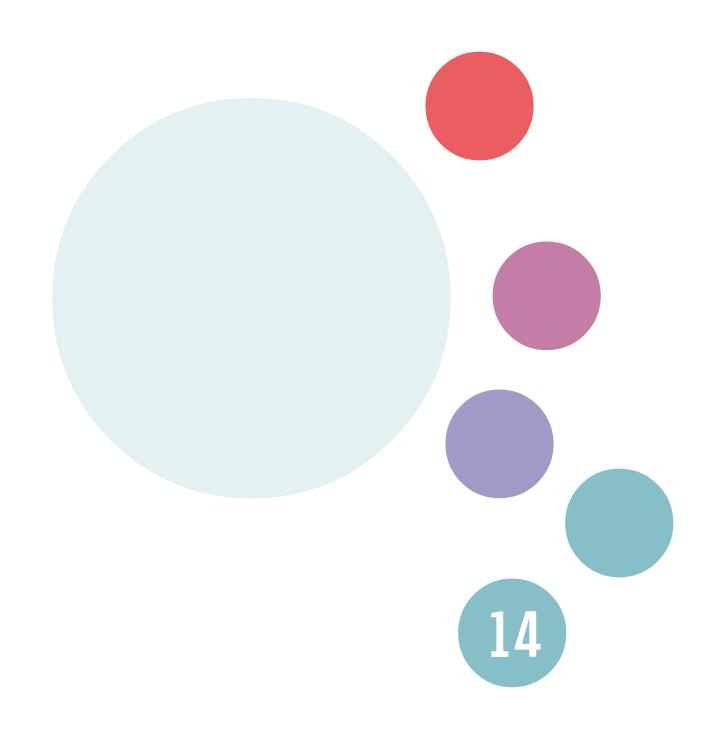


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# THE USE OF EDUCATIVE VIDEOS TO DEVELOP CRITICAL COMPETENCES MARI-CARMEN CALDEIRO-PEDREIRA Universidad de Santiago de Compostela, Spain TEREZA HAVRÁNKOVÁ University of West Bohemia, Czech Republic

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Key words: ICT, videos, critical competence, students

**Abstract:** An increasingly technologically driven society and the expanding number of communication tools have lead to the development of new forms of teaching. Nowadays it is practically impossible to teach using traditional methods/approaches. The emerging world of media requires educators to implement new teaching-learning methodologies that enable students to acquire skills for life in society. These skills help them to prepare for a working world in which they will have to face the challenge of utilizing intercommunication skills and understanding.

Therefore, by applying a literary review, this research focuses on analyzing the educational potential of videos and their application in the educational systems of the 21st century. When implementing video activities into classes, students become co-designers of their own knowledge base. To transmit acquired knowledge, students need to develop critical thinking skills as these skills enable students to act autonomously and responsibly.

The main objectives of this paper are: learning and constructive learning that is carried out in an orderly manner, supervised by people who specialize in different subjects.

This study aims to analyze research that has been conducted in the field and prove that there is a need to evolve the traditional approach to teaching. Finally, the study presents the current situation and the future direction for future development.

# Introduction: Which is the real situation nowadays

Development of media competency is necessary in a digital context, where people spend more than 6 hours connected to screens. We live in a multiscreen society (Pérez 2008) that often requires a continuous use of technology and digital devices. It is normal and relatively simple to exemplify because if we think about a normal day, people use digital devices from the break of dawn until long after sundown. One such device may be used in the first hours of the day (the system we use to wake up) or then, when we leave our homes (probably by elevator). These cases confirm the enormous and continuous uses of technology.

In spite of this reality, nowadays, there is a lack of educational policies that can be used as an element to follow. Formal education has an objective: to teach students to obtain a certificate. It is very important to acquire the knowledge in the theoretical and practical way because OCDE (1996) proposes that education should focus on skills that are necessary to prepare for future jobs. In this context, there is a big problem that can be presented from two points of view. On one hand, media ecosystem has changed and on the other hand educational policies and educative methodologies have been the same for many years.

In this sense, this research proposes a different methodology detailing how to obtain a better education. ICT, digital media and screens are part of our reality and students use them from childhood. In general, society infoxicated (Aguaded 2014) and people need to acquire critical competence (Caldeiro y Aguaded 2015) in order to survive in a digital society. Students in particular need the application of new methodologies in classes where digital devices are implemented, and they demand that teaching methods be reformed. These new teaching strategies are very and important and can increase results all around, regardless of the subject being taught. The advent of a technology dependent society and the increase in the

number of communication tools have given rise to the development of new forms of teaching. At the present time it is practically impossible to teach using traditional approaches. This concept is reinforced by studies which explore the relevance of new methodologies (Espejo y Sarmiento, 2017).

This context justifies media literacy as a means to survive in a digital society. Since the end of the last century, this discipline has been proposed by the European Parliament and the European Commission as a way to integrate media in every aspect of life. Moreover, the same opinion is held by educational institution and reports of teachers including media literacy in their teaching have surged However, in general, educational policies do not include any particular recommendations as to how to implement it into different subjects in order to conform to curricula. Despite this fact, there are researchers who focus on good practices that are used in different contexts (Caldeiro-Pedreira, Aguaded and Pérez-Rodriguez 2019).

Nevertheless, some initiatives can be mentioned, studies which refer to media competence and digital competence as a ways to obtain critical competence. For example, the Comunicar Group in Huelva (Spain) works on Media Lit and Media Competence. In this sense, a lot of research can be used to argue the relevance of media competence and its usefulness in academic settings. In this sense it is necessary to explain audiovisual competence as an ability that spans six dimensions (Table 1).

TABLE 1. DIMENSIONS OF MEDIA COMPETENCE		
Dimension 1	Technology	
Dimension 2	Language	
Dimension 3	Interaction	
Dimension 4	Production	
Dimension 5	Axiology	
Dimension 6	Esthetic	

Source: Adapted from Ferrés (2007)

Despite this, it is necessary to establish active methodologies, such as new approaches to synchronizing ICT, educational objectives, and new forms of teaching. Different processes of obtaining results allow curricula objectives to be met. In this sense, a flipped classroom is a good example because it seeks to improve the relationships between students. This and also uses educational videos and systems considered appropriate in order to obtain adequate results in subjects in different fields.

# Relevance of educational videos

The flipped classroom is a teaching model based on the principle that teachers prepare educational videos or online video lectures for students prior to class, and the class time itself is dedicated to active learning activities (Bergmann and Sams 2012). Educational videos have been around for some time, and a great amount of research proves that the use of videos can be a good tool for enhancing learning (Brame,2015). What makes educational videos such an effective tool for learning? Kay (2012) points to five positive perceptions of students on educational videos: learning improvement (learning anywhere, anytime, at any

pace), positive attitude towards videos (videos are effective, helpful, motivating), shifts in learning style, regular class attendance, and improvement on tests and with related skills.

When utilizing videos in classes, it is important to consider video design (Guo & Kim & Rubin 2014) conducted research focusing on analyzing the attitude of 127, 839 university students toward watching educational EDx videos in math and science classes. The results of his study show, for example, that students are more engaged when the videos are shorter than 6 minutes, are recorded in Khan-style (talking head), or are filmed in informal setting. Shoufan (2019) adds that students tend to like educational videos when they understand the explanation potion, when the video implements some aspects like animation, when the quality of recording is good,, and also when the sound quality and voice of the speaker are pleasing.

Furthermore, it is indisputable that the use of videos can become a more effective tool when the media includes some interactive features that help students understand the content and track their own understanding (Brame 2015) i.e. when students take an active part in the learning process. According to Baker (2016) when students do not interact, they probably fail to learn.

Brame (2015) mentions that guiding questions, which students answer while observing a video, enables them to be active learners. Lawson (2007) adds that students who were asked to answer questions while watching videos achieved higher scores than students who watched videos without answering any questions. Lawson also adds that "giving students guided questions to answer while watching an educational video may improve their achievement by helping them select, encode, and record the important information in a video".

Technology helps to enhance not only the production of videos, but also to make the videos more interactive and engaging for students. Baker (216) states that some of the interactive elements of video learning are: quiz questions, links to Websites, audio overlay, posting comments, and assessment results.

There are different applications such as EdPuzzle or Playposit that allow teachers to insert questions into videos and make videos more interactive. EDpuzzle is a tool which enables teachers to "upload a video from a computer or find a public video from a hosting Website." Users of the application can modify the length of the video, add subtitles, voice over or insert questions. After students have seen a video, teachers can track whether the students have seen the entire video and also assess replies to the guiding questions.

The above recommended features of educational videos can help teachers to prepare interactive video lessons for their students which they can watch prior to class. The lesson time can be therefore open to discussions and activities which can help students to develop their critical thinking skills. In addition, according to Mu&Paparas (2016, p.45) educational videos "..... can free up the class time that lecturers are able to devote for learner-centered activities such as problem solving and active learning".

## Methods

This research presents a analytically descriptive methodology. It research analyses the real situation

through a bibliographic review and argues, through a descriptive methodology, the relevance of new strategies and good practices to teach in twenty one century. At the same time, it proposes the use of educational videos to develop media competence in citizenship in general and particularly into students.

### Results

This kind of methodology, based on cooperative work and with a new educational philosophy, increases students' participation in class and virtual environment (Garcia-Aretio 2018). For example, to design an educational video it's necessary to develop technological dimensions insofar as students must use technology to record their product. They must also create a text using proper language, then they must develop the language dimension. In summary, they must be a prosumer (García-Ruiz, Ramírez, Rodríguez-Rosell 2014), that is to say, people who create, are active with, and responsible for images and content. Besides this, they must create an educational video using axiological values and they must respect esthetic dimensions.

If students develop all of these dimensions, they will achieve critical competence and they will become a citizen of the media (Gozalvez 2013). In order to obtain this objective, students must practice new methodologies in their classes. That is, new forms of learning which underline their relevance. To obtain these objectives, the lifelong training of teachers in multiple literacies is also necessary (Bergomas 2019).

To teach using new methodologies, as it is, for example, in different schools in Spain (Table 2) it is necessary to train teachers well. They must be integrated (Eco 1993) with the use of ICT and they also develop media competence because they must teacas the example.

TABLE 2. DIMENSIONS OF MEDIA COMPETENCE			
1. Congrès-Indians	A project based on the principles of active and active education		
2. LA QUINTA'L TEXU	College of active non-directive pedagogy		
3. Ikastola Arizmendi	Confident pedagogy		
4. Colegio Público Princesa de Asturias	It follows a philosophy is based on the fact that the school is a place to learn to learn		
5.CEIP Ponte dos Brozos (https://bit.ly/2Eshhxh)	In this example technology is put at the service of pedagogy		

Source: adapted by 25 innovative schools (https://bit.ly/2EBiLoK)

The last example in Table 2- CEIP Ponte dos Brozos (https://bit.ly/2Eshhxh)- has been selected by Unesco as one of the seven best examples in the world using ICT in education. This confirms that the use of ICT and new pedagogies not only reinforces knowledge, but contributes to the development of responsible, critical and autonomous citizenship.

Definitely, this research demands the use of new educational methodologies that require hard work from teachers and, at the same time, a change in the teacher's role. In order to obtain this goal, the design of educational videos could be a good approach.

### Conclusion

In this sense, media literacy is a good discipline to improve in order to develop skills in digital society. In general, citizens must achieve a higher level of literacy. To achieve this objective, training is necessary "to reflect on the education that the young generations need" (Daza 2010). In this way, education and communication require people to work together because in a digital society, people need to develop different types of knowledge. In such cases, media education (Pérez 2003) could be an alternative approach to contributing to the achievement of twenty-first century skills. These days wisdom that prepares students for both virtual and classroom contexts is desirable. Because of this, educational videos are proposed as a part of an adequate methodology to reinforce millenial and non-millennial knowledge.

In other orders of things, the possibility of using ICT to innovate must be taken into consideration. In this sense, there are many experiences (Table 2) that can act as important models for other schools. In reference to schools that are working with new pedagogies, methodologies that aim for collaborative work and provide opportunities to work based on the necessities of digital context. Besides this, good educational practices (Caldeiro-Pedreira, Aguaded and Pérez-Rodríguez 2019) are an example of that which must be riposted in academic life on all educational levels.

In conclusion, lifelong learning (Longworth 2005) is proposed as an approach that must be implemented into every person's life. Nowadays, the continual development of the media requires continuous and systematic training for teachers.

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