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APPLICATION OF LYNDA AS A TEACHING RESOURCE IN THE PROJECT OF EDUCATIONAL INNOVATION IN THE EXCELLENCE OF TEACHING

LA METODOLOGÍA FLIPPED CLASSROOM EN EDUCACIÓN SUPERIOR. RESULTADOS DE USO DE LYNDA COMO RECURSO PARA LAS PRE-CLASES

Laura Melendo Rodríguez- Carmona: Universidad Camilo José Cela. España. Imelendo@ucjc.edu

África Presol Herrero: Universidad Camilo José Cela. España. apresol@ucjc.edu

ABSTRACT

This essay mainly represents the spirit that transcends philosophy framed in the new EEES, and in line with these new approaches to teaching, this paper raises new pedagogical resources that give greater prominence to the student in the learning process. Running away from the traditional lectures and written works, they raised this initiative based on the flipped classroom methodology and advantages offered TICS to the student. This pedagogical model transfers the work of processes of learning outside the classroom, devoting class time to work the aspects in which it is required the teacher's support and experience. This text presents two projects of flipped classroom methodology. Both cases had started with the objective of implementing the educational platform Lynda as training in university teaching resource. They proposed to the student conduct training sessions with the teacher. So they had to employ Lynda platform and viewing videos of courses related to the materials. Each one had goals and different evaluation criteria, but they shared the same methodology. The results obtained make to think about need to motivate the student to invest time before the session with the teacher.

KEY WORDS: Flipped Classroom; design thinking; educative technology; communication; Lynda

RESUMEN

Siguiendo el espíritu que trasciende la filosofía enmarcada en el nuevo EEES, y en línea con estos nuevos enfoques de la docencia, este trabajo plantea nuevos recursos pedagógicos que den mayor protagonismo al alumno en el proceso de aprendizaje. Huyendo así de las tradicionales clases magistrales y los trabajos escritos, plantearon esta iniciativa basada en la metodología flipped classroom y las ventajas que ofrecen las nuevas tecnologías al alumno. El término flipped classroom ha sido traducido literalmente como clase al revés o clase invertida. Este modelo pedagógico transfiere el trabajo de determinados procesos de aprendizaje fuera del aula, dedicando el tiempo de clase a trabajar los aspectos en que es necesaria la ayuda y experiencia del docente. En este texto se presentan dos proyectos de metodología de aula invertida. Ambos casos partían con el objetivo general de implantar la plataforma educativa Lynda como recurso de formación en la docencia universitaria. En ellos se proponía al alumno realizar formación previa a las sesiones

con el docente. Para ello debían emplear la plataforma Lynda y visionar videos de cursos relacionados con las materias. Cada uno tenía objetivos y criterios de evaluación diferentes, pero compartían metodología.

Los resultados obtenidos en ambos hacen reflexionar sobre la necesidad de motivar al alumno para invertir tiempo previo a la sesión con el docente.

PALABRAS CLAVE: Aula invertida; flipped classroom; tecnología educativa; comunicación; Lynda

A METODOLOGIA FLIPPED CLASSROOM NA EDUCAÇÃO SUPERIOR. RESULTADOS DO USO DE LYNDA COMO RECURSO PARA AS PRÉ- CLASSES

RESUME

Seguindo o espirito que transcende a filosofia moldurada no novo EEES, e em linha com estes novos enfoques da docência, este trabalho expõe novos recursos pedagógicos que deem maior protagonismo ao aluno no processo de aprendizagem. Saindo assim das tradicionais aulas magistrais e dos trabalhos escritos, expuseram esta iniciativa baseada na metodologia flipped classroom e as vantagens que oferece as novas tecnologias ao aluno. O termino flipped classroom foi traduzido literalmente como classe ao contrario ou classe invertida. Este modelo pedagógico transfere o trabalho de determinados processos de aprendizagem fora da aula, dedicando o tempo de aula para trabalhar os aspectos que são necessárias a ajuda e a experiência do docente. Neste texto se apresenta dois projetos de metodologia de aula invertida. Ambos casos partiam com o objetivo geral de implantar a plataforma educativa LYNDA como recurso de formação na docência universitária. Neles se propunha ao realizar formação na docência previa as sessões com o docente. Para isso deveriam empregar a plataforma LYNDA e visionar vídeos de cursos relacionados com as matérias. Cada um tinha objetivos e critérios de valoração diferentes, mas compartiam metodologia. Os resultados obtidos em ambos, faz reflexionar sobre a necessidade de motivar ao aluno para investir tempo prévio a sessão com o docente.

PALAVRAS CHAVE: Aula invertida; Flipped classroom; Tecnologia educativa; Comunicação; LYNDA

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1. INTRODUCTION

The students who are currently in the university classrooms belong to the socalled Generation Y or millennials. This is defined as the first generation that has been born and has developed entirely in the digital world. They were born from 1981 to 1995, and their main characteristic is their special relationship with technology. This paper is situated in the middle of this relationship between this generation and the use of technology associated with its learning process.

The contributions of the study of Alonso Mosquera, González Vallés and Muñoz de Luna (2016) on their relationship with electronic devices can help to understand the strong link between them: 57% of students always use an electronic device in the classroom (laptop, tablet or similar). This study also yields data on the risks that this entails: the distraction on the activity carried out in the classroom. In the results of the study, the reasons are read: they use it to check the mail, their social networks, online documents, read the online press and even make purchases online. This close relationship of our students with technology made us think that the proposal of training with online course platforms would be attractive to this group so dependent on it.

On the other hand, it was expected that this generation that has been formed in an environment in which the image has a great power of attraction, learning with a tool such as video would ensure their attention and interest. The experience of Professor Álvarez Álvarez (2016) with the use of video documents also foreshadowed a success of the innovation proposal that this text reflects.

At the moment, three approaches coexist in function of the role that has (as it is mentioned in García, Melendo and Presol, 2013). The first model, the most traditional one, is centered on the teacher, who is a source of knowledge and the student is a receiver where technology supports the presentation of the contents and the realization of exercises for its application. The second approach, focused on the student, considers that one learns through activities and questions generated from the student and not from the teacher, who is a guide who has to facilitate and support the student during their training. Technology here is a means to help explore knowledge, a vital tool in the search for information and the elaboration of tasks. Finally, the focus on connectivity is based on the fact that learning has not only an individual but also a social dimension. Training involves learning in community and being able to contribute to the construction of knowledge. The teacher is a designer of learning spaces, and technology plays a mediating role in the construction of knowledge and social interaction.

The authors of this article, following the spirit that transcends the philosophy framed in the new EHEA, and in line with these new approaches to teaching, are committed to using new pedagogical resources that give greater prominence to the student in the learning process. Fleeing from the traditional master classes and written work, they raised this initiative based on the advantages offered by new technologies to the student.

In this third approach is this experience, which could also be located in the Third Environment where Echeverría (1999), author of numerous reference works on technology and philosophy, places the actions carried out with technology. This

author uses this term of third environment to describe this new global city created by the new information and telecommunication technologies.

1.1. Invested learning

The term flipped classroom has been translated literally as class upside down or inverted class. It was coined by teachers Bergmann and Sams in 2012. These teachers began recording their lessons so that absent students could view them and did not miss them. This way, they could have more time to take care of the students and solve their doubts (Bergmann and Sams, 2012)

This pedagogical model transfers the work of certain learning processes outside the classroom, dedicating the class time to work the aspects in which the help and experience of the teacher is necessary. (Observatory of Educational Innovation of Technical School of Monterrey, 2014)

Inverted learning can therefore be defined as "a pedagogical model that transforms certain processes that were habitually linked exclusively to the classroom, transferring them to the extracurricular context. That is, it reverses the traditional way of understanding a lesson: those activities linked mainly to the exhibition and explanation of contents are offered outside the classroom, through technological tools such as video or podcast, or simply Internet" (García -Barrera, 2013, p.2).

This methodology is based on four basic pillars. The first is that there must be a flexible environment, in which the student can choose when and where to learn. Although it is understood that deadlines have to be set over time. Second, inverted learning involves moving away from the teacher-centered model, discussed earlier. The teacher directs learning by proposing the roadmap to the student. The third pillar is the accessible and relevant content that the teacher makes available to the student. And lastly, there is the role of the teacher, much more important than ever as he becomes active, accessible, instructor, as well as observer of the evolution of student learning (Observatory of Educational Innovation of Technical School of Monterrey, 2014).

According to Raúl Santiago (Santiago, 2014), inverting a class is much more than editing and distributing a video. It is an integral approach that combines direct instruction with constructivist methods, commitment actions and students' involvement with the content of the course and the improvement of their conceptual understanding. It is a holistic approach that, when applied successfully, will support all phases of a learning cycle such as Bloom's Taxonomy suggests. This didactic professor from the University of La Rioja is considered the main promoter of Flipped Classroom in Spain. In 2012, he launched a research project to find ways to improve the learning of his teaching students and found this method. He is the author of the website theflippedclassroom.es in which almost a hundred Spanish teachers (of all levels of teaching) have published thousands of articles telling their experiences in their lessons, along with tips and useful tools (El País, 2016).

1.2. Description of the innovation project

In order to help improve and develop creative skills through new technologies quickly and by objectives, from Camilo José Cela University, the implementation of the online learning platform Lynda.com is proposed.

Lynda.com is part of LinkedIn since 2015 and UCJC becomes the first Spanish university to offer its courses to its students as an academic resource for each subject. Teachers voluntarily have the ability to decide the videos that suit the specific needs of the subjects they teach and disseminate them through the Virtual Campus. In the case of this innovation project, the video was not prepared by the teacher, as some authors recommend (Carrillo García and Cascales Martínez, 2016, p.65), instead, the courses offered by this platform were used.

Thus, in December 2016, the Educational Innovation project "The Flipped Classroom" was launched by the Office of the Vice-Rector, which would start on January 2017. Teachers were invited to present a proposal for a teaching practice to implement Lynda in the classrooms through this methodology.

All those researchers who presented as IP some teaching practice associated with the project would receive the accreditation credential for presentation in the teaching bodies.

The proposals in a simple way should contain the definition of the project, the methodology that would be implemented, for what grade / subject / and number of students it would be carried out. In addition to a summary of the indicators of success and quality that would be measured.

This text presents the results of two of the proposals made at the School of Communication. In the first place, the one carried out by Professor Laura Melendo Rodríguez-Carmona for the use in the degree in Communication within the framework of the subject Digital Skills for the 21st Century. Secondly, the use in the subject of Creativity of the degree in Advertising and Public Relations by Professor Dr. Presol Herrero Africa.

2. OBJECTIVES

The general objective of the educational innovation project was to implement the use of the Lynda platform as an educational resource in the degree in communication and in the degree of Advertising and Public Relations. However, each of the two teachers approached the project in different ways.

In order to understand its development, the specific objectives of the two subjects participating in the project are presented below.

In the first place, the objectives of the subject Digital Skills are analyzed. The project proposal was to implement a flipped classroom practice in the Personal Brand Workshop of the subject. This would allow time to work more closely and personally with the student in the classroom. The subject had twenty-two students and it was necessary to have time to take care of each one individually.

What was proposed to the student was to do a pre-lesson, which consisted of viewing an asynchronous video with a course related to the content that they wanted to work in the classroom. The purpose was for the student to attend the first session

with the concept of personal brand assimilated, and in that way time could be spent in the classroom to perform exercises and check the progress of each student.

Regarding the second subject, creativity, in addition to pursuing motivation, the proposal was to measure the ability of the student's autonomous work, beyond the interest to implement a flipped classroom practice in the subject, since the way the eminently practical subject is proposed already makes the student a participant in all the dynamics and a protagonist of his own learning.

It was proposed as an open proposal of a non-obligatory nature on twenty-seven students enrolled in the subject of creativity, affecting those aspects that, perhaps due to curriculum issues, were considered necessary to reinforce. With an open and voluntary proposal, it was intended to analyze the interest and individual attitude of each student, mainly outside the classroom, in addition to using a didactic resource that would not directly impinge on the final grade of the subject, but on the individual training of each student.

It was a commitment to individual interest and motivation, which, as explained in the classroom, in addition to facilitating access to free training, would improve the assimilation of content consistent with the subject, in addition to Lynda's own certification as an eLearning platform of online education for universities, companies and students.

The evaluation system was for objectives, beyond measuring attendance, participation, success rate or performance, trying to measure the interest and willingness for student training.

One of the contributions to the curriculum and professional interest of the subject is to train students to dominate creative work at a professional level. The aim is to offer an up-to-date vision of advertising creativity, to transmit to the students the necessary knowledge in the process of defining the concept, as well as to apply the contents in the elaboration of messages as part of the strategic process, learning creativity techniques for generation, stimulation of ideas and realization of the objectives of the creative strategy.

3. METHODOLOGY 3.1. Design

For the study, an evaluative research design was used through the results collected from the Blackboard platform. The Flipped Classroom methodology has been applied to two groups of students and subsequently the use and influence on learning outcomes has been analyzed and evaluated through the use of this methodology.

3.2. Sample

The group of subjects used for this study was twenty-two and twenty-seven men and women aged eighteen to twenty, university students of the Camilo José Cela University, Communication and Advertising and Public Relations, respectively.

The choice of the sample was mainly due to the objective of the educational innovation project, applying the Lynda tool to students enrolled in both subjects in both cases in face-to-face mode.

The date of field work was the second semester of 2016, a period in which both subjects were taught.

3.3. Method

First, the lessons on which the tool was supposed to be used were selected, the planned methodology for the activities and the schedule were prepared. In relation to the activities carried out before the beginning of the application of the methodology, previous activities were carried out in which the professors presented the new methodology through the BlackBoard platform in relation to the subjects Digital Skills and Creativity.

In the platform, and in each subject, the student is provided with different materials such as explanatory videos, reading documents, about specific contents related to different units within the programs of each subject. All materials were made available to the student, sufficiently in advance so that the student could have the materials before the start of the units.

The professors of both subjects explained the theoretical contents, doing previous practices before suggesting to the student the revision of the exercises and the realization of the planned activities to achieve the results of guided learning.

At the end of the units, a review of the topics developed was carried out, delving into topics of interest and analyzing the papers prepared by the students.

4. DISCUSSION

4.1. Description of the project in the subject Digital Skills for the 21st Century

Personal branding is a topic of the subject Digital skills for the 21st century. We work from two perspectives: the background and the shape in an activity called Personal Brand Workshop with a duration of approximately three weeks.

In addition to the specific practices of each unit, students, as a final project, have to shape their personal brand through a video presentation of themselves, working their own identity, with the help of the teachers of MediaLab, which is a professional - academic laboratory directed and coordinated by professors and students of the university.

The role of the teacher in the subject is to work, prior to the video recording, the concept of brand that will be reflected in it. But for this, the teacher has only five lesson sessions. As the work of personal branding is a process that requires maturity on the part of the student and a lot of introspection work, this project aroused interest in the teacher. It is important to allow the student time for reflection but the student must also be given tools and guidelines so that he is able to define and verbalize his brand and then shape it.

The student is informed one month before the project in the classroom. They are told how to install the access from Blackboard, specifically from the link of the subject within the platform, they are indicated the recommended date of completion and the structure of the sessions of the personal branding workshop.

Next, we proceed to the detailed description of the sessions of the subject with Lynda:

Session 0: before the first session, the student will have had to take the Lynda course. The chosen course was: Building your brand before graduating. Session 1:

• Clarification of doubts about the concept of personal branding and debate about the need to have your own brand

• Viewing the Importance of Personal Branding - Become Essential by Risto Mejide

• Exercise starting point in which the student is defined

Session 2: A personal guided SWOT exercise will be conducted in class, in which the student must locate their weaknesses, threats, strengths and opportunities.

Session 3: Guided exercises focused on deepening the definition of the personal brand.

Session 4: Supervised work in the classroom solving doubts.

Session 5: Supervised work in the classroom solving doubts.

Session 6: Presentation of the personal branding concept of each student.

Prior to the sessions, the student was informed of the evaluation system. To evaluate the Personal Brand Workshop, a rubric would be used, in which the students would be awarded up to two points in the final mark of the Personal Brand workshop. Specifically:

1. Lynda course (up to 20% of the grade):

- 0 points (0%) The student has not taken the Lynda course or has taken less than 40%
- 1 point (10%) The student has not finished the whole course or does it out of time
- 2 points (20%) The student has taken the full course in term

2. Workshop attendance (up to 40% of the grade):

- 0 point (0%) The student attends 1 or less sessions
- 1 point (10%) The student attends from 2 to 4 sessions
- 2 points (20%) The student attends all workshop sessions

3. Personal Brand Exercise (up to 40% of the grade):

- 0 points (0%) The student does not hand in the personal brand
- 4 points (40%) The student hands in the personal brand with some deficiency or out of time
- 6 points (60%) The student hands in the full personal brand on time

Prior to the development of the sessions, the indicators to be measured were established. In particular, three indicators would be measured: the success rate, the performance rate and the rubric analysis. Namely:

• Success rate: number of students who complete the course on the total number of enrolled students

• Performance rate: number of students who complete the course before the indicated date on the total number of students who complete it

• Analysis of the rubric: Performance of the Evaluation: real points obtained on possible points

The resources used in Digital Skills were:

1. Face-to-face lesson that the Department of Educational Technology taught about flipped classroom

2. Course on Blackboard UCJC_FLIPPED_CLASSROOM_USING_LYNDA.COM: FLIPPED CLASSROOM with the following resources:

- a. Initial self-evaluation
- b. Working guide Inverted Classroom by Professor Ángeles Bueno, with information, tasks and case studies
- c. Learning Hub with documents, videos and web links to real cases of Inverted Classroom Projects
- d. A Blog for questions and clarifications

3. Lynda.com user guide for Blackboard teachers to activate and add it on Blackboard

4. Lynda.com user guide for Blackboard students to sign up

5. Blackboard qualification center of the subject 2016-17_60011_95353_P1.1: HABILIDADES DIGITALES PARA EL SIGLO XXI (I) - P1.1 MADRID-VILLAFRANCA MAÑANA

6. Face-to-face lesson that the Department of Educational Technology taught about flipped classroom

7. Course on Blackboard UCJC_FLIPPED_CLASSROOM_USING_LYNDA.COM: FLIPPED CLASSROOM with the following resources:

a. Initial self-evaluation

- b. Working guide for Inverted classroom by Professor Ángeles Bueno, with information, tasks and case studies
- c. Learning Hub with documents, videos and web links to real cases of Inverted Classroom Projects
- d. A blog for questions and clarifications
- 8. Lynda.com user guide for Blackboard teachers to activate and add it on Blackboard
- 9. Lynda.com user guide for Blackboard students to sign up
- 10. Blackboard qualification center of the subject2016-17_60011_95353_P1.1: HABILIDADES DIGITALES PARA EL SIGLO XXI (I) - P1.1 MADRID-VILLAFRANCA MAÑANA

4.2. Description of the project in the subject Creativity

For its part, in the subject Creativity, the Lynda project was proposed as an online learning platform in which the student chooses the moment of learning, with the interest of reinforcing contents of the subject, in the organizational modality of tutoring on follow-up and guidance through the digital platform programmed by the teacher, in a learning contract teaching method, in addition to autonomous work in oriented learning.

For this, once explained to the student, it is determined that the optimal moment for the beginning of the project will be made to coincide with the third didactic unit of the subject, where the creative idea is analyzed from the identification of the concept to the development of the strategy, principles and techniques of creativity.

Thus, it is proposed as a working tool for a practice of flipped classroom with Lynda, in which it is about reaching the student in an individual and personalized way inside and outside the classroom, favoring cooperative-collaborative work during the course, optimizing to the utmost the individual and collective resources of each group.

Next, we proceed to the detailed description of the sessions of the subject with Lynda:

Session 0: Before working on the identity of the student to build his image, the student had to take the course on Lynda: Design Thinking.

Session 1:

- Clarification of doubts and questions.
- Analysis of identity and corporate image
- Exercise to define the identity of the student. Definition of their own concept

Session 2:

- Lynda Course to create identity through the design of their own logo.
- Logo design: Think simple

Session 3: Piece design exercises to create their identity. Creating and Adapting a Logo

Session 4: Tutoring in the classroom

Session 5: Tutoring in the classroom

Session 6: Presentation and defense of their own identity and image

For the realization of this project, there was a series of resources, specifically:

The resources used in the subject Creativity were:

1. Face-to-face lesson that the Department of Educational Technology taught about flipped classroom

2. Course on Blackboard UCJC_FLIPPED_CLASSROOM_USING_LYNDA.COM: FLIPPED CLASSROOM with the following resources:

a. Initial self-evaluation

b. Working guide for Inverted Classroom by Professor Ángeles Bueno, with information, tasks and case studies

c. Learning Hub with documents, videos and web links to real cases of Inverted Classroom Projects

- d. A Blog for questions and clarifications
- 3. Lynda.com user guide for teachers to activate and add it to Blackboard.
- 4. Lynda.com user guide for Blackboard students to sign up.

5. CONCLUSIONS

Next, the results of the two projects are presented, which differ in performance indicators as they have different approaches.

In the first place, the performance indicators for the subject Digital Skills for the 21st Century are presented:

1. Success rate: 82%.

2. Performance rate:

- 17% take course and meet deadline
- 71% take course and do not meet deadline
- 12% do not take it

3. Analysis of the rubric:

 $\circ~$ Performance of the Evaluation: 52%. Of the 2 possible points, the student got 1.04.

These results show that, although the students took the course, eighteen enrolled students took the Lynda course, very few did so on the date indicated by the teacher. It is observed that the performance rate reflects little commitment of the student with the deadlines indicated to do it. This was key to being able to start the first session with the concept of personal brand assimilated.

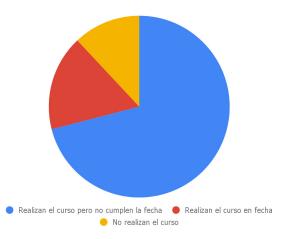


Image 1: Performance rate in the subject Digital Skills for the 21st Century

Regarding the analysis of the rubric, it is confirmed that students are not motivated by the possibility of improving their final grade by taking the course on the established date. It can be observed that, on average, for taking the course, they only obtained half of the qualification that they chose. Attendance surpasses this item in qualification, with data around 30% higher. In the bulk of the rating was the own personal branding work, which reached almost the highest score (5.67 real points as compared to the 6 possible). This seems to indicate that the students work hard on the so-called traditional tasks, the realization of the exercise itself, but they do not strive or do not care to improve on the other two aspects that could have meant approaching the maximum mark, 10.

Regarding the results obtained in the subject Creativity, the statistics of content use show the lack of access to the three links of course. The results show the lack of activity in the use of the tools provided.

Regarding the allegations of students with an attendance rate equal to or higher than 75%, the following stand out: lack of participation due to lack of time and the need to devote oneself to the activities that affect the evaluation system grades, and the students with little or no attendance, which claim not to have made use of the tool due to ignorance of the links.

In the following image you can read the message that was sent to the students.

I	Lynde 🛇	Publicado por: África Presol Herrero Publicado para: CREATIVIDAD -
	Publicado el: viernes 12 de mayo de 2017 14H04' CEST	P1.1 MADRID VILLAFRANCA MAÑANAS
	Os he puesto en contenido teórico y recursos, tres enlaces a Lynda muy interesantes. Lynda es una plataforma de formación no gratuita, pero que en vuestro caso podréis disfrutario. Recordar que cuando pincheis en el enlace, os	
	remaines anno paramentaria de normación no gracinas pero que en nuesto caso portes casinación. Necoroan que comos pinenes en el emaco, os pedirá cuenta, decir que no tenéis y volver a entrar.	
	Carpeta contenido teórico y recursos	
	Espero que os guste. Saludos	
	Jenuus	
	Enlace del curso /CONTENIDO TEÓRICO Y RECURSOS	

Image 2: Message written by the teacher announcing the activity

In relation to the learning outcomes of the competences that are developed in the subject, one of the generic competences of the subject pursues that the students know how to apply their knowledge to their work or vocation in a professional way and have the competences that are usually demonstrated through the elaboration and defense of arguments and the resolution of problems within their area of study;

Thus, the learning results are measured by the student's ability to apply the theoretical and practical knowledge of creativity to communication problems through advertising messages. Lynda courses facilitate the learning and development tool for solving problems.

Therefore, the starting hypothesis in which the implementation of Lynda is proposed as an educational resource demonstrates, at least in the case under study, that its implementation must be mandatory, in addition to having an impact on the final grade of the subject. Although the importance of the use of the tool, which as a pilot project would have no cost on it, was transmitted to the student, the students decided not to get involved, alleging lack of time.

Due to the results obtained and the scarce participation, it can be affirmed that the majority of students prefer the traditional class, because the inverted class requires much more time, involvement and effort than the conventional methodology (Bogost, 2013; Schuman, 2014).

Similarly, the implementation of this methodology also entails an effort for the teacher as well as the obvious role change, which restructures the expected way of teaching, where the teacher becomes the guide, guidance of learning, where there is no place for the master class in which students listen to the teacher; besides, they will have to design materials, specific activities for each subject and its evaluation.

So, regarding future applications, we consider that informative sessions on flipped classroom should be carried out and even attending real cases, experiences with which we can demonstrate the results intended with the methodology.

5.1 Recommendations

Considering the results obtained in the project, from the subject Digital Skills, we propose, for future applications, to encourage the student in a more attractive way so as to influence the importance of carrying out the course on time, perhaps more specifically exemplifying in the classroom the achievable results.

On the other hand, in the other subject, due to lack of participation and only considering the results, with transferring to the student the need to use the tool to be able to practice real techniques to cases, it is proposed to evaluate the results directly and actively in the evaluation criteria of the subject, in addition to the review in the classroom of the individual and group results.

With this new approach, the objectives of the implementation are altered, since the intention and will of the students will not be measured, but the acquisition of new skills from the tool. Beyond measurable results, we intuit that readiness and motivation, except for some exceptions, is usually given at higher ages with other objectives.

After these two projects and in view of their results, it is proposed What can the inverted class model contribute to face-to-face higher education? It is obvious that the use of this method requires a change in the usual ways of teaching classes, objectives, purposes, experiences, habits, among others. Since in neither of the two projects was the student's motivation to work outside the classroom achieved.

This way of working, which proposes a methodology that develops skills such as creativity, communication, cooperative work a priori serves to shorten the gap between the academic and the professional world facing the graduates.

This model facilitates materials and a work process that is more attractive to any student, where they acquire skills that allow them to learn by themselves from the material provided, and whose work can be reviewed and supervised by the teacher at any time during the process.

As it has been observed, it would be fundamental to establish a stable link between the technologies and the activities developed in each subject in order to involve the student and achieve the desired results, as well as taking time to show the results in the classroom as the rest of the dynamics, thus differentiating this methodology. The authors agree with Vélez and González (2017, page 815) in that in education there is no "The Model" that solves all the problems in the classroom. There is no exclusive method that is the definitive one. Each teacher is the one who must find the balance among all existing ones. What does seem clear is that the information and communication technologies must always be present. However, the authors differ from Vélez and González in that this model generates a high level of satisfaction and that the teachers who have tried it repeat it. If repeated, the author question whether it would be more appropriate to move this working method to semi-face-to-face teaching. This way, and in line with Chinchilla and Cañón (2015), the similarities between the inverted class and virtual education will be strengthened. Virtual education focuses on the student, fosters their autonomy, develops in a flexible environment, has intentional content, adapts to the rhythm of the student, uses digital tools, conducts individual learning tutorials and fosters creativity and critical thinking. These similarities seem to be those that were wanted to be enhanced in the experience with the use of Lynda, which did not give the expected results. For future occasions, the authors of this paper intend to carry out the project with groups of semi-face-to-face modality to be able to check if the results differ and are closer to the similarities commented in this last paragraph.

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AUTHORS

Laura Melendo Rodríguez-Carmona

Doctor of Communication Sciences from UEM. She is a university expert in development of learning and knowledge in an ICT environment. Specialized in advertising media planning and management, advertising strategy, transmedia narratives, digital marketing, mobile marketing and new technologies applied to education, she teaches undergraduates and graduates at the Faculty of Communication of José Cela University. She has been a member of several research groups: Mobile Adserver of the Ministry of Science and Technology and Digital Youth: analysis of the future of the ways of social, economic and political communication through the experiences of current teenagers. She has made many publications, scientific documents, etc. She has more than ten years of experience in media agencies.

https://orcid.org/0000-0003-1111-1905

África Presol Herrero

Doctor of Advertising and Public Relations from UCJC. Bachelor of Sciences of Information specialized in Advertising and Public Relations from UCM. CAP from the Institute of Education Sciences at UCM. Awarded for excellent teaching practices by UCJC. Specialist in Graphic Design and professor at the Faculty of Communication and Digital Arts of UCJC, where she teaches subjects such as Creativity, Corporate Identity, Theory of Advertising, Design, and Applied Technologies. She has worked for accounts such as Buena Vista International–Disney, Publirama, among others. Her lines of research are the analysis of advertising message, personal brand and the development of techniques of creativity, a subject developed in publications, conferences and chapters of books, among others.

https://orcid.org/0000-0003-2236-4131