

Rosana Satorre Cuerda (Ed.)

El profesorado, eje fundamental de la transformación de la docencia universitaria

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Editorial

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28. Integrating technology into ESP instruction: a case study with Educaplay

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ABSTRACT

The constant change that characterizes modern society and its way of living affects the approach to the teaching-learning process in higher education. More and more educators are looking for alternatives to traditional teaching by introducing different digital tools to make this process more effective, appealing, and autonomous. This study focuses on Educaplay (<https://www.educaplay.com>), a popular online digital tool used by numerous teachers worldwide. Its objective is to discover if Educaplay can help to improve language acquisition and enhance motivation among Spanish undergraduates studying English for Specific Purposes (ESP) in the degree in Physiotherapy, Occupational Therapy, and Architecture at the Catholic University of Murcia. The results obtained from tests and a questionnaire with 82 respondents point to the success of Educaplay, which has contributed in a very positive way to the learning of content seen in the subject, has assisted in making the course more enjoyable and attractive, and improved students' motivation. 84% of respondents would like to use Educaplay in other subjects of the degree, and 58% believe that technology-enhanced language learning is the direction that teaching should take. In conclusion Educaplay is recommended to be used in ESP teaching at tertiary level.

KEY WORDS: Educaplay, ICT, English for Specific Purposes (ESP), motivation, language acquisition.

1. INTRODUCTION

Nowadays, technology has become an integral part of our everyday life and is extensively used around the world. As a result, there is a growing interest to incorporate ICT into education in order to keep up with the fast societal changes. An increasing number of teachers are searching for alternatives to traditional lectures by turning to different online educational platforms and mobile applications in a number of ways to make the teaching-learning process more effective, motivating, and autonomous.

Nevertheless, the great number of tools available often makes it difficult for teachers to select the appropriate teaching resource for their students. Not only does the expanding prevalence of online platforms and mobile applications make the selection more difficult, but the lack of scientific research demonstrating their usefulness also plays an important role. Consequently, in recent years, an increasing number of authors have dedicated themselves to researching the effectiveness of different tools, such as Duolingo (see, e.g., Ajisoko, 2020; Gavarrí, 2016; Shortt et al., 2021), Memrise (e.g., Nuralisah & Kareviati, 2020), Quizlet (e.g., Anjaniputra & Salsabila, 2018; Nguyen et al., 2022; Setiawan & Wiedarti, 2020), Anki (e.g., Khoshsima, & Khosravi, 2021), just to mention a few. As noted by Gimeno-Sanz (2016), “as long as technology continues to evolve and new gadgets appear on the market, there will always be a place for CALL developers and authors to find the optimum way of pedagogically exploiting those for-ever emerging technological developments” (p. 1109).

This study focuses on Educaplay, another popular online educational platform that allows teachers to create activities and share them with their students. Educaplay offers a wide repository of games and activities such as riddles, crossword puzzles, word search puzzles, ABC games, memory games, dictations, quizzes, video quizzes, map quizzes, interactive maps, and matching games, among others. It allows teachers to create challenges both synchronically and asynchronously creating competitive and motivating environments; to carry out an evaluation record of each student; and to share activities on platforms such as Google Classroom, Microsoft Teams, Moodle, Blackboard or integrate them into webpages or blogs. To students, Educaplay provides immediate feedback, offers the possibility of repeating the activities, and allows their realization both inside and outside the classroom. Developed by a Spanish company ADR Formación, Educaplay has created a large learning community around the world that continues to grow, as its numbers exceed one million users and more than 4 million available activities.

To date, several studies have investigated the potential benefits of using Educaplay in the teaching-learning process. Most of the studies carried out with this tool have been developed with compulsory education students, both of primary (see, e.g., Alzaga, 2020) and secondary education (see, e.g., Orrego-Riofrío & Aimacaña-Pinduisaca, 2018), but in recent years there seems to be a growing interest and use of Educaplay in higher education (see, e.g., Artal, 2019; Belmonte-Jiménez, 2020, Carretón-Gómez et al., 2021; Corchuelo-Rodríguez, 2018; Extremera-Fernández et al., 2021; García-Martín & García-Martín, 2020; Garrido-Astray et al., 2014; Jurado, 2022). Three main research lines can be distinguished: 1) Educaplay's effect on students' motivation, 2) its effect on knowledge acquisition, and 3) its effect on autonomous learning. For example, Jurado (2022) examined the effectiveness of Educaplay on learning through online teaching and found that this platform encouraged autonomous learning during the pandemic. Similarly, Carretón-Gómez et al. (2021) studied the effectiveness of Educaplay during online teaching and its impact on students' motivation. Corchuelo-Rodríguez (2018) and Artal (2019) also focused on enhancing motivation, but in face-to-face education with the aim to make the classes more dynamic and fun. Regarding the third line, it seems that most researchers are studying the benefits of using Educaplay in content teaching rather than in language acquisition. Thus, for instance, Belmonte-Jiménez (2020) used this tool for teaching Audiovisual Communication, Extremera-Fernández et al. (2021) – in Law teaching, while Garrido-Astray et al., 2014 used it in Medicine, just to mention a few.

However, to our knowledge, very few have paid attention to teaching English for Specific Purposes (henceforth, ESP) through Educaplay. Particularly, Mykytka (2021) found this tool to be effective in language acquisition in Occupational Therapy students. The present study intends to follow this line and seeks to provide a wider panorama by offering a much larger and more varied sample focusing on 82 learners from three different degrees: Degree in Occupational Therapy, Physiotherapy, and Architecture. The objective of this research is to discover if Educaplay can help to improve (1) language acquisition, both specialized lexis and grammar, and (2) students' motivation. Additionally, this study is also set to analyze students' perception of Educaplay, i.e., its features and activities.

2. METHODOLOGY

The following sections present the context of the study as well as its participants, the instruments and the procedure employed to reach the proposed objectives:

2.1. Context and participants

This research was carried out among 82 undergraduate students enrolled in English for Specific Purposes subject in three different degrees during the 2021-22 academic year at the Catholic University

of Murcia (UCAM). In particular, 59 students (73.1%) belonged to the Degree in Physiotherapy – out of which 43 (52.4%) studied on Los Jeronimos campus while 16 (20.7%) attended classes on Cartagena campus –, 17 students (19.5%) belonged to the Degree in Occupational Therapy, and 6 respondents (7.3%) studied Architecture. The learners had a basic level of English (A2), aiming to achieve an intermediate level of English (B1) during the course. It is also worth mentioning that, 52.4% of the participants were women while 46.2% were men; only 1 person (1.2%) identified as “other”. Furthermore, even though their ages ranged from 18 to 48, the majority were between nineteen and twenty years old. Thus, it was a group mostly of teenagers who are familiar with new technologies and the use of computers and smartphones.

2.2. Instruments

Three instruments were employed in this study. On the one hand, the Educaplay platform (<https://es.educaplay.com>) – the protagonist of this study, was used to create activities. On the other hand, tests and a survey based on an anonymous questionnaire created in Google Forms were used to assess the effectiveness of Educaplay in the teaching-learning process and to check if our objectives were fulfilled. The survey consisted of 21 questions, related to (1) class feedback, that is, consecution of activities; (2) activity feedback, which ones were the most liked and why; and (3) methodology feedback, whether or not this active methodology has enhanced motivation, the learning process, and has made the classes more entertaining. These questions were of varied nature, mainly those based on the Likert Scale, but also open and closed ones to be answered briefly, and yes-no questions. The answers based on the Likert Scale scored from 1 to 5, that is, ranging from 1 = strongly disagree to 5 = strongly agree. The data has been managed, processed, and analyzed using Microsoft Excel. Tests were used to compare the results from the 2021-2022 and 2020-2021 academic years, to discover if there was any improvement in students’ academic achievement.

2.3. Procedure

The first step consisted in creating the activities on Educaplay, which can be found at the following link: <https://es.educaplay.com/usuario/7504145-educaplay/>. In total 44 activities were created for this research corresponding to the content seen in the aforementioned courses. On the one hand, the specialized lexis belonging to each degree was worked on, such as parts of the human body, internal organs, bones, joints, injuries, diseases, therapies, architectural styles, and so on. On the other hand, we created activities related to English grammar, mainly on verb tenses, linking words, modal verbs, comparatives and superlatives, etc. Out of 17 types of activities available on the platform we focused on 10, namely Crossword puzzle, Word search puzzle, ABC game, Quiz, Video quiz, Map quiz, Matching columns game, Fill in the blanks game, Matching game, and Dialogue game. Apart from the activities created precisely for our students, we also used activities elaborated by other users, in particular those related to grammar, as we found no activities on specialized lexis of architecture or physiotherapy, despite the fact that Educaplay presents more than 4 million games available as mentioned before.

Once created, the activities were carried out in class, and after that shared on Virtual Campus of each subject encouraging students to repeat them autonomously. These were used either to present new content, review the content seen in previous classes, or perform self-assessments before exams.

3. RESULTS

First of all, it is worth mentioning that, despite its growing popularity, 78% of participants in this study were not familiar with Educaplay, compared to 22%, who used it to do exercises in secondary school, high school, or higher institutions.

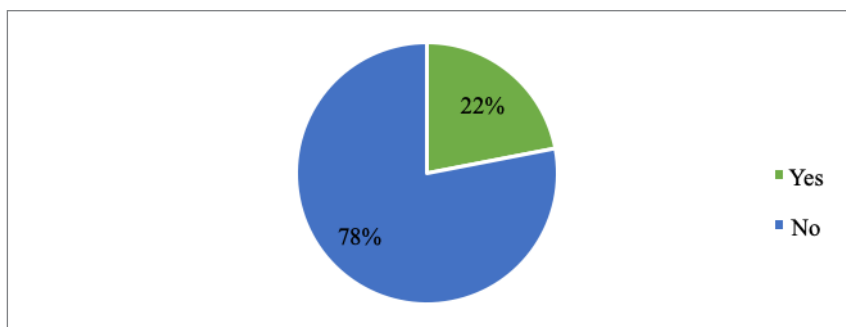


Figure 1. Percentage of students' familiarity with Educaplay before the research

Not only were they not familiar with Educaplay, but the majority (65%) did not use any other similar tool for language learning, which is quite surprising, considering the high number of educational platforms and applications that exist nowadays. Those who replied yes (35%) mentioned such tools as Kahoot, Duolingo, Rosetta Stone, Anki Droid, or Lingualia.

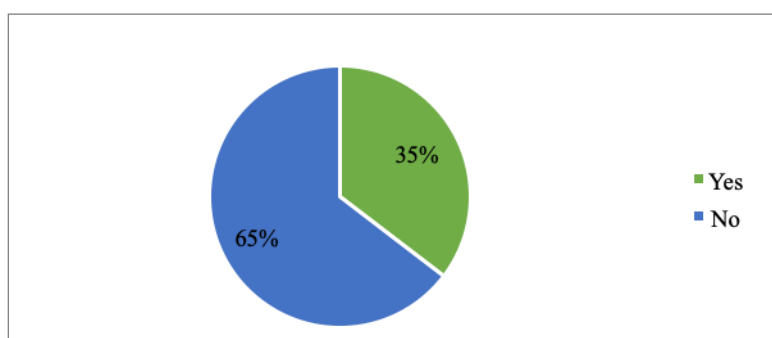


Figure 2. Percentage of students' use of other similar tools for learning

Yet, the implication of students in this project was very high as learners seemed to actively use the tool: 32% claim to have done all the activities proposed through Educaplay, 54% – almost all, while only 14% did some of the activities.

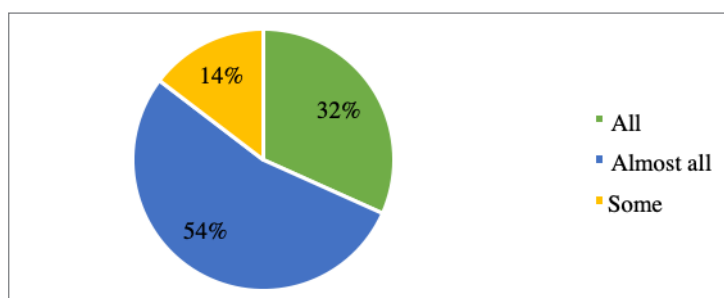


Figure 3. Percentage of students following the activities on Educaplay.

When analyzing the students' feedback in relation to the effects that Educaplay has on the language acquisition process, 41.5% of respondents believe that this platform has contributed quite positively and 42.7% very positively to their learning of the specific contents of the subject ($M=4.2$). In addition, the results of the tests showed that there was an increase in students' scores during 2021-2022 academic year, when Educaplay was used ($M=7.7$ compared to $M=6.9$ obtained by students during 2020-2021 academic year). When surveyed about the platform's effect on their motivation, the majority believe that having used Educaplay has enhanced their motivation and interest in the subject ($M=4.1$), and has made the subject more attractive, fun, and engaging ($M=4.5$).

Table 1. Language acquisition.

Educaplay improved my English grammar and vocabulary.										
1		2		3		4		5		Mean Score
n	%	n	%	n	%	n	%	n	%	
1	1.2	0	0	12	14.6	34	41.5	35	42.7	4.2

Table 2. Interest and motivation.

Educaplay enhanced my motivation and interest in the subject.										
1		2		3		4		5		Mean Score
n	%	n	%	n	%	n	%	n	%	
1	1.2	1	1.2	17	20.7	36	43.9	27	32.9	4.1

Table 3. Attractiveness of the subject.

Educaplay made the subject more attractive, fun, and engaging.										
1		2		3		4		5		Mean Score
n	%	n	%	n	%	n	%	n	%	
1	1.2	1	1.2	3	3.7	30	36.6	47	57.3	4.5

When it comes to the assessment of the activities, the one that scored the highest ($M=4.1$) was the Crossword puzzle game, followed by Matching, Word search, ABC game, and Test ($M=4$) in the second place. Video quiz, Fill in the blanks, and Matching columns received 4 points from students. Finally, Map quiz and Dialogue were the least favored by the respondents with the respective means of 3.9 and 3.8 points.

Table 4. Activities' assesment.

Game/Activity	1		2		3		4		5		Mean Score
	n	%	n	%	n	%	n	%	n	%	
Crossword puzzle	0	0	5	6	13	15.7	31	37.3	34	41	4.1
Matching	1	1.2	2	2.4	27	32.1	26	31	28	33.3	4
Word search	0	0	2	2.4	23	28	30	36.6	27	32.9	4
ABC	1	1.2	3	3.6	16	19	38	45.2	26	31	4
Test	0	0	2	2.4	20	23.8	36	42.9	26	31	4
Video quiz	1	1.2	5	6	25	30.1	28	33.7	24	28.9	3.9
Fill in the blanks	1	1.2	4	4.9	16	19.5	41	50	20	24.4	3.9
Matching columns	0	0	6	7.3	18	22	37	45.1	21	25.6	3.9
Map quiz	2	2.4	4	4.8	23	27.7	36	43.4	18	21.7	3.8
Dialogue	1	1.2	5	6.1	25	30.5	35	42.7	16	19.5	3.7

Regarding the assessment of Educaplay's features, the possibility of repeating the activities received the highest score ($M=4.6$) followed by the possibility of receiving immediate feedback ($M=4.5$). Surprisingly the possibility of participating in challenges scored the lowest ($M=4.3$), although the results are still very positive. Finally, Educaplay has been appraised for its ease of use ($M=4.5$). Given its accessibility, it does not require extra classroom time for its employment or explanation to the students, as well as, it promotes its use outside the classroom.

Table 5. Educaplay's features.

	1		2		3		4		5		Mean Score
	n	%	n	%	n	%	n	%	n	%	
Educaplay is easy to use.	0	0	0	0	6	7.3	27	32.9	49	59.8	4.5
I liked the possibility that Educaplay offers to participate in challenges.	1	1.2	1	1.2	17	20.7	36	43.9	27	32.9	4.3
I liked the possibility that Educaplay offers to receive immediate feedback.	1	1.2	1	1.2	6	7.3	23	28	51	62.2	4.5
I liked the possibility that Educaplay offers to repeat the activities.	1	1.2	0	0	5	6.1	19	23.2	57	69.5	4.6

The learners in the study (84%) indicated that they would have liked to use Educaplay in other courses in the degree, not only limiting its use for language courses, but also to integrate it in subjects that are more content based.

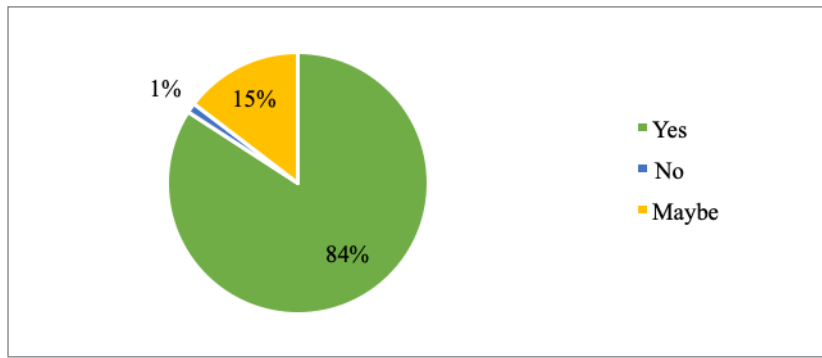


Figure 4. Use of Educaplay in other subjects

When enquired about the methodology preference, 59% of participants believed that the introduction of active methodology with the use of ICT is the direction teaching should take, 39% claimed it should be the combination of both, active methodology and traditional master classes, and only 2% showed preference for traditional methodology.

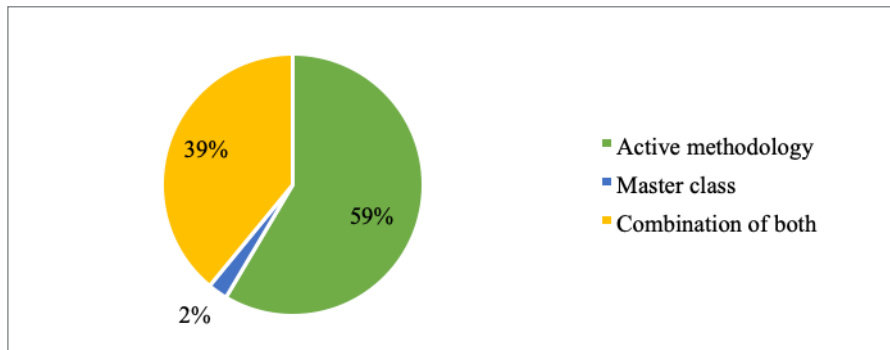


Figure 5. Methodology preference

In conclusion, Educaplay has received a general mean assessment of 4.5 out of 5. These results evidence a high satisfaction level felt by the students with the implementation of this project in their classes.

Table 6. Satisfaction level from 1 to 5.

1		2		3		4		5		Mean Score
n	%	n	%	n	%	n	%	n	%	
0	0	0	0	5	6.1	32	39	45	54.9	4.5

4. DISCUSSION AND CONCLUSIONS

The results indicate that the learners had very positive views toward the use of Educaplay in the ESP classroom. Similar to previous studies (e.g., Artal, 2019; Carretón-Gómez et al., 2021; Corchuelo-Rodríguez, 2018), Educaplay enhanced students' motivation and interest in the subject ($M=4.1$). Moreover, it had a very positive impact on improving students' learning of the contents ($M=4.2$), that

is, English grammar and specific lexis typical in their profession (architecture, occupational therapy, or physiotherapy). These results are in congruence with other studies (e.g., Belmonte-Jiménez, 2020; Extremera-Fernández et al., 2021; García-Martín & García-Martín, 2020; Garrido-Astray et al., 2014) that examine the effectiveness of Educaplay on the acquisition of the contents. Lastly, when it comes to the use of Educaplay in the ESP context and higher education, the results also go in line with observations made by other others, such as Mykytka (2021), showing that Educaplay is not only effective for enhancing motivation or content acquisition, but it also proves to be effective in the ESP subjects taught at tertiary level.

Regarding the particular features of Educaplay, we can conclude, that learners were especially satisfied with the possibility that Educaplay offers to repeat the activities ($M=4.6$) and the possibility to receive immediate feedback ($M=4.5$). As to the activities, our students rated best Crossword puzzle ($M=4.1$), followed by Test, ABC game, Matching, and Wordsearch ($M=4$), while the least preferred were Video quiz, Matching columns ($M=3.9$), Map quiz ($M=3.8$) and Dialogue ($M=3.7$). These findings are consistent with Mykytka (2021) who also showed that learners seem to show preference for more traditional activities.

Noteworthy is the fact that only 22% of our students were familiar with Educaplay before this research, which suggests that despite its growing popularity in teaching, this tool remains a great unknown to the learners and teachers overall. Furthermore, it should be noted that surprisingly 65% of respondents claim not to have used other similar digital tools for learning languages, which suggests that technology, even though ubiquitous in our daily lives, is not yet sufficiently present in education. Considering the growing number of online educational tools and applications that exist nowadays, the students' observations make visible the need to thoroughly employ them in order to synchronize society's technological advances with classroom practice.

To conclude, the majority of the participants were highly satisfied with Educaplay ($M=4.5$). They indicated (84%) that they would have liked to use it in other courses of the degree and agreed (59%) that the use of active methodology with the introduction of ICT in the teaching-learning process is the direction we should take.

Yet, this study is not exempt from limitations, such as the limited sample size ($n=82$). This could be remedied by replicating this experience with a larger and more varied sample. Furthermore, because we intended the experience to be enjoyed by all of our students, we did not include a control group in this study; however, future lines of research may be tempted to include it. Finally, we highly encourage researchers to continue studying the effect of Educaplay and other digital tools in the teaching-learning process in different disciplines at a university level.

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