjects and propose something similar, but with their subject as the common thread.

After finishing the project, a reflection and evaluation group of the project was organized, composed by the teacher responsible of projects and two students. The main proposals for the development of the project in future editions were:

- The adaptation of the rubric (figure 1) so that each of the activities of the language or communicative skills (oral expression and interaction, written expression and interaction, among others) are considered.

- Use of the Additio application for an evaluation through the competency profile.

- Use of the Flip Grid application for the management of videos, which will favor a better organization and greater interaction.

- Carrying out a pre-test and a post-test of the Physical Education Importance (PEI) questionnaire in the line of other studies such as Baena-Extremera et al (2014) or Granero-Gallegos et al (2012).

It is necessary to emphasize the human work of the teaching staff and the union that this project has brought to the faculty of our center. Finally, we are very satisfied with the results obtained and especially with the great diffusion that has been made through different channels, something that is also related to our initial proposal.

4. DISCUSSION

Once we have analyzed our practical proposal and reviewed the current educational curricular legislation on which the development of the contents dealt with in our project is based, we can conclude by saying that 1st year of university is the ideal framework to promote this type of innovative project in the educational context, since it aims to build significant learning for the next courses, achieving a goal-learning that favors educational success. But, above all, we have managed to make our students aware of the importance of the value of sport sciences.

Relevance of the contributions of professional practice and its innovative character

With respect to the methodology applied, we would like to suggest that our didactic preferences in the teaching of university cannot be limited only to traditional teachings that sometimes do not have repercussions on the students or on the society in which they are going to develop. There is a lot of talk about innovation in the education sector today, but in reality, it is not incorporated as often as we would like in teaching-learning process. With this applied methodology we manage to unite educational innovation with the motivations of the actual students that we currently have in our classrooms using the instruments that they use in their day-to-day lives as tools for the development of their learning and to be able to advance in the previously mentioned processes. Thus, although there are numerous examples that use this model in different processes of teaching-learning process of different subjects with very good results and in our case, it has not been

less, the general satisfaction rates of both students and teachers involved have been very positive. Actually, this pedagogical model goes beyond a simple anticipation of the subject to be developed in class and can include all the necessary tools for students to create and develop their own learning. In our case, we have given them search tools and scientific texts so that they are able to analyze texts, create posters, synthesize and adapt them to the general public with the extra condition of multi-disciplinarity that includes their exposure in another language of their choice.

Below, we would like to highlight another of the strengths of this innovative practice. This point is the implementation in parallel with other teaching units over one or several quarters. This not only ensures a continuous and integrated use of all foreign language skills but is also meaningful and integrated into the subject matter. But without a doubt another potential is that the evaluations, analyses and reflections carried out by the students as part of the project imply the use of "high order thinkig skills" (HOTS), by following the indications of authors such as Coyle et al. (2010) or more specifically in the field of CLIL in Coral (2013). In this sense, our proposal has been ideal to put into practice all the skills and also to adapt to the linguistic level of each student from their personal interests. It is very likely that this flexibility has been one of the factors that have triggered the increase of CAD in foreign language mentioned above.

5. CONCLUSIONS

In conclusion, the findings presented in the present professional practice manifest the importance of multidisciplinary works. In fact, this study has some limitations. On the one hand, the small number of the participants involved. For this reason, this work should be faced as a limiting factor for the generalization of scientific evidence. On the other hand, most studies are the tact of being limited to cases report of one only class or proposal of active methodology. In all case, the results of the present study emphasize in a potential finding that deepening about the the current working world with work groups in which there are different professionals, carrying out work that involves several subjects manages to make our students' minds more flexible towards new learning, to learn from the diversity of points of view, to create synergies and above all to improve results, since, when working with other professionals from different disciplines, the quality of the work is increased by the contributions of each one of them. In this sense, the teachers believe that working in a multidisciplinary way brings efficiency to this type of projects, due to the creation of different work scenarios and above all, collaboration in which dialogue, debate, research and exchange of information take place. In short, we can suggest that the realization of our innovative professional

practice helped our students to create ideas in a more elaborate way, to try to identify the problems found by looking for plausible solutions and to build a personal autonomy that will serve them for the construction of knowledge throughout their lives.

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AUTHOR CONTRIBUTIONS

CONFLICTS OF INTEREST

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