Physical Education and English learning: perceptions of students participating in a CLIL program

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ABSTRACT: Content and Language Integrated Learning (CLIL) is an innovative approach that integrates language learning with content-based instruction in a variety of subjects including physical education and tactical learning of sport. This paper aims to explore the benefits of combining these two subjects in the classroom and how it can lead to a more dynamic and effective learning experience for students. A total of 32 students (22 males and 10 females) with a mean age of 16.62 years (SD = 0.5) took part. Students completed weekly reflective entries in their personal diary. In addition, two focus groups were conducted with a total of 12 students each. Considering the nature of this research, the qualitative method was chosen to gather and analyze the data, using NVivo (version 12 QSR International). Three main themes emerged: 1) Visual material to improve language learning and comprehension, 2) Learning English during the practice of physical exercise and 3) Lack of Balance among the 4 Cs of CLIL. CLIL is an effective approach to integrating language learning with content-based instruction in physical education and tactical learning of sport. It is essential to implement some strategies to capture the attention of students while they are involved in the activities.  

Key words: CLIL, Pedagogical approach, Sports, Foreign Language, Language Learning.

Educación física y aprendizaje del inglés: percepciones de los estudiantes que participan en un programa con metodología AICLE

RESUMEN: El Aprendizaje Integrado de Contenidos e Idiomas (AICLE) es un enfoque innovador que integra el aprendizaje de idiomas con la instrucción basada en contenidos en una variedad de materias, incluida la educación física y el aprendizaje táctico del deporte. Este documento tiene como objetivo explorar los beneficios de combinar estas dos materias en el aula y cómo puede conducir a una experiencia de aprendizaje más dinámica y efectiva para los estudiantes. Participaron un total de 32 estudiantes (22 varones y 10 mujeres) con una edad media de 16,62 años (DE = 0,5). Los estudiantes completaron entradas reflexivas semanales en su diario personal. Además, se realizaron dos grupos focales con un total de 12 estudiantes cada uno. Considerando la naturaleza de esta investigación, se eligió el método cualitativo para recolectar y analizar los datos, utilizando NVivo (versión 12 QSR Internacional). Surgieron tres temas principales: 1) Material visual para mejorar el aprendizaje y la comprensión del idioma, 2) Aprender inglés durante la práctica de ejercicio físico y 3) Falta
Every nation is racing to produce 21st century citizens who are ready to face modernity obstacle. One of the main characteristics of these modern citizens is the ability to communicate in English as a lingua franca, which makes it one of the main goals of foreign language education in any country (Coyle et al., 2021). Content and Language Integrated Learning (CLIL) is an innovative approach that integrates language learning with content-based instruction in a variety of subjects (Gil-López et al., 2021), including physical education (PE) (Martínez-Hita et al., 2022) and tactical learning of sport (Ito, 2019). The goal of CLIL is to provide students with a more meaningful and authentic learning experience that goes beyond traditional language learning methods. Students are exposed to real-life situations and are able to develop their language skills in a relevant and practical context (Fazio et al., 2015). This approach also helps students to gain a deeper understanding of the content and improve their language proficiency. PE and English language learning are two crucial aspects of a well-rounded education. While physical education helps students develop their physical abilities, motor skills, and teamwork, learning English opens up new doors for communication, education, and career opportunities (Salvador-García et al., 2022). These variables are two important components of education that play a significant role in the development of students. PE helps students develop their physical abilities, improve their health, and promote an active lifestyle (López Cancho, 2021). On the other hand, English language learning provides students with the necessary communication skills for the modern world and opens up new opportunities for education and career advancement (Salvador-García et al., 2018).

The integration of physical education and English language learning has been shown to have several benefits for students. It can improve their physical fitness and coordination (López Cancho, 2021), as well as their language skills, vocabulary, and pronunciation (Coral, 2013). The combination of physical activity and language learning also helps to boost students’ confidence, cognitive abilities, and memory retention (Ceallaigh et al., 2017). Additionally, incorporating English language learning into physical education classes provides students with real-life context for using the language, making the learning experience more meaningful and enjoyable.

For teachers looking to integrate PE and English language learning into their lesson plans, there are several strategies that can be effective. One approach is to incorporate English vocabulary and phrases related to physical activities into physical education lessons. This can help students develop their language skills while they are participating in physical activities (Salvador-García et al., 2018). Another strategy is to use English vocabulary and phrases related to sports and tactics in training sessions (Ito, 2019). This can help students develop their language skills while they are participating in physical exercises, requiring them to communicate and work together in English to achieve their goals (Martínez-Hita et
In this context, PE and English language learning are two important subjects that can complement each other to provide students with a more dynamic and effective learning experience. By integrating physical activity with language learning, students can improve their physical and cognitive abilities, boost their confidence, and develop essential life skills (Ceallaigh et al., 2017; Celina & Oscar, 2017; Fazio et al., 2015; Salvador-García et al., 2022).

Physical exercise and tactical concepts are crucial components of sports and play an important role in the development of students. Physical exercise helps students develop their physical abilities, strength, and endurance, while tactical concepts help them understand and execute game strategies (Ito, 2019). The integration of physical exercise and tactical concepts can lead to a more effective and complete training experience for students, leading to improved performance and success on the class (Ioannou-Georgiou & Pavlou, 2011; López Cancho, 2021). Incorporating English language learning into the training of students can also provide several benefits. English is widely used as the international language of sport, and some students participate in international competitions where English proficiency is essential for communication and understanding instructions (Salvador-García et al., 2020). In addition, English language learning can improve students’ overall communication skills, making them better prepared for future career opportunities in life (Gracia & Rojo, 2018; Luanganggoon, 2020).

This article aims to explore the benefits of combining these two subjects in the classroom and how it can lead to a more dynamic and effective learning experience for students. By combining physical activity with language learning, students can improve their cognitive and physical abilities, as well as their confidence and social skills. Through this article, we will examine the ways in which these two subjects complement each other and provide practical tips for teachers looking to integrate them into their lesson plans.

2. Methods

2.1. Participants and context

A total of 32 students (22 males and 10 females) with a mean age of 16.62 years (SD = 0.5) took part (Table 1). Two of the 32 students were Muslim, 24 were Catholic and six did not practice any religion. In addition, it is important to note that all students were born in Melilla. During 12-week period the students attended two weekly one-hour PE sessions. As mentioned above, the CLIL intervention took place in Melilla, a city on the north coast of Africa that is surrounded by the waters and territory of Morocco but is one of the two autonomous cities that form part of Spain. One of the factors that makes Melilla an enclave worthy of study is its delimited location, as it presents a very particular cultural and social setting (Segura-Robles, 2020) that makes it a uniquely interesting context.
Table 1. Participants of the study

<table>
<thead>
<tr>
<th>Sample</th>
<th>Age</th>
<th>N</th>
<th>Religion</th>
<th>Gender</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group 1</td>
<td>16.62 (SD=0.5)</td>
<td>32</td>
<td>24 Catholic</td>
<td>22 M</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2 Muslim</td>
<td>10 F</td>
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<td></td>
<td>6 Not provided</td>
<td></td>
</tr>
</tbody>
</table>

2.2. Design

Considering the nature of this research, the qualitative method was chosen to gather and analyze the data. The information was gathered to understand the different results by describing, analyzing, and interpreting the data using qualitative methods, which means that this process deals with understanding the subjects’ behavior. For data collection, a reflective diary was used by the participating students and two focus groups.

Focus groups

In addition, two focus groups were conducted with a total of 12 students each who had completed the 12-week intervention and were recruited according to availability. These groups meetings lasted approximately one and a half hours and were audio- and video-recorded before being transcribed for textual analysis. Following Hamui-Sutton and Varela-Ruiz (2013), it was deemed necessary to use a topic guide as an instrument for the moderator, which was composed of open-ended questions related to the object of study.

Reflective Diaries

Students completed weekly reflective entries in their personal diary throughout their 12-week experience. The diary entries had to contain reasoning about what they experienced during that week after the two physical exercise sessions. In any case, in order to write a reflective diary correctly, it is necessary to guide students to ensure sufficiently deep analyses (Vinjamuri et al., 2017). Therefore, the initial prompts focused on describing the CLIL environment and impressions (Yamashita et al., 2013). Some of the questions included were, “Please describe your interaction with your class mates in English”, “Was there anything you said or did that he/she reacted or responded to expressively (either positively or negatively)?” After completing the sessions, students were prompted to reflect further on their experience. Prompts included questions such as “Did you find the visual tools useful to learn the vocabulary in English? What were the most challenging parts? What would you say has been the best tool you’ve used in PE lessons to learn English? Have you encountered problems putting into practice what you have learned in class?” The prompts served as a didactic tool to guide students in their learning. In this context, the use of reflective diaries seems one of the best options to stimulate critical thinking while meaningfully describing a personal experience (Bharuthram, 2018).
2.3. Analysis

The methodological option was based on the previous questions set out in the script of the focus groups and the reflective diaries of the students being deductive, inductive and emergent, by respecting the discourses and annotations of the participants. Some of the guidelines set out in Grounded Theory (Glaser et al., 2019) have been used, outlining the discourses of the study from the particular to the general, through the process of categorization and subsequent coding (Glaser et al., 2019). The general emerges from the data itself, in this case, from the discourse and the reflections of the students in their written diaries (Sandín Esteban, 2000). The information produced, from the diaries, the video and audio recording of the two focus groups and the notes collected from the observation of each of them, were organized and prepared for processing with Nvivo software (Version 12, QSR International Pty Ltd, Melbourne, Australia). Direct transcription of the written and audio-visual media with the software enabled us to identify the actual timeline based on each intervention for further analysis. Each focus group intervention has been numbered in order of participation. An axial coding was carried out; open, based on the previous and emerging categories, fundamentally in the second and third level of categorization, from the interpretation of the main researcher (Figure 1).

![Figure 1. Axial Coding of the categories analyzed from the reflective diaries and focus groups](image)

The data analysis, supported by NVivo software (V12), was based mainly on the coding matrices, in order to bring out the relationships between the different categories, the cross-referencing of the categories of interest at each moment of the analysis and the attributes of the participants (Rivas-Valenzuela et al., 2021). This allowed us to compare, establish relationships and make visible the questions raised by the discourses of the students (Figure 2). The strategies used have allowed us to confront the implicit theories of the participants with those of the researchers, generating the substantive theories of the research (Feng & Behar-Horenstein, 2019; Trigueros Cervantes et al., 2016).
2.4. Ethical considerations

The ethical and good practice criteria for research established by the University of XX were closely followed. Specifically, the present study was approved by the bioethical committee in Social Sciences for interventions with people with the number 178/CEIH/2022. In the creation of the focus groups, prior consent was obtained from the participants and the management of the high school in which the students attended their physical exercise practices. Following Quinn Patton and Cochran (2007), the ethical issues that must be taken into account in all research were followed, which are confidentiality and consent. Therefore, the university students were informed about the objectives and topics to be addressed and their identity was protected above all else creating new names for them. Informed written consent was obtained from all members of both groups.

3. Results

After analyzing the speeches of the participating students in the focus groups and the entries in their reflective diaries, three main themes emerged: 1) Visual tools to improve language learning and comprehension, 2) Learning English during the practice of physical exercise and 3) Lack of Balance among the 4 Cs of CLIL.

Visual tools to improve language learning and comprehension

The use of audiovisual material is based on reinforcing the concepts worked on in class, improving the comprehension of the vocabulary by the participating students according to the

Figure 2. Preponderance of the narratives of the participants.
type of material used both in the classroom and during the physical practice. The material used was intended to support the teaching-learning process, trying to vary the traditional methodology of learning English. In this, the performance of physical exercise in Physical Education classes introducing concepts in English was done through theoretical and practical sessions in which posters, images, videos and banners were included.

This type of methodological tools was greatly appreciated by the participating student. For example, one of the entries in the reflective diaries made reference to this topic: “It has helped me a lot to see the concepts in English that we were using in the different exercises in class on the banners” (RD 3; 32). In this context, the speech of another student also appears “It is very useful to see through a video in English the concepts about football that we were going to deal with later”. For this project they turned out to be significant tools due to the impact they had on student learning.

Based on the speeches of the students, the use of audiovisual media to deepen the learning of English was an important method for planning Physical Education sessions and the acquisition of a second language. Presenting the students in the classroom the concepts to be learned in English helped the teachers to enhance their learning and use of them during sports activities practiced outside the classroom. The students were able to prepare their own audiovisual cards with the concepts of tactics, technique or physical preparation of the sport. The combination of the materials created inside and outside the classroom was useful in reinforcing the students’ understanding of the vocabulary taught about actions, aspects of the game and sports concepts related to soccer. This was found in the following tests: “We designed cards with some action concepts written on them (pass, run, shoot, dribble). When I created cards with concepts, that concept was never forgotten in practice” (RD 12; 45).

In the previous interventions, the point of view of one of the students is observed, which is in line with that described by another classmate when it comes to positively assessing the effectiveness of audiovisual media for the acquisition of sports concepts in English: “It worked perfectly because it did not use the need to study the concepts, they were perfectly assimilated after having created them in class and then they came to practice (RD 8; 12)”. In reference to these results, it can be seen that the students perfectly associated the written word with the sporting action when carrying out the teacher’s orders; However, this method is not infallible, it depends on the student’s ability to retain the vocabulary and the relationship that the learned word has with the daily use of it by the students.

Learning English during the practice of physical exercise

The CLIL approach of the project was driven by the previous activities in the classroom for familiarization with the concepts to work on later in the practical part. Once this system was implemented, it was shown how the students preferred to reinforce learning through sports practice. In this sense, we find entries in reflective diaries such as: “In my case, I strengthened the concept in English after experiencing it and using it in a real game situation” (RD 21; 7) or in the focus group “After using the concept in English with my classmates during homework, I have realized that without realizing it I have learned many words in English” (FG 2; 43).

Based on the above, it is important to highlight that the planning of the content, prioritizing the learning of the language through the practice in Physical Education, increased the
level of interest of the students: “it is much more fun to learn English through play than to be sitting down in the classroom or study it at home” (RD 6; 2). The implementation process of the CLIL model was carefully designed with the objective of integrating the contents to be worked on from Physical Education and the activities related to the learning of concepts in English. In certain situations, it was difficult for the students to be focused on the use of concepts in English during practice: “There are times when you are so involved in the task that you forget to communicate with your classmates in English, because you want to win that task” (FG 1; 27) or “on several occasions we said the concepts in Spanish and the teacher immediately corrected us so that we continued speaking in English, this was due to the emotion during the task” (RD 23; 6). In this sense, we found moments in which, due to the fact that the Physical Education subject was so practical, the linguistic part was neglected at certain moments in which the emotion and concentration in said activities implied a total abstraction of the use of English as a means of communication between classmates.

When this type of situation was detected by the teacher, the practice was stopped and the students were asked how they could explain in English what they were transmitting in Spanish to their classmates during the game. These situations are shown in the interventions of the students in the focus group: “it personally helped me a lot to stop and be aware of the concepts we were working on and make the effort to explain it in English to my teammates” (FG 1; 27) or “when the teacher stopped the activity, he gave us an image that reinforced the concept in English that was happening at that moment and we had to be aware” (RD 5; 9). In this example taken from the reflective diaries, the integration of a Physical Education task with a language acquisition task can be evidenced. In this class, students not only had to read and internalize the word that the teachers showed them on a flashcard, but also recognize and explain it during practice in English. Each student was shown at different times a different action verb, situation or tactical/technical concept in which they also had to say the meaning of the word in Spanish demonstrating comprehension.

Lack of Balance among the 4 Cs of CLIL

The CLIL approach is composed of 4 Cs whose meaning of each of them is Cognition, Content, Communication and Culture. In the present intervention, the C related to Culture was not developed at the same level as the others. In most of the sessions carried out, activities and tasks related to cognition, content and communication between students could be developed; however, the term related to Culture was the one that had fewer learning opportunities and situations to be able to integrate. In a context like the one developed in this research, in a city like Melilla, known as the city of four cultures, this section could be developed by the idiosyncrasy of the city. Throughout the Physical Education sessions, the students learned parts of the body, action verbs, tactical and technical concepts, and vocabulary related to soccer. However, none of these issues was related to a cultural aspect, being an important variable to reinforce.

Prior to the development of the sessions, the teacher established a planning process focused on covering the 4 Cs during the intervention through the CLIL approach. After implementing the program, the variable related to culture did not have the expected relevance and it was decided to reinforce the other 3 Cs. The culture could not be developed in the class. Contrary to the awareness given to the challenges related to the delivery of instructions
and the emphasis on physical practice tasks over theoretical classes, this challenge on the integration of Culture as one of the 4 Cs in the project could not be improved over time throughout the sessions. This fact can be supported with one of the interventions made by the students in the focus groups or in their reflective diary.

“When we talk about culture in relation to soccer as a sport, a lot could be taught, but in this lesson, there was an interruption in the explanation of the vocabulary, so the teaching of the content was incomplete, although the intention was to talk about the culture of sport and the importance that it has for the country and continent” (FG 2; 28). In the reflective diary of a student we found, “the teacher chose to work this sport in a more practical way instead of letting the students learn about any cultural background, for so the planning focused on the sports modality and on some technical considerations regarding the game and the regulations” (RD 6; 10).

Although C related to Culture could not be developed as expected after content planning in each session, there were moments related to values according to the race of each person that emphasized the acceptance regardless of their place of birth. Scandals of famous players related to racism in the history of football were used to show them to the students and work on these values that are so important in society. In this context, we find the contribution of a student who reflected in her diary the following: “it has been a shame to see how the public in a football stadium is capable of insulting a player because of his skin color or his country of origin. It is important to eradicate this type of behavior from the playing fields” (RD 8; 3).

4. DISCUSSION

The aim of the intervention of learning English through soccer content in PE class was to know the impact that it could have in the students learning process and their experience during every session. In PE lessons, CLIL can be applied by incorporating English vocabulary and phrases related to physical activities and sports (Chiva-Bartoll et al., 2018). This can help students develop their language skills while they are participating in physical activities, making the language learning experience more meaningful and enjoyable (Luangangggoon, 2020). Additionally, incorporating tactical concepts into physical education lessons in English can help students understand the strategies and tactics involved in different sports, while also improving their language skills (Gracia & Rojo, 2018). CLIL can be applied by using English language simulations of tactical situations and game strategies. This can help students develop their language skills while they are learning about tactical concepts and improving their understanding of the game (Ito, 2019). Additionally, incorporating physical exercise into tactical learning in English can provide students with the opportunity to practice and apply the tactical concepts they have learned in a real-life context (Gil-López et al., 2021).

One of the important aspects for learning English was the use of audiovisual media. In the present study, the use of visual cards to favor the comprehension of vocabulary and thus facilitate the understanding of instructions was one of the tools that gave the best results. Following Coyle et al., (2021), they show how the use of visual materials to improve linguistic skills in terms of language use, as well as for the acquisition of content and its construction in new knowledge. In line with our study Coral & Lleixà (2014), showed how
the combination of English through Physical Education classes can be carried out satisfactorily through audiovisual media. In this context, implementing didactic tools through the use of images, banners or videos turned out to be a great opportunity that allowed students to relate the vocabulary with its meaning in relation to real action and thus help the language learning process (Chiva-Bartoll et al., 2018). In addition, the use of these audiovisual didactic tools in this study was shown to be an effective alternative to maintain the attention and interest of the students during the development of the classes. Likewise, its use served as content to study the topics explained by the teacher and as a facilitating way for the students to understand and execute the instructions with ease. These findings would be consistent with those found by López Cancho, (2021) where he showed how the use of audiovisual tools to learn vocabulary and grammar helped students to improve their repertoire and understanding of language.

Following Wewer (2017), they pointed out that learning through the CLIL approach is necessary to create what is known as Verbal Scaffolding, in which teachers offer a vocabulary that starts from the simple to improve student participation and motivation in the proposed tasks. This method was introduced in each of the sessions of this intervention and although it was difficult to achieve in all the sessions, this Verbal Scaffolding was achieved satisfactorily in most of the proposed tasks. In this type of methodological approach for the acquisition of language through physical exercise, it is important the behavior and predisposition of the students (Ayapova et al., 2021). In addition, it is relevant to have a logical and organized sequence of the contents at the same time that the teacher guides the students during the teaching-learning process (Ioannou-Georgiou & Pavlou, 2011). In accordance with this process, the teacher in this study tried to present the students with the concepts to be learned before the practical part, looking for a logical progression in the acquisition of the contents in the foreign language. Likewise, it is important for teachers to guide students in the development and acquisition of language in an autonomous and independent way (Salvador-Garcia et al., 2020; Wewer, 2017).

On the other hand, based on Coyle et al. (2021), in a CLIL lesson, the 4 Cs should act as a framework for the planning and implementation stage, complementing each other; that is why the balance between the four variables is important. Unfortunately, in this project it was not possible to achieve the objective of integrating culture in all classes so that students become familiar not only with the language but also with its cultural characteristics according to the sports modality practiced. Inevitably, the Culture could not develop throughout the project in the planned way. Similarly, Coral & Lleixà (2014) found in their research that when it comes to teaching English and physical education it was a difficult challenge to maintain the balance between the 4Cs.

5. CONCLUSIONS

CLIL is an effective approach to integrating language learning with content-based instruction in physical education and tactical learning of sport. By incorporating English language learning into this subject, students can improve their language skills, understand the content more deeply, and develop essential life skills. Teachers and coaches can use CLIL to provide their students and athletes with a dynamic and meaningful learning experience that prepares them for future opportunities and challenges.
Most Physical Education classes take place outside of the classroom; however, for a project like this in which language learning through the CLIL method is also immersed, it is important to use the initial part of the lesson within the classroom. Therefore, it is essential to implement some strategies to capture the attention of students while they are in the classroom; in this sense, the use of audiovisual material is an appropriate option. For this, it is relevant to involve students through letters, videos or images the few minutes they are in the classroom to present and practice new knowledge found in sports practice. The use of these tools contributes directly to the participation of the students and the explanation of the contents and linguistic activities by the teachers before leaving the classroom. In addition, it is essential that teachers approve this time in the classroom to establish clear verbal instructions and clean up on activities that will take place outside of the classroom. For example, teachers must specify what language and content activities will be developed, and why and how they can be carried out.

One of the limitations of the study is not having foreseen alternatives to promote and reinforce those contents of the program that could be less accepted by the students. Lastly, for further investigation, it is necessary the integration of the 4 Cs as a balance to support the implementation of CLIL. Although for this project it was conducted a planning process to integrate the 4 Cs, the C of culture was disregarded since the beginning. In this sense, for future researchers it would be interesting to find a way to integrate it at the same level of the others. Another limitation of the study is due to its intervention time. Since, in order to assess the perceptions of the students based on their acquisition of the foreign language, more time must pass.

6. References


