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Technological Tools to Develop Competences for the 21st Century: A Project to Empower Students in the English Teaching Major at UNED

Herramientas tecnológicas para desarrollar competencias para el siglo XXI: un proyecto para empoderar a estudiantes de la carrera de Enseñanza del Inglés en la UNED

Outils technologiques pour développer les compétences pour le XXI^{ème} siècle: un projet pour autonomiser les étudiants de la filière d'Enseignement de l'Anglais à l'UNED

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Abstract

Being a «native digital», that is to say an individual who has grown up using Internet, computers and mobile devices, and being an individual able to communicate ideas effectively in a foreign language are definitely traits of a profile for the 21st century. Society is requiring future English teachers to graduate with these linguistic and technological competences to eventually equip them to provide their pupils with meaningful learning experiences. The following article intends to describe all the actions, stages and activities carried out in a project about technological tools offered to students from the English Teaching Major at Universidad Estatal a Distancia (UNED) during the year 2021. The article presents a description of the process followed and the information obtained through a questionnaire and a group discussion applied to the participants. One important conclusion was that projects with a hands-on perspective where students not only get information from professors but need to practice, construct, and propose their own ideas will always contribute to the participants' development.

Keywords: Technology, teaching methods, workshops.

Resumen

Ser un individuo «nativo digital», esto es, un individuo que ha crecido usando la internet, las computadoras y los dispositivos móviles, al igual que ser un individuo capaz de comunicarse en un idioma extranjero definen muy bien el perfil del siglo XXI. La sociedad requiere que las futuras personas docentes de lengua extranjera puedan graduarse con estas competencias lingüísticas y tecnológicas para eventualmente capacitarlas para que puedan proveer a sus estudiantes de oportunidades de aprendizaje significativas. Este artículo describe las acciones, etapas y actividades llevadas a cabo en el proyecto de herramientas tecnológicas que se ofreció a estudiantes de la carrera de la Enseñanza del Inglés de la Universidad Estatal a Distancia (UNED). El texto presenta la descripción del proceso llevado a cabo y la información obtenida a través de un cuestionario y una discusión grupal aplicados a las personas participantes.

Palabras clave: Método de enseñanza, talleres, tecnología.

Résumé

Être un individu «enfant du numérique» signifie qu'il s'agit d'une personne ayant grandi en utilisant l'internet, les ordinateurs et les appareils mobiles, ainsi que d'être capable de communiquer dans une langue étrangère; tout ceci définit très bien le profil du XXIème siècle. Par conséquent, la société actuelle demande que les futurs enseignants de langue étrangère finissent leurs études avec ces compétences linguistiques et technologiques acquises pour éventuellement se former plus afin de fournir à leurs apprenants des opportunités d'apprentissage significatives. Cet article décrit les actions, les étapes et les activités menées dans le projet d'outils technologiques qui a été offert aux étudiants de la filière d'Enseignement de l'Anglais à l'Université de l'État à Distance (UNED). En ce cas, on décrit le processus mis en œuvre et l'information obtenue à travers un questionnaire et d'une discussion groupale administrés aux sujets participants. Finalement, on a conclu que les projets dans lesquels les personnes peuvent aller au-delà de recevoir de l'information de la part des enseignants, ils contribuent au développement de ces personnes participantes car elles peuvent pratiquer, construire et proposer leurs idées.

Mots-clés: méthode d'enseignement, ateliers, technologie.

Introduction

Mankind has always expressed a desire to learn new languages. The first attempts to learn a foreign language in Costa Rica dates to the XIX century when Latin was introduced. After that and due to influences from different societies and telecommunications, French and English started to take place. Then, the latter became the most important one because of the geographical, economic, political, and cultural boundaries¹.

In 1935, an educational reform took place and the teaching and learning of English was considerably transformed. Native speakers and Costa Ricans who have studied and lived abroad were the ones in charge of facilitating the learning process. Although they «master» the language, they did not have any formal training for teaching. Due to this lack of formal teaching training, the Universidad de Costa Rica (UCR) started its English teaching program in 1954. The methodology used was the Audiolingual method.

From 1978 to 1990, the Ministry of Public Education eliminated formal and official study plans and, instead, sent teachers a guide with a list of books to use and units to cover in class. However, in 1990, because of an urgent change, new study plans took place and directed the attention to a more communicative methodology. These new plans thrive for new objectives, meaningful learning contexts and more effective ways of evaluating students' outcomes. The new approach is now the Communicative Approach.

In 1977, under the government of President Daniel Oduber Quirós and according to Law 6044 - March 3, Universidad Estatal a Distancia (UNED) was officially created as a High-Education institution specialized in teaching through social communication means. It is pioneer in Latin America with a distance learning modality². Nowadays, UNED promotes different levels of study programs, extension and research, and intensive use of Information and Communication Technology (ICT's) in its pedagogical model.

Regarding the teaching of English as a foreign language (TEFL), UNED started training teachers in 1997 because of a direct request from the Ministry of Public Education that required immediate training of English teachers for the elementary levels. Those teachers would come to ease the need of trained professionals in Costa Rican schools. Once the agreement was over in 1999, UNED decided to continue pursuing more efforts by developing and elaborating its own English Teaching major³.

The first formal study plan dates to 2005 where different blocks of subjects were put together. The diplomado plan integrated language courses (Grammar,

¹ Patricia Córdoba-Cubillo, Rossina Coto-Keith y Marlene Ramírez Salas, «La enseñanza del inglés en Costa Rica y la destreza auditiva en el aula desde una perspectiva histórica», *Actualidades en Educación* 5, n.º 2 (2005): 1-12. <https://revistas.ucr.ac.cr/index.php/aie/article/view/9153/17525>

² «Historia», Universidad Estatal a Distancia, acceso: 28 de junio de 2022, <https://www.uned.ac.cr/historia>

³ Programa Estado de la Nación, *Sexto informe estado de la educación* (San José: PEN / Servicios Gráficos, 2017).

Conversation, Phonetics and Written Expression), teaching and assessment courses (Didactics, Planning, Principles of Assessment, Didactic Resources and Teaching Seminar), and complemented with general courses in Spanish (Humanities, Curriculum, Pedagogy). The Bachelor's program included some language, teaching, and literature courses as well. No course on ICT's was part of the plan neither for the Diplomado plan nor for the Bachelor's one. The only course related to Technology in the English major was part of the Licenciatura plan placed in block K⁴.

Teaching and technology around the world

Norway was one of the first countries in the world to include Information and Communication Technology (ICT) within the national curricula in compulsory education. In 2006 the Norwegian Ministry of Education and Research introduced a new educational reform; the Knowledge Promotion reform; which included a new curriculum in compulsory and upper secondary education (1st-13th grade). The reform emphasized five basic competence aims considered equally important, and one of those was to develop digital skills. Consequently, teacher ability to provide learning opportunities in digital competences for their pupils was highlighted. Moreover, the use of ICT in teaching and learning became widespread in Norwegian schools⁵.

Authors Joke Voogt & Natalie Pareja from University of Twente in their article: 21st Century Skills Discussion Paper state:

It is without a question that ICT has a primary place when talking about 21st century skills. The development of technology is not only regarded as an argument for the need of new skills by all frameworks, but it is also associated to a whole new set of competences about how to effectively use, manage, evaluate, and produce information across different types of media. With more or less detail, all frameworks refer to the three domains of what Anderson (2008) refers to as 'applied ICT literacy', namely: a technical domain (related to the basic operational skills needed to use ICT), a knowledge domain (which refers to the use of ICT with a particular knowledge related purpose) and an information literacy domain (related to the capacity to access, evaluate and use information).⁶

María del Carmen Pegalajar⁷ regarding teacher training in the use of ICT states «those tools enable personal development, successful activity completion and enjoyment of situations that call on one's own individuality, as well as fully and

⁴ Yinnia Mora, *Plan de Estudios de la Carrera Diplomado, Bachillerato y Licenciatura en Enseñanza el Inglés para I y II ciclos* (San José: UNED, 2008).

⁵ Gunstein Egeberg, Greta Björk Gudmundsdottir, Ove Edvard Hatlevik, Geir Ottestad, Jørund Høie Skaug, and Karoline Tømte, The Digital State of Affairs in Norwegian Schools, *Nordic Journal of Digital Literacy* (2012), <https://www.idunn.no/doi/10.18261/ISSN1891-943X-2012-01-07>

⁶ Joke Voogt y Natalie Pareja Roblin, *21st century skills*. Discussion paper (Enschede: Universidad de Twente, 2010), http://opite.pbworks.com/w/file/attach/61995295/White%20Paper%2021stCS_Final_ENG_def2.pdf

⁷ María del Carmen Pegalajar-Palomino, «Teacher training in the use of ICT for inclusion: Differences between early childhood and primary education», *Procedia – Social and Behavioral Sciences* 237 (2017): 144-149, <https://doi.org/10.1016/j.sbspro.2017.02.055>

actively participating in activities in one's environment. What is more, devices of this type facilitate the development of varying forms of expression and knowledge enhancement».

Authors Llorent-Vaquero, Tallón-Rosales y Heras-Monastero comment on their comparative study with students from Spain and Italy regarding the Information and Communication Technologies (ICTs) and declare that

ICT's are present in almost all fields of society. These tools have generated important changes and advances that have been introduced to our daily routines, slowly integrating into our everyday lives until, in some situations, we have come to depend on their use. In this technological context, being able to function successfully in the digital field or develop digital competence is essential.⁸

Charles Musarurwa implemented ICTS in Zimbabwe at the CITEP (College Information Technology Enhancement Programme) and found that teacher educating students have a significant role to play in the sustained application of ICT in schools. Therefore, declares Musarurwa «it is imperative that they are exposed to effective use of ICT in their training. By integrating ICT as a learning resource during regular classes, lecturers are exposing students to innovative ways of learning»⁹.

Nowadays in India, teaching is becoming one of the most challenging professions where knowledge is expanding rapidly and much of it is available to students as well as teachers at anytime and anywhere. As education is primarily directed towards preparing teachers, the quality of teacher education depends on the teacher trainee's abilities and skills. The N.C.F. 2005 had also highlighted the importance of ICT in school education and it also stated that «ICT if used for connecting children and teacher with scientist working in universities and research institutions would also help in demystifying scientist and their work»¹⁰. Therefore, teachers have to accept the demands of modern world and modify their old concepts and methods according to the needs of learners, otherwise teachers will become outdated in the coming future and it will deteriorate the quality of education. There is widespread belief that ICT can and will empower teachers and learners for teaching-learning processes to develop their creativity, problem-solving abilities, informational reasoning skills, communication skills, and other higher-order thinking skills. ICT is not only used to enhance learning but also important for a teacher to be comfortable using to ensure that students get the full advantages of educational technology. Teaching with technology is different than teaching within a typical classroom.

⁸ Mercedes Llorent-Vaquero, Susana Tallón-Rosales y Bárbara de las Heras-Monastero, «Use of information and communication technologies (ICTs) in Communication and collaboration: A comparative study between university students from Spain and Italy», *Sustainability* 12, n.º 10 (2020): <https://doi.org/10.3390/su12103969>

⁹ Charles Musarurwa, «Teaching with and learning through ICTs in Zimbabwe's teacher education colleges», *US-China Education Review A* 7 (2011): 952-959.

¹⁰ Nabin Thakur, «A study on implementation of techno-pedagogical skills, its challenges and role to release at higher level of education», *American International Journal of Research in Humanities, Arts and Social Sciences*, 2 (15-154), 2015.

The inclusion of ICT resources into teaching strategies constitutes a variable that favors the growth of the learning efficiency, having a positive impact on the student, but also on the teacher's activities declared authors Gorghiu and Pascal on their article «Enriching the ICT competences of university students»¹¹.

In recent years, authors Garzón et al reported that «information and communication technologies (ICTs) have entered society, causing numerous changes to the social and economic levels, and without any doubt, to the educational one»¹². They continue saying that the reality of its arrival has led to a change in educational plans, whose lines needed to be adapted to an innovative training where culture and digital practice is predominant. ICTs permeate our daily lives, and their use is becoming a fundamental requirement for insertion and promotion in the workplace, for learning autonomy, and for encouraging the practice of active citizenship.

As is evident, the use of ICT is essential in education to prepare students for the demands of the modern world. In 2014, the Ministry of Public Education of Costa Rica embraced new trends in teaching and learning by adopting the Action Oriented Approach as the core curriculum. The new plan was officially launched in 2017 and gradually introduced in first and seventh grade. The primary objective of this new curriculum was to graduate students in sixth grade with a A2 level of proficiency and B2 for students graduating from eleventh grade according to the Common European Framework for Languages.

This curriculum was designed in an era in which technology plays an increasingly important role. Professors and students of the English teaching major recognized that while students were making progress in their linguistic performance, they lacked technological skills. Courses, academic activities, and society itself were longing for efforts from the university to help students improve and maximize their capabilities by being trained in technology and XXI century skills.

As a result, the Cátedra Enseñanza del Inglés developed a Research-Teaching Project during second and third quarters of 2021, aimed at providing current students in the English Teaching for I and II Cycles major with meaningful opportunities to explore, comprehend, and develop competences for the 21st century by interacting and designing technological tools.

Therefore, the objective of this article is describe the process developed during the implementation of the project «Technological Tools to Develop Competences for the 21st Century» offered to students from the English Teaching Major at UNED during the year 2021.

¹¹ Lucia Pascale, Gabriel Gorghiu y Laura Mónica Gorghiu. «Enriching the ICT competences of university students – a key factor for their success» (conferencia pronunciada en 3rd Central and Eastern European LUMEN, Chişinău, Moldavia, del 8 al 10 de junio de 2017).

¹² Esther Garzón-Artacho, Tomás Sola-Martínez, José Luis Ortega-Martín, José Antonio Marín-Marín y Gerardo Gómez-García, «Teacher training in lifelong learning – The importance of digital competence in the encouragement of teaching innovation», *Sustainability* 12, n.º 7 (2020): <https://doi.org/10.3390/su12072852>

Methods

The article uses a qualitative approach since the purpose is to describe the process developed in the implementation of the project. As Dörnyei¹³ explains qualitative research «involves data collection procedures that result in open ended, non-numerical data which is then analyzed primarily by non-Statistical Methods». The project was developed over two quarters with students of the English teaching for I and II cycle major, from different campus at UNED. The students participated in workshops designed to teach them how to use different tools that can be used when teaching.

Participants

In the first phase of the project, 12 students participated; comprising 10 women and 2 men. All participants were taking the diplomado and the bachelor's degree from the English teaching for I and II cycle major. The participants could choose a schedule for the workshops from two options. The first option was Monday and Wednesday from 5:30 p.m. to 7:30 p.m., and the second option was on Saturday from 8:30 a.m. to 12:30 p.m. Six students chose the first schedule and the other six chose the second schedule.

During the second phase four participants could not continue with the workshops due to working commitments. They were replaced with four new participants. The new students chose the Monday and Wednesday schedule. Thus the first schedule had a total of 7 students while the second schedule had four students. Table 1 presents the student's relevant background information such as their assigned number, sex, age, schedule and the campus where they study.

Table 1
Information of the participants

Student	Sex	Age	University Campus
1 V	Female	34	Desamparados
2 M	Female	22	San Carlos
3 C	Female	38	Puntarenas
4 A	Female	35	Liberia
5 J	Male	32	Desamparados

The table continues on the next page.

¹³ Zoltán Dörnyei, *Research Methods in applied linguistics* (Oxford: Oxford University Press, 2011), 2.

Student	Sex	Age	University Campus
6 S	Female	26	Puriscal
7 A	Male	41	Orotina
8 R	Female	30	Palmares
9 N	Female	32	Nicoya
10 N	Female	47	Upala
11 M	Female	39	Ciudad Neilly
12 C	Female	27	Monteverde
13 K	Female	48	Palmares
14 S	Female	35	Desamparados
15 D	Female	28	Cartago
16 K	Female	47	Alajuela

Surce: Alvarado-Barboza, 2022.

Instruments

Two instruments were used to gather information from the participants regarding the satisfaction of the project. The first instrument was an online questionnaire that consisted of four open-ended questions related to the tools presented during the workshops, their opinions on the methodology employed, the professor's performance and any recommendations they might have for the second quarter. Besides, two closed-ended questions were included that asked participants to rate the usefulness of the tools studied during the workshop and their interest in participating in the next quarter. Brown as cited by Dörnyei define questionnaires as «any written instrument that present respondents with a series of questions or statements to which they are to react either by writing out their answers or selecting from among existing answers»¹⁴. The questionnaire was administered at the end of the second quarter in 2021 using Google Forms and it was sent to the students via email.

The second instrument was a focus group interview. According to Dörnyei the focus group interviews is «a collective experience of group brainstorming, that is participants thinking together, inspiring and challenging each other, and reacting to the emerging issues and points»¹⁵. Participants could express their ideas at the end of the second period about the project and aspects to improve.

¹⁴ *Ibíd.*, 102.

¹⁵ *Ibíd.*, 144.

Results and discussion

Development of the project

The project was developed in two quarters. Each quarter had three phases: organization of the project, didactic activities, and evaluation of the project.

In the first phase «Organization of the project» during the first quarter, the first step was the students' registration. An informed consent was sent to the students with the instructions and obligations related to the participation of the project. The second step was to design the project with the corresponding objectives, contents, methodology, timetable, materials, evaluation, and outcomes expected.

In the second phase «didactic activities» the students attended various workshops. During the exploratory virtual sessions, the facilitator demonstrated the use of the online tools such as Canva and Zoom for creating videos. These sessions were conducted using the zoom app.

After the workshop, the participants had to prepare a draft of a video using the presented tools (Canva or Zoom). Then, the facilitator and the participants had online sessions in which the facilitator provided feedback and participants clarified doubts about the tools. The facilitator used the rubric shown in Table 2 to assess the drafts.

Table 2
Rubric used to evaluate the video drafts

Performance Level	Needs Improvement	Needs Improvement	Needs Improvement
Video content and organization	The video lacks a central theme, clear point of view, and logical sequence of information. Much of the information is irrelevant to the overall message. 0-4 points	Information is connected to a theme. Details are logical and information is relevant throughout most of the video. 5-7 points	Video includes a clear statement of purpose. Events and messages are presented in a logical order, with relevant information that supports the video's main ideas.
Video content and organization	The video is not creative. 0-4 points	The video needs more creativity. 5-7 points	The video is very creative and catches the audience attention. 8-10 points.

The table continues on the next page.

Performance Level	Needs Improvement	Needs Improvement	Needs Improvement
Mechanics	The text and/or audio has 4 or more grammar or spelling errors. 0-4 points	The text and/or audio has 1-2 grammar or spelling errors. 5-7 points	The text and/or audio has no grammar or spelling errors. 8-10 points
Production	Video is of poor quality. There are no transitions added or transitions are used so frequently that they detract from the video. There are no graphics. 0-4 points	A variety of transitions are used, and most transitions help to explain the content. Most of video has good pacing and timing. Graphics are used appropriately. 5-7 points	Video runs smoothly. A variety of transitions are used to assist in communicating the main idea. Shots and scenes work well together. Graphics explain and reinforce key points in the video. 8-10 points
Length (4 to 5 minutes)	Too long or too short. 0-4 points	The video last almost the time proposed. 5-7 points	The video achieves the time proposed (4 to 5 minutes). 8-10 points
Comments		Language comments	

Source: Alvarado-Barboza, 2022.

After receiving feedback, students improved their drafts to create the final version of the video. Then, they uploaded it to UNED's platform: APRENDE U. The same process was used with the second theme, which involved the design of digital presentations using tools such as Powtoon and Mentimeter.

At the end of the quarter, students participated in an academic forum where they applied the knowledge they had acquired to solve various situations related to technological tools (Figure 1).

In the Figure 1 it is observed the activities that students developed in the first quarter. For the evaluation of the project, students completed a questionnaire. The questionnaire covered themes related to the opinion about the tools, the usefulness of the tools, the methodology used during the project, the professor's performance during the workshops, the interest to continue with the project and possible recommendations. It helped to make decisions to improve the second part of the project in the following quarter.

Figure 1
Activities developed by the students in the first quarter



Source: Alvarado-Barboza, 2022.

In the second quarter, after feedback from students was received, it was decided to change the methodology used for the learning of the new tools. During this transition, four students did not continue. A new registration had to be done and four students substituted them. The second part of the project was prepared similarly to the first quarter, but there were changes in the didactic activities. One important change was that the projects were focused on educational purposes. It helped to contextualize more the projects the participants had to develop.

The methodology used during the workshops was similar throughout both quarters. The facilitator demonstrated the use of the tools which for the second quarter were Padlet, Genially and Google Classroom. Then, students worked on their projects. They had to design a Padlet and upload the material to UNED's platform APRENDEU. Finally, students presented their projects to both the facilitator and other participants providing and receiving feedback. The table used for the feedback is presented in the Table 3.

Table 3
Table used to give feedback

Student:	Group:
Comments	Language comments

Surce: Alvarado-Barboza, 2022.

After the feedback students had to upload the final version of the project. This methodology was used with the tools Genially and Google Classroom (Figure 4).

Figure 4
Activities developed by the students in the second quarter



Surce: Alvarado-Barboza, 2022.

For the evaluation of the project in the second quarter, students participated in a group discussion. The facilitator gave students the opportunity to talk about the aspects they liked and did not like about the project, also students provided recommendations for improvement regarding methodology.

Students' opinions

The project was very successful for the students as all the participants found the tools presented during the project to be very useful for their learning. Some of the comments expressed in the questionnaire are presented in the Figure 5.

As shown in Figure 5, students expressed that the tools were highly useful, dynamic, and helpful. The tools provided them with the opportunity to be prepared for a new context in which technology plays an increasingly important role every day. According to LaToya et al.

technological advancements have led to changes in the expectations placed on K-12 teachers. Teachers are now expected to better equip students with 21st-century skills, making it important to understand teachers' beliefs about the role of technology in teaching and learning and the skills their students need to be successful.¹⁶

Figure 5

Activities developed by the students in the second quarter

-The tools were very interesting and useful.
-Very dynamic for the new methodology.

-The tools were so useful for the career.
-The tools were very helpful.

Source: Alvarado-Barboza, 2022, based on the questionnaire applied to participants.

Participants considered these tools as significant since they were able to analyze how the interaction with these tools will help them to improve the quality of their classes. In the presentations of their projects, the participants could demonstrate how the tools were useful in English teaching environments and they were able to include in their presentations interactive games, videos, music, audios and materials for students with curricular accommodations.

The participants also provided their opinions about the methodology used during the project. Some of the opinions about the methodology are presented in the Figure 6.

¹⁶ O'Neal, LaToya J., Philip Gibson y Sheila R. Cotton, «Elementary school teachers' Beliefs about the role of technology in 21st-Century teaching and learning», *Computers in the School. Interdisciplinary Journal of Practice, Theory, and Applied Research* 34, n.º 3 (2017): 192-206, <https://doi.org/10.1080/07380569.2017.1347443>

Figure 6
Opinion about the methodology used during the project



Source: Alvarado-Barboza, 2022, based on the questionnaire applied to participants.

The methodology used helped students to explore the apps with the facilitators' help. Then, students could interact with the tools on their own to develop their projects, but also students had the opportunity to present their projects and to receive feedback during the process. This methodology facilitated the participants learning since it was developed step by step. Authors Dmshinskaia et al. comment on the importance of providing and receiving feedback from peers and say:

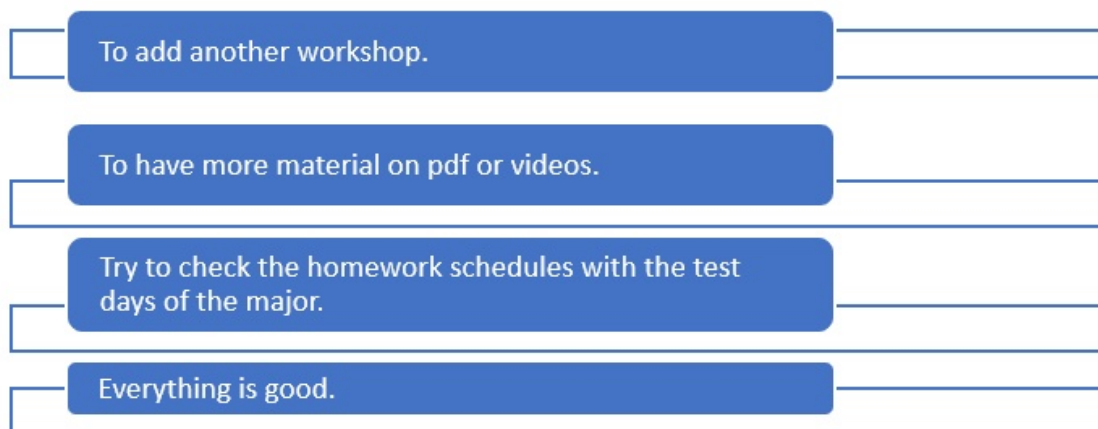
Peer assessment is being used more and more in education. Its growing popularity is due in part to the trend of making educational processes in general, and assessment processes in particular, more active and student-centered. Giving and receiving peer feedback is seen as an important vehicle for deep learning.¹⁷

The methodology used helped the participants to see how the tools worked, the requirements, the difference between free and paid versions, and the use they can give them for the teaching process. Participants were also able to register and interact with the tool to design their own project. Besides, as Dmshinskaia et al.¹⁸ and the students mentioned the feedback process was very significant for deep learning. Participants were able to see their projects from different perspectives and they could reflect about the teaching and learning process.

One important aspect to consider was that students were able to evaluate the project at the end of the first phase in order to improve the project for the second phase. Some of the observations given are presented in the Figure 7.

¹⁷ Natasha Dmshinskaia, Hannie Gijlers y Ton de Jong, «Giving feedback on peers' concept maps in an inquiry learning context: The effect of providing assessment criteria», *Journal of Science Education and Technology* 30, (2021): 2021, <https://doi.org/10.1007/s10956-020-09884-y>

Figure 7
Recommendations for the project



Source: Alvarado-Barboza, 2022, based on the questionnaire applied to participants.

The participants were very satisfied with the tools, methodology and facilitator. However, they made some recommendations in aspects of time. For example, one participant mentioned that she would have liked to have more workshops because she was learning a lot. Another participant mentioned the idea of more videos or PDF documents. In this case, all the sessions were recorded and uploaded to APRENDEU platform, so that participants could see and review what was studied.

A third recommendation was made in terms of administrative procedures since the project needed to be scheduled taking into consideration the participants' dates for exams and homework at UNED. For the second phase, students' dates and assignments were considered when making the chronogram. It was a difficult process since the assignments at UNED for students from the profesorado and bachelor's degree from the career of English teaching at I and II cycle is very demanding.

Final conclusions

1. Students from English Teaching major can consolidate their linguistic competences as well as maximize XXI century skills through projects implemented by the coordination in which they can use English to communicate their ideas and learn technological tools that will eventually empower them to facilitate the teaching-learning process with elementary level students.
2. Projects with a hands-on perspective where students not only get information from professors but need to practice, construct, and propose their own ideas will always contribute to the participants' development.
3. Enabling meetings with participants where individualized feedback is provided to them to shape their personal projects is a key to promote self-regulation, self-assessment and self-improvement of students.

4. The ages from the participants was in a range from 22 years to 47 years. For the oldest students the use of technology was very difficult, but they were guided in a simple way to make the process easier and not frustrating. It means that the methodology used was effective to achieve the goal of the project.

5. Participants were able to interact with a variety of tools, but at the same time the reflection process they did about the teaching of English was very new for them. They not only learned how to use a tool, but also how to use it for a specific English objective. It helped participants a lot for their future practicum at the English Major and for their future job as teachers.

6. This was the first time that this project was put into practice. For this reason, the feedback given by the participants would help to improve the implementation of future projects with similar characteristics.

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