



Flipped Classroom Methodology in the Specialty
of Geography and History of the Master's
Degree in Teaching Training at UNIR, the
University on the Internet

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Abstract

This paper develops the teaching method that is implemented in the course of Complements for disciplinary training, belonging to the specialty of Geography and History, in the University Master's Degree in Teacher for Compulsory Secondary Education, Upper Secondary Education, Vocational Training and Language Teaching, which is taught at the Faculty of Education of the International University of La Rioja, the University on the Internet. This specialty is aimed at training future teachers who will teach in the master's degree in Teacher for Compulsory Secondary Education, Upper Secondary Education, Vocational Training and Language Teaching in the subject of History, Art History and Geography. Most of the students who enroll in this training are graduates in History, Art History, Geography, Humanities and Archeology. The subject proposes a didactic model where it places the student at the center of the teaching-learning process through active, practical and collaborative work, always online using the Flipped Classroom methodology.

Keywords 1

Master's Degree in Teacher for Compulsory Secondary Education, Upper Secondary Education, Vocational Training and Language Teaching, Geography and History, on-line teaching, Flipped Classroom.

1. Introduction

Distance education is the way of learning in which, using technology, interaction between student and teacher is allowed, even if they are in different physical environments and synchronous or asynchronous timelines ¹. It is usually the adult population that uses this educational methodology the most². On the other hand, according to Naidu ³, the concept of distance education itself was founded in the beginning as a flexible access and focused to distance students, which were generally adults workers, outside full time or part time, allowing them to study at the time, place and pace that best suits their circumstances.

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Distance education began to consolidate and develop, both in Spain and in the rest of the world with the emergence of the first remote education methodologies from the end of the 19th century and the beginning of the 20th century, developing and establishing itself during the course of the 20th century. It was recognized in 1892 when the first distance education program at the university level was created at the University of Chicago⁴. In the United States the DEAC (Distance Education Accrediting Commission) was founded in 1926 to regulate educational standards of distance education: it is recognized by the United States Department of Education. More than two million Americans study under the accreditation of this commission. The first institution to work with distance education was the New York State's Empire College (NYSE) in 1971. According to Bizhan [5], it was founded with the aim of making higher education more accessible to students who could not attend face-to-face classes.

In Spain, although private distance courses and methodologies already existed at the beginning of the century, it was not until the 1960s that the Spanish government authorized the establishment of distance teaching and study centers, with the aim of providing access to education to the rural population⁶. It is finally in 1972, when the first unimodal distance education university in Spain was created, the Universidad Nacional de Educación a Distancia (UNED), was established, promoting the right to educational training for all citizens who require it in each of the existing training cycles⁷.

During the following decades, with technological development, the Universidad Internacional de La Rioja (UNIR) was founded, which was recognized in 2008 and began its academic activity in 2009 after being authorized in Decree Law 69/2009, of July 31. It is established internationally, not only in Spain but in Mexico, Colombia, Ecuador, Peru, as well as in the United States after the acquisition of the Marconi International University (MIU), with 21% of its students distributed throughout the whole world.

Currently, millions of people have access to online distance learning (ODL) and a considerable increase in this is expected over the next ten years. The estimated worldwide income from distance learning is \$107 billion⁸. But, although there has been an increase in the number of students who are learning at distance, anticipating a potentially enormous increase⁹, it has finally been more irregular than previously proposed^{10,11}.

More than two decades ago, at the World Conference on Higher Education held by UNESCO in Paris in 1998, the need to strengthen cooperation with the world of work and to analyze and anticipate the needs of society, as well as to use innovative educational methods in which students were the protagonist (UNESCO, 1998). As a consequence, although master classes continue to be the most frequent way of working, more and more teachers have included other methodologies in the classroom, even if it is true that the teachers who propose the most active methodologies in their classrooms are precisely those who more knowledge they have about the variety and usefulness of these methods¹².

Among the different active methods used in recent years in education, we find the Flipped Classroom, increasingly used in Spain. Flipped Classroom is a pedagogical approach in which, basically, the way in which it is traditionally worked in the classroom is turned around. Therefore, it is based on the fact that the student at home, before class, reviews materials related to the theoretical part of the transmission of information so that the classroom time is used to work on this information in a practical way¹³.

More specifically, before class, students should review informational resources such as readings, videos, podcasts through websites, platforms or mobile applications such as YouTube, SoundCloud, Google Classroom, Moodle, etc. In class, activities such as debates or practical cases are promoted that allow the development of aspects related to social skills, creativity, professional skills or personal reflection, so that the teacher focuses during this phase on attending to the students in a personalized way¹⁴.

As a consequence, this way of working is accompanied by a change in the roles of the teacher and the student in reference to the traditional methodology (Table 1).

Table 1

Pedagogical changes between the traditional model and Flipped Classroom

Level	Traditional model	Flipped Classroom
Teaching-learning process	The teacher transmits knowledge	The Student acquires skills
Role of teacher the	To teach	Guide
Phases of teaching work	Before class: Selection of materials and class preparation	Before class: Planning, preparation and creation of materials. Class selection and preparation
	During class: teaching the content	During class: guide, discussion, incentive, etc.
	After class: Final evaluation	After class: Review In all phases: Continuous evaluation, co-evaluation
Role of the student	Individual learning	Individual and collaborative learning
Phases of student work	Before class: Nothing	Before class: Review and assimilate theoretical content independently
	During: Follow the class; take notes	During class: Resolution of doubts and shared creation of knowledge through practical activities
	After class: Memorize content	After class: Review and self-assessment

Adapted from Simon -Llovet, Ojando -Pons, Avila -Morena, Miralpeix -Bosch, Lopez-Vicente and Prats-Fernández (2018).

The first studies on investment in the class were Lage, Platt and Treglia¹⁵, who used this way of working for their classes in Economics, specifically in Microeconomics. After evaluating this methodology at the end of the semester, the students showed that they preferred this method. traditional way of working as well as working in a practical way and in a group.

Despite the above, the truth is that Flipped Classroom did not become popular until a few years later, when Bergmann and Sams began to use it in their chemistry classes because there were students who did not attend class because they were in a rural environment. As a solution to this problem and to avoid having to explain again to the students that they were absent from class, with the loss of time that this entailed, in the summer of 2007 they began to record their classes and ask those students to visualize

them and ask them later doubts, although as a result they saw that this could bring with it other benefits such as improved motivation and academic results^{16, 17, 18}.

Therefore, the beginnings of Flipped Classroom are at the University, and, in fact, it has been used in numerous university studies as diverse as the bachelor's degree in Primary Education^{19, 20} or in studies related to the area of Medicine^{21, 22, 23, 24}, although in Spain it seems to be more used in the area of Education, Social Sciences, Law, Engineering and Architecture according to the analysis carried out by Galindo and Bezanilla²⁵.

As mentioned, the key point of the flipped classroom methodology is that the student prepares at home through the content prepared by the tutors and the classroom is the place where doubts are discussed, and the active and constructive role of the student is encouraged. To apply what they have learned, which contrasts completely with the perspective of passive students who listen to the class and it is at home where they encounter doubts and problems when they do their homework, at which time they cannot count on the teacher's help. However, it is necessary to highlight another concept closely related to the flipped classroom, which is flipped learning: while the first is reduced to the investment of educational processes in the classroom and at school (which is traditionally done at home now is done in the classroom, and what is traditionally done in the classroom is now done at home), the second is defined as the use of various useful forms of learning to engage students to interact and work more in class by transforming of the learning environment, at which point direct instruction ceases to be located in the group environment of the classroom to do so in the individual environment of the student, turning the group into an environment in which learning is interactive and dynamic and where the teacher establishes itself as a guiding figure as students actively apply and build their learning. Despite this differentiation of concepts, it is common to find an indiscriminate use of both¹⁷.

Although the flipped classroom is a method based on e-learning because the most common method is to use recordings or internet access^{17, 26}, multimedia materials are easier to teach and handle, there is no consensus in this way of conceiving this method, since authors such as Kim et al¹⁷ emphasize that the essential characteristic of this methodology is to offer students the appropriate content and guidance for instruction, not limiting itself to multimedia content. What does seem to be a consensus is in the role of the teacher as a counselor who awakens in the students their critical capacity, who provides feedback and that solves the doubts of their students, which favors the motivation of the students and improves the results of the instruction^{17, 26, 27}, the teacher ceases to be an instructor to be an auxiliary and facilitating figure for the students. It is precisely this role of the teacher that allows better academic results, since, if students participate actively in their instruction and are motivated to be critical of the content and their own learning process, the instruction is more effective, in such a way that the student is not exclusively oriented to achieve good grades, but rather seeks to improve his level of knowledge in the area in question on which he is instructed²⁷.

The flipped classroom method has many advantages, as O'Flaherty and Phillips²⁷ report: it allows an individual and flexible process in which each student learns at their own pace, it allows classes to be directed to carry out debates and resolve doubts, it encourages that it is the student himself who initiates said process of debate and makes the student more responsible and active in learning the contents, in addition to being a more economically profitable method for educational centers, especially for universities and other educational centers higher, given the increase in the number of students they are experiencing. In addition, it facilitates the process of review and modification of the contents and activities by the instructors, allows the teachers to also work individually with their students, promotes the development of higher-order cognitive skills and allows a greater adaptation of the students who, for various reasons, cannot attend some classes, preventing them from losing the level¹⁷. That is why greater motivation and performance of the students is achieved and it is also associated with an improvement in the quality of educational resources. However, despite its many benefits, it becomes a challenging method, since it requires a lot of time and effort on the part of teachers to analyze how to adapt the content to this type of methodology or the possible lack of initial involvement by part of the student body^{17, 27, 28}.

The effectiveness of the flipped classroom has been evaluated from different approaches. Continuing with the review performed by O'Flaherty and Phillips²⁷, most of the studies analyzed that apply the flipped classroom in various formations (both pre-university and university studies and vocational training) use surveys with Likert-type scales and the evaluation of academic performance of students,

as well as qualitative studies. Scientific literature has shown that the flipped classroom method is more effective than traditional teaching in improving academic performance, student satisfaction and participation, improving communication skills and teamwork, and although there are studies²⁹ that do not find a significant difference in the average performance between the face-to-face and online flipped classroom, they did find that there is greater attendance in the online flipped classroom but also a greater polarization of performance in the online flipped classroom (i.e. some students have better performance but others had an even worse performance), probably due to the type of design used, which raises the alert about the need to make programs well balanced between synchronous and asynchronous methodology when doing online flipped classroom programs.

As mentioned before, the flipped classroom method is generally understood as an online learning method, where not only instructional videos are used, but also various electronic applications and technologies such as Google Sites¹⁷ Moodle, Quizlet and Socrative¹⁸. The use of the flipped classroom method can also be proposed in stages, as in the work of Gilboy et al.³⁰ in which three are proposed: before, during and after class. Before class, students analyze the learning content guide, they must search for information on the internet and collect the questions and doubts they find. During class, the questions collected are discussed, students get guidance to clarify doubts and divide into groups to discuss the content. Finally, in the final stage after the class, students take a test to assess their level of learning of the content. These three stages do not make up a static process but can be carried out in a different order or with different formats. An example of this is the process collected by Fautsch³¹, where in the first stage the students view a video made by the teacher with the explanation of the content before class and answer some questions about the content displayed, in the second stage they are reviewed in class the most important concepts of the content worked on and the questions asked in the first stage with the highest frequency of errors are discussed with the students, in the last stage the teacher and students discuss the content and the teacher gives feedback on the students' presentations. In the first stage, it is common to use, in addition to prerecorded classes in the form of podcasts, screencats, interactive videos and simulations²⁷.

A special type of flipped classroom with a strong m-learning (mobile learning) component is seamless flipped learning. Seamless mobile learning (or fluid mobile learning) is a type of instruction in which, through the use of mobile devices, students can switch between different scenarios and learning contexts, experiencing a continuity of the learning process³². The application of non-disruptive mobile learning to flipped learning makes it possible to improve the flipped learning experience, so that, while the flipped classroom has typically focused on developing learning in the classroom and at home, non-disruptive flipped learning enables a transcontextual process that goes beyond classroom-home environments and improves the acquisition and generalization of the content learned to various contexts¹⁷. The use of mobile devices in flipped learning allows greater accessibility of multimedia content, either those offered by the teacher or those created by themselves based on their own annotations or summaries, which makes it easier for them to review and review the material in any time and place, adapting to their needs and the way of life of each student. It is the student who directs and distributes their learning method, something really useful in online training, which is usually chosen by people who, given their personal characteristics (for example, have a family, work, live in rural or remote environments of the main cities, etc., which greatly limits their time and makes it impossible for them to attend face-to-face classes and follow the pace that these educational centers require) they want to be the ones who regulate how and when to work with the content they must learn. Stöhr et al.²⁹ reflect a concept practically similar to that of flipped learning without interruptions described by Hwang et al.¹⁷, the online flipped classroom model, a method that combines synchronous online learning (a face-to-face online where students and teachers meet by videoconference) and asynchronous (where students do not meet with teachers); Students in this type of online flipped classroom no longer meet physically, but through video calls using applications such as FaceTime, Google Meet, Skype, Discord, Zoom, etc., combining the synchronous method with these video calls and the asynchronous method, the latter being the one that guarantees the adaptation of the content to the situation of each student.

The distance learning modality with flipped classroom has increased at all educational levels, especially due to the suspension of face-to-face classes in the 2020/2021 academic year as a result of the COVID-19 pandemic, when Google searches for Flipped Classroom increased about 200%³³. There are articles related to its implementation in Computer Science³⁴, Chemistry³⁵, Medicine³⁶ or Tourism

³⁷. In a study carried out with 45 professors from the Faculty of Education of the University of Malaga, 66.7% recognized that the use of Flipped Classroom increased during the pandemic, using ad hoc videos, although the sample studied does not allow extrapolation of results to other scenarios³³.

An example of how Flipped Classroom can be developed in a completely virtual environment is found in the launch of the College of Medicine of the University of Sharjah, in the United Arab Emirates by Professor Salman Guraya ³⁸. In the study, students were sent a video recorded by the teacher on the aspects to be worked on in the classroom. After this, a complex clinical scenario was proposed to the students so that they could solve it as a group using Blackboard® or MS Teams®. Two or three days later, a live online session was held on the same topic in which the teacher facilitated discussion groups to solve the problem through anonymous responses in real time on PollEverywhere®, promoting active work and interactions without fear of giving wrong answers. Other scenarios were also worked on in class under the teacher's supervision and, finally, exercises were assigned to the students to work in small groups after the session through live chat tutoring. Also, in other scenarios working class under the supervision of the teacher and finally was assigned n the exercises students to work in small groups after the session by tutoring for live chats. Consequently, each topic was reviewed in total three times: before, during and after the live session.

Due to the fact that the bibliography consulted shows more benefits and positive results than disadvantages, it was decided to implement this approach for the subject in the University Master's Degree in Teacher for Compulsory Secondary Education, Upper Secondary Education, Vocational Training and Language Teaching in the subject of History, Art History and Geography as an alternative method to videoconference lectures.

2. The experience at UNIR: the University on the Internet

A continuación, se presenta una experiencia práctica sobre enseñanza on line en el Máster de Profesorado de Enseñanza Secundaria Obligatoria, Bachillerato, Formación Profesional e Idiomas, título habilitante en España que forma a los futuros docentes de esos niveles educativos.

En los próximos puntos se expone, de lo más general a lo más particular, cómo funcionan las plataformas digitales y qué herramientas se emplean en UNIR para su programa docente. Subsequently, the didactic training program of the subject of Complements for disciplinary training in the specialty of Geography and History is analyzed, whose recipients will work as teachers at the levels of Compulsory Secondary Education (CSE) and Upper Secondary in the subjects of History, Geography and History of art.

According to the Ministry of Education³⁹ and Vocational Training, the CSE is “a compulsory and free educational stage that, together with Primary Education, constitutes basic education. It consists of four academic courses that are usually carried out between 12 and 16 years of age. However, students have the right to remain in the ordinary regime until the age of eighteen under certain conditions. The purpose of the CSE is for students to "acquire the basic elements of culture: humanistic, artistic, scientific and technological, develop and consolidate their study and work habits, prepare for their incorporation to subsequent studies and for their employment and employment. is formed for the exercise of their citizen rights and obligations”.

Upper Secondary “is part of post-compulsory secondary education, and therefore is voluntary. In public centers it is offered free of charge. It comprises two academic courses, which are usually carried out between 16 and 18 years of age”. The purpose of the Upper Secondary is for students to "acquire the training, intellectual and human maturity, knowledge and skills that allow them to join active life in society with responsibility and competence and to be trained to access higher education”.

2.1. UNIR platform of the subjects

UNIR makes available to all its students a complete platform that allows adequate monitoring of the degree.

In the first place, it establishes that before the beginning of the school period itself, the students have the so-called “Week 0” in which an introduction is made about the operation of the platforms and resources that they will have at their disposal for their distance learning. However, throughout the course there is also a Technical Support service with 24 hours attention from Monday to Friday and 12 hours on weekends. The platform also includes an assistance center where you can seek help for different procedures.

Going to the academic aspect of the platform, it includes a great deal of information. In each subject, the students can see the “Last minute” messages, among which is, for example, the first welcome message, the notice of publication of grades, etc.

The platform includes links to general tools such as:

- "Agenda": where the dates and hours of classes of the different subjects in question will be marked.
- “Exams”: with information such as the duration, procedures related to the exam, when and where they are carried out, etc.
 - Download programs like Google Chrome, 7-Zip, Adobe Reader, Java, etc.
 - Library with bibliographic resources like UNIR and other external platforms such as: Dialnet, eBooks, ERIC, Google Scholar, Scielo, Springer Journals, GRAO (education journals), Scopus and Web of Science.

In addition to these general tools, the platform offers access to information related to the subject, as follows:

- a) Resources: Includes 4 great points:
 - "Topics": from where each of the topics is viewed online or downloaded in PDF format, along with the didactic program, continuous assessment work, etc.
 - "Documentation": where students can download documents in different formats that are uploaded by the teacher to support them.
 - "Lectures": this point refers to short videos with aspects related to the subject such as explanation of activities, summaries of topics, extension of any of the points covered or whatever the teacher deems appropriate. These pills are prepared with the Panopto tool.
 - "Weekly schedule": that allows students to see what is covered in each of the weeks, the agenda and continuous assessment activities.
- b) Live classes: allows access to both live classes and recordings of previous classes for viewing if it has not been possible to attend live or for later review whenever the student needs it.
- c) Communications: last minute, mail, forums and blog. At this point, the case of forums is especially remarkable, which allow interaction with both the teacher and the rest of the classmates in the subject. The forum also allows to include files, turning it a powerful tool both for making queries and for sharing information beyond the classes or the specific Documentation section.
- d) Activities: where students can consult in more detail each of the activities included in the continuous assessment, reviewing their description, template, assessment rubric or delivery deadline. Likewise, students will be able to review here the results of the activities carried out, both individually and the sum of the different grades obtained up to the moment of consultation.

Therefore, as mentioned above, the platform offers a wide range of tools for the autonomous monitoring of the subject, but also for synchronous and asynchronous collaboration and communication with the teacher.

Figure 1: UNIR Learning Management System.

2.2. Practical case: practical experience with the subject Complements for disciplinary training in Geography and History

2.2.1. Context

The subjects of History, Art History and Geography Master's Degree for Compulsory Secondary Education, Upper Secondary Education, Vocational Training and Language Teaching in the subject of History, Art History and Geography, which is within the specialty of Geography and History, Enables and is focused on future teachers who will teach at the CSE and Upper Secondary levels in the subjects of History, Geography and Art History. These subjects are:

CSE:

- Geography and History. 1st cycle of CSE (1st, 2nd and 3rd).
- Geography and History. 4th CSE.

Upper Secondary:

- Geography. 2nd Upper Secondary.
- History of Spain. 2nd Upper Secondary.
- History of Art. 2nd Upper Secondary.
- History of the Contemporary World. 1st Upper Secondary.

2.2.2. Recipients

Students who can access this specialty to later work as teachers in CSE and Upper Secondary are graduates or graduates in History, Art History, Geography, Archeology, etc. They tend to be mostly recent graduates who are either unemployed or working in trades that have nothing to do with their training, such as the service or commercial sector. With this qualifying title they seek to have the opportunity to practice as teachers both in the public sector, through competitive examinations, as well as in the concerted and private sector: after all, to work on what they have studied. This type of student differs from other specialties of the Master, such as health processes, in which almost all work in what they have been trained, are older and are looking for a change of job or a complement to the one they already have.

2.2.3. Goals

Prepare students for their professional future as CSE and Upper Secondary teachers, in a practical, active and collaborative way, where class work and interactions on the platform serve them for their future professional practice, for opposition processes, of facing the final exam and for the preparation of the Final Master's Thesis, in which they must prepare an intervention proposal in the classroom using the Flipped Classroom as the main methodology and supported by other methodologies such as collaborative work, gamification or augmented reality.

2.2.4. Presentation of the subject

According to the didactic programming with this subject, it is intended to make the Master's students aware of the weight and presence of Social Sciences subjects in the curriculum, the guidelines that mark their organization through the different educational levels and their concretion in current educational programs. It is also intended to expose its importance to be able to understand the current world, analyze the formative values it possesses, as well as address the current debates about the teaching-learning processes of these disciplines. The course aims to address the epistemology of these disciplines. In addition, there will be a tour of the main historiographic currents that will inspire the future teaching activity of students and will see issues related to the History of didactics, taking as a basis the evolution of the teaching of Geography, History and History of the Art throughout the centuries since its birth as disciplines and how it has manifested itself in the manuals of the disciplines. A participatory, cooperative and practical methodology will be used to achieve objectives and competencies, promoting comprehensive learning at all times.

2.2.5. Tools online for virtual classroom lessons

For the development of online lectures, the Adobe Connect platform is used, which offers a series of resources to work with students. It basically consists of a series of " pods " with which students can interact: whiteboard, surveys, notes, questions and answers, screen sharing, upload presentation, file sharing, chat for students (given by a camera and micro), direct links to web links, group work pod , etc. All lectures are recorded so that students who have not been able to come to class or those who want to review it at home, have access to it.

Other tool to prepare audiovisual material, is Panopto, which is used to record small lectures on the subject, with an approximate duration of ten minutes. It is also used to present small explanatory pills of the continuous assessment activities and for other extra videos that the teacher deems appropriate to record to: reinforce knowledge, clarify doubts that may have arisen in the virtual face-to-face class, in the forum or by mail of the platform, so that all students have access. This video is posted on the subject forum.

2.2.6. Virtual face-to-face classes

They consist of 14 sessions of key ideas, in which the normal development of the subject's syllabus occurs, and 6 of reinforcement, in which doubts are clarified, complementary activities are carried out and one of the sessions is left to do a simulation of the final evaluation. the duration of the lectures is 60 minutes throughout the semester.

Model, method and methodology.

Model: the way of developing the educational process in this subject is based on a completely practical model, placing the student at the center of the learning process; active, since it works in the resolution of cases by groups; and useful, because what they have worked on prepares them for their professional future as teachers, if they want to appear in opposition processes to the teaching staff or, also, for the final exam of the subject and the Master's Thesis.

Method and methodology: several methodologies are combined and developed, which will later be seen how they are specified in the virtual classroom. The main method is the Flipped Classroom supported by other methods such as discussion, problem-based learning, thinking-based learning and gamification, all working collaboratively in groups. The first thing that students do at home is to read the syllabus for the first week, since this is clearly reflected in a schedule in the subject programming (PGA 1 and 2) and, later, these contents are worked on in class through discussions around one or more key questions, problem solving with information search, drawing up murals, concept maps, questionnaires, timelines, virtual reality, etc. Through platforms such as Padlet, Mindmeister, Timetoast, Tiki-Toki, Educaplay, Google Earth, subject forums, virtual classroom tools, such as the Adobe Connect notes pod, always performing the tasks in groups of 3 to 5 students, collaboratively and culminating in the sharing of results and / or ideas, using the chosen format.

Development of class.

The duration of the virtual lectures is 60 minutes. Students access the virtual classroom of Adobe Connect, in which teachers always have the technical support of UNIR. It is called "UNIR Classes Support".

The class begins with a series of good practices such as asking how they are, how are they taking the Master, from what geographical location they write and what are their specialties (there have been cases of students studying the Master from Germany, England or France). In this way, a mental map of the attendees is made, giving them context and not just their names and surnames. Subsequently, a brief introduction is made to how it will work in class part of the agenda that touches and if everything is clear and there is no doubt the work starts in groups. These group works are very varied, as has been commented, also because the agenda is rich and heterogeneous, dealing with various topics that affect the didactics of History, Art History and Geography.

Below are three practical cases to be solved in class by students:

Example 1:

Unit 1. What are the social sciences? The social sciences, Geography and History, as a subject contemplated from the curriculum.

Practical question.

Make a small proposal for a Didactic Unit developing only the sessions (5 approx.), Of free-choice content and proposing competencies that appear in the LOMCE law.

<https://www.educacionyfp.gob.es/educacion/mc/lomce/curriculo/competencias-clave/competencias-clave.html>

Linguistic communication LC

Mathematical competence and basic competences in science and technology MCBCST

Digital competence DC

Learn to learn LL

Social and civic competences SCC

Sense of initiative and entrepreneurial spirit SIEP

Consciousness and cultural expressions CCE

Example 2:

Unit 5. The teaching of history. Why and for teach history.

Practical question.

In groups, think about and develop a short writing on the following questions:

- 1) How do you think history is taught today? What would you propose so that it is not conceived as a finite and rote knowledge?
- 2) "History helps to understand the present" What opinion do you have on this topic?

Example 3:

Unit 6. Geography: a science of synthesis.

Practical question.

Create a timeline with the Timeline platform with the main milestones from the beginning of Geography to the present:

<https://www.timetoast.com/>

Or Tiki Toki:

<https://www.tiki-toki.com/>

The students, depending on the enrollment, tend to be in the cases of less attendance in the 8 to 12 students and in those with the highest attendance, being very specific cases, between 25 and 30. When the students are in the group rooms of Adobe Connect, they can use the chat, the microphones, and the webcam to elaborate in the proposed cases. There is always the figure of the "scribe" who is in charge of writing and collecting what colleagues say in the "pod" of notes. In the cases that work on platforms outside of Adobe Connect, it is also done by groups, but in this case, they are all "scribes". From experience, the ideal group size is between three and five members, not to exceed six. Keep in mind that they are not in a physical classroom and that the interaction is more complicated, especially since not all students have the same resources, for example, a microphone. More than 6 students make communication difficult in the room.

Once the proposals are finished, the students return to the main room and the final 10-15 minutes of class are used for a spokesperson from each group to present to the classmates what their classmates have proposed in the previous collaborative work. If this collaboration is enriching, it is even more so when the groups present their proposals to the rest of their colleagues, since they can see how they have a multitude of different and coincident solutions for the same problem. This part amuses them and motivates them a lot, it opens their minds. In the case in which applications such as Padlet, Educaplay or Mindmeister are used, the link of the work of the groups is shared in the subject forum called "Ask the Teacher". In this way, the work of all the groups is shared so that all students can see them, including students who did not go to class, as well as interactions on these contents can be established. The teacher acts as a guide, visiting the different groups solving doubts, contributing and organizing ideas, many from his own professional experience.

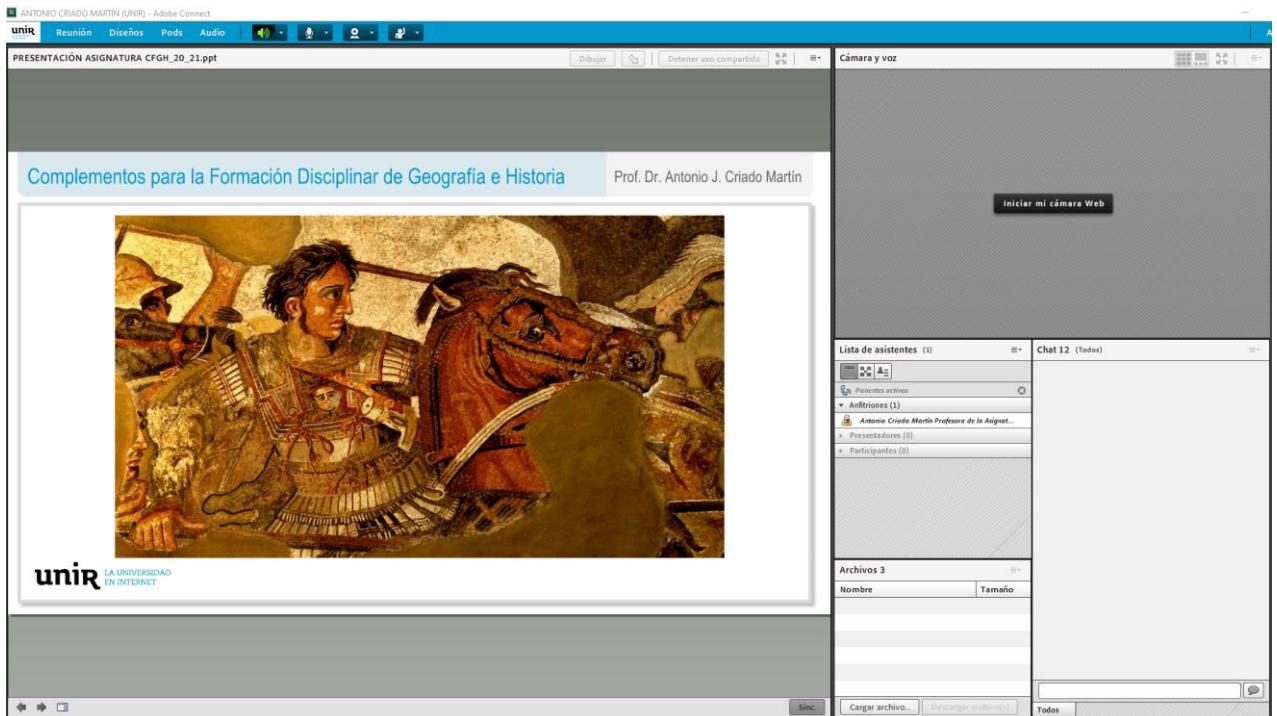


Figure 2: UNIR Adobe Connect Web conferencing tools.

2.2.7. Evaluation

La evaluación es fijada por la UNIR y consta de dos partes: una continua que supone el 40% y que se compone de la elaboración de tres trabajos y la resolución de los test presentes a cada final del tema; la evaluación final, que pesa el 60%, que consta de dos preguntas de aplicación práctica a elegir una (vale 6 puntos) y otras cinco de comprensión, para desarrollar cuatro, que vale 4 puntos, un punto por cada una.

Los tres trabajos de la evaluación continua tienen que ver con contenidos de la asignatura pero que también puedan trabajar de manera práctica, amena, motivante y que les puedan servir como futuros docentes. Una de las actividades, por ejemplo, es ésta:

Activity 1:

Guy. Brief research on innovative proposals: didactic groups.

Goals:

- ▶ To inquire about concepts, theories and theoretical reflections related to the evolution of the specific contents of the specialty subjects.
- ▶ Promote the knowledge of some pioneering didactic proposals in our country. Detect official reluctance in the face of new approaches.
- ▶ Promote in future teachers a critical spirit and the analysis of primary and secondary sources.
- ▶ Publicize the importance of disciplinary approaches in teaching activity.

description of the activity

A synthetic analysis of two innovative didactic groups, from the 70s to the 90s, of free choice, will be carried out. The educational and historiographic paradigms that supported them will be exposed and a comparison between both approaches will be made.

The work will include the following aspects:

- ▶ Name of the group and reason for its emergence.
- ▶ Initial program of the educational proposal and theoretical foundation that supported it.

► Didactic approaches and materials proposed by the group for the development of these approaches (general description of the materials and objectives they met).

- Implementation and evolution of the innovative group.
- Personal reflection on the proposals analyzed.
- Conclusion.

Orientations to carry out the activity

► The activity has a fundamentally reflective character, not a mere contribution of data extracted from external sources.

► The bibliography and sources consulted will be reviewed at the end of the work according to the APA criteria for citations.

- The finding of plagiarism will automatically lead to the suspension of the activity.

Evaluation criteria

In this activity, the adaptation to the proposed problem, the quality of the information, the discussion and the results will be taken into account; as well as the sources used and the correct writing and use of terminology and bibliographic citations.

As regards the final exam, the structure of which has already been described, the questions are not theoretical or rote answer. The questions are once again the cases of reflection and informed opinion on different issues inherent to the Social Sciences, with which it does not make sense to copy.

What about students who cannot attend class and do not see the recordings? Apart from the notes, the syllabus, the Panopto videos and the recording of the virtual face-to-face classes, they have access in documentation to the contributions made by the groups in class in the debate and reflection activities and to the links to the work carried out in the various internet platforms in the forum, so that the student who wishes can work on their own what has been prepared by their classmates.

3. SWOT Analysis

SWOT Analysis		
Internal Origin	Strengths	Weaknesses
	Helpful	Harmful
	<p>In joining the students have not been disrupted their training on line with pandemic COVID-19</p> <p>Students have immediate access from home, any day at any time, to all resources: library, forums, teaching materials, educational videos, recording of lectures, notes, syllabus, etc., and they can set the pace of learning.</p> <p>They can interact through various channels with colleagues involved in training on line from multiple locations in Spain.</p> <p>It encourages synchronous communication in class and asynchronous in the forum or through the tutor with the teacher.</p>	<p>There is no physical interaction between students and with the teacher: expressions, voices, etc.</p> <p>High number of students many times that prevents everyone from turning on their microphone and thus we have direct feedback.</p> <p>Resources to work online by the students may be limited: not have good internet access, microphone, web cam, accessing large groups to the virtual classroom, etc.</p> <p>When the groups are high, the sharing of ideas and results is complicated in a timely manner.</p>

	<p>Improves students' ability to adapt to new situations.</p> <p>The experience of UNIR teachers as teachers of Compulsory Secondary Education and Upper Secondary.</p> <p>Active learning based on real educational situations.</p> <p>Group work: motivating, promoting teamwork and social skills.</p> <p>Individual work: creativity, innovation, flexibility, preparation for teaching.</p> <p>By working in small groups, they can turn on the microphones in the Adobe sub -rooms, even the web cam, recovering part of that physical interaction that we have in face-to-face classes.</p>	
External origin	Opportunities	Threats
	<p>Access to training from anywhere in the world that has internet access.</p> <p>Inclusive training: adaptation to people with disabilities and with very different personal circumstances.</p> <p>Possibility to return or continue studying in the case of people who work.</p> <p>Access to a huge number of resources on the web for students, researchers and teachers in a single platform.</p> <p>The students of this specialty are usually young recent graduates in History, Art History and Geography, with which they are digital natives and do very well with virtual tools.</p>	<p>Digital divide: places with limited or no internet access.</p> <p>Excessive control of the contents by the university.</p> <p>The final evaluation is given by the university, it is the same as always: an exam. There is no evaluative innovation, no matter how much you want to give a practical character to the questions.</p> <p>The approach of the exam questions is sujet to control it.</p>

Strengths

International University of La Rioja bases its philosophy on comprehensive training and 100% online. The students who enroll are perfectly aware of this premise and therefore choose to study at UNIR. Alarm status pandemic COVID-19 has logical problems education systems online, did not alter the daily life of students joined. Yes, there were certain difficulties in facing the internships they had to do in educational centers, but ingenious and creative solutions were reached that allowed them to do their internships also remotely.

Another of the strengths, which the pandemic has not been able to disrupt, is that students interact through forums, in virtual face-to-face classes, in group work they have in other subjects, having access from home to all the material they need to develop their studies, also including access to research resources.

Regarding the specialty of Geography and History, it has a teaching staff that has experience teaching in Compulsory Secondary Education and Upper Secondary in the branch of Social Sciences. This means that the didactic material prepared and the proposals for activities and class dynamics are focused in an active and practical way, from their own experience, so that the students reflect, work and elaborate materials on cases that they will have to face. when it comes to being teachers at these educational levels.

This practical and active learning is carried out in a collaborative way, in groups, which encourages teamwork and also initiative when proposing solutions, a fundamental factor in their future teaching to be able to coordinate with their other colleagues in the cycle of professional training, so that in the end the beneficiary of this collaboration and good dynamics between teachers is the students.

Working in small groups makes it possible to partially recover that loss of physical contact that occurs from face-to-face to remote teaching. In the sub-rooms of Adobe Connect, they can turn on the microphones and even the web cam, going from the silence of the chat in the main room to being able to hear their voices, what they think, what they express, what they feel, through voice, obtaining feedback on the practical activity that is being carried out.

Finally, something as important as it is the vocación is inherent in the profile of students in this specialty. There are others where the student seeks a way out of the job burnout suffering, thinking that everything is being professor easier and bearable. Fortunately, in the specialty of Geography and History, although they seek work motivation as teachers, in this case it is vocational.

Weaknesses

Linking with the last point above, it does not go unnoticed that the lack of physical interaction between students and students and teacher is scarce. When we do not use cameras and microphones, either because they do not have that resource or because there are too many students in the class to be able to use them, we lose the visual and sensitive contact that helps us so much to know if they are understanding or not, if they are motivated, excited or bored. In these cases, the only way to get feedback from them is to ask them directly and have them write through the chat. It is one of the many reasons why this work in small groups was chosen, breaking that silent barrier of platform chat.

As frequently appears in the literature on active methodologies, these entail a greater workload for the teacher. It is not the same to coordinate proposals, assignments, activities or discussions carried out by a small group of students than by numerous groups in the sub-rooms of Adobe Connect. It is something that is detrimental to quality.

Opportunities

An opportunity for the future, accentuated with the COVID-19 pandemic, is universal access to this type of training. Both students and teachers can study and teach from anywhere in the world with Internet access. In fact, UNITE has offices across all continents and transformation to take exams on line, access is unlimited as long as there is access to the Internet.

This universal access from anywhere encourages the inclusive training of people in the most diverse contexts by having access to all training from their homes. For example, people with disabilities who have adapted their houses, eliminate possible architectural barriers to access to face-to-face teaching centers. Other examples may be the case of people who, for work or lack of time, want to renew, refresh and resume studies, in person could not, because in this type of flexible teaching can bring their own pace.

For the non-native digital population, it is an opportunity to recycle and improve their skills related to ICT (ICT, TAC), and this can be extrapolated to better management in their jobs in which the requirement of a correct management of computer interfaces is necessary, as well as on a day-to-day basis.

Referring to the specialty of Geography and History, these are young students, most of them digital natives, recently graduated, with which they perfectly handle all kinds of digital tools and adapt very quickly to the use of new ones for them, such as they can be the Padlet or Mindmeister platforms.

Finally, whether it is digital native or not, the platform allows access to both students, professors and researchers, to a series of resources of proven scientific quality through, for example, Dialnet, eBooks, ERIC, Google scholar, Scielo, Springer journals, GRAO (magazines education), Scopus, web of Science, etc.

Threats

On the other hand, the type of students who access this type of training is very heterogeneous in age ranges and previous teaching experience online and all that it entails. It has been found that digital natives have no problem working as a team and they function perfectly in virtual environments, working with tools and platforms on the internet to develop educational material. Students of a higher age range have more difficulties, but with the methodology of group work, with a heterogeneous distribution, this gap can be partially bridged by achieving satisfactory results from the students.

One thing the pandemic has highlighted is the digital divide. There are areas where they do not have access to the internet and / or sufficient computer resources, so they cannot access this type of training. Many students in face- to- face training centers have not been able to continue their studies due to confinement and state of alarm. It is also the case of people who could access higher studies online, they do not have the possibility in person, but lose this opportunity because of the digital divide.

Despite the paradigm shift and despite the fact that there is continuous evaluation, the final form of evaluation is the traditional exam. The Master's students work and learn with active, practical and motivating methodologies, but at the end of the journey they find the usual final exam, which no matter how practical the questions are proposed, demotivates and discourages them. Besides, the content of the exam questions goes through the control of the departments.

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