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Italian and Spanish Students' Perception on Use of Technology in Classrooms of Classics in Secondary School

Percepción de los estudiantes italianos y españoles sobre el uso de la tecnología en las aulas de clásicos en la Escuela Secundaria

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ABSTRACT

A society that is becoming increasingly digital must explore new ways of learning. In fact, digital technologies have an impact on the education through the development of more flexible learning environments adapted to the needs of a high-mobility society. To prepare future citizens to the needs of the digital labor market, recent educational reforms in Italy and Spain focused their attention on students' Digital Competences. Therefore, we are interested in probing how students of classical studies in Italian and Spanish high schools perceive the use of new technologies in the classroom. It is important to investigate classics at school, because traditionally this program is perceived as less useful for employment. We used a qualitative case study methodology and collected data through semi-structured interviews with students from both nationalities. Open-Code software was used to analyse the data. The main content categories identified were: use of technological resources in the classroom, teaching methods, useful Latin and Greek competences for job placement. The results showed that students, especially Italians, perceive a lack of technology usage in the classroom due to teacher-centered instruction prevailing. Moreover, students who use technology in the classroom are not aware of its usefulness in their future job. Conclusions will offer suggestions to students of classics.

RESUMEN

Una sociedad que cada vez es más tecnológica debe explorar nuevas formas de aprendizaje. De hecho, las tecnologías digitales tienen un impacto en la educación a través del desarrollo de entornos de aprendizaje más flexibles adaptados a las necesidades de una sociedad de alta movilidad. Para preparar a los jóvenes en su futura incorporación al mercado laboral, las recientes reformas educativas en Italia y en España han centrado su atención en las competencias digitales de los estudiantes. Por ello, estamos interesados en investigar cómo el alumnado de estudios clásicos en escuelas secundarias italianas y españolas perciben el uso de las nuevas tecnologías en el aula. Es relevante investigar acerca de los clásicos en la escuela porque tradicionalmente estas materias se perciben como menos útiles para el trabajo. Utilizamos una metodología de estudio de caso cualitativa y recopilamos datos a través de entrevistas semiestructuradas con estudiantes de ambos países. Se utilizó el programa OpenCode para analizar los datos. Las principales categorías de contenido fueron: uso de recursos tecnológicos en el aula, métodos de enseñanza, competencias latinas y griegas útiles para la colocación laboral. Los resultados mostraron que los estudiantes, especialmente los italianos, perciben una falta de uso de la tecnología en el aula y el uso de la enseñanza tradicional expositiva prevalece. Los que usan la tecnología en el aula no son conscientes de la utilidad para su trabajo futuro. Concluimos con sugerencias para estudiantes de lenguas y cultura clásicas.

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1. Introduction

Europe is facing a progressive digitalisation of society to such an extent that many of the current employment types did not exist a decade ago, with many more new ones to emerge in the coming years (European Commission, 2017). For this reason, the guidelines established by the European Digital Agenda 2020 had set the objectives of digital inclusion to improve citizens literacy and digital skills (Cortés, Caro, & Bosch, 2016).

The Council Recommendation on Key Competences for Lifelong Learning (European Council, 2006) had indicated Digital Competence as a transversal key competence with another seven key competences. It is a combination of knowledge, skills and attitudes appropriate for any activity in each context.

Different approaches of competence

Although there are different definitions of competence (e.g., Bicocca-Gino, 2017; Di Pietro, 2014; Vidal Ledo, Salas Perea, Fernández Oliva, & García Meriño, 2016), it is currently a multidimensional concept based on a person's ability to perform well. Nevertheless, some elements are repeated and establish the essence that can be found in these definitions: knowledge systems, habit and skill systems, attitudes and values, expectations, relationship with the activity, problem solving and decision making (Wen & Shih, 2008).

Díaz-Barriga (2011) sums up these main approaches (Table 1):

- The labor approach shows the direct relationship between competences and work.
- The behavioral approach is linked to the development of good behavior in the workplace.
- The functional approach underlines key competences, functional individual and new citizenship.
- The socioconstructivist approach empathises the role of the subject in the construction of knowledge, the learning context, and the stages of development of a competence.
- The pedagogical-didactic approach proposes an active education, student centered.

Labor approach	Behavioral approach	Functional approach	Socioconstructivist approach	Pedagogical-didactic approach
Direct relationship between competen- cies and work	From the theory of Human Capital: it arises from a strictly economic paradigm	Need to articulate what is learned in school with everyday life	Importance of measurable performance	Importance of personal experience
Importance of flexibility and ability to solve problems	Immediate objectives: professional prepa- ration and success at work	Importance of key competences, functional individual and new citizenship	Role of the subject, situa- ted learning, graduate each learning process	Student centered
	Medium-term objectives: economic growth			

Table 1. Main approaches of competence. Source: adapted from Díaz-Barriga (2011).

Digital Competence

Digital Competence is defined by Ferrari (2012), comparing the definitions in different frameworks, as

The set of knowledge, skills, attitudes, abilities, strategies, and awareness that are required when using ICT and digital media to perform tasks; solve problems; communicate; manage information; collaborate; create and share content; and build knowledge effectively, efficiently, appropriately, critically, creatively, autonomously, flexibly, ethically, reflectively for work, leisure, participation, learning, and socializing (p. 30).

In Table 2 it can be seen the different parts of this definition.

Digital Competence is	
the set of knowledge, skills, attitudes, abilities, strategies, and awareness	learning domains
that are required when using ICT and digital media	tools
to perform tasks; solve problems; communicate; manage information; collaborate; create and share content; and build knowledge	competence areas
effectively, efficiently, appropriately, critically, creatively, autonomously, flexibly, ethically, reflectively	modes
for work, leisure, participation, learning, and socializing	purposes

Table 2. Different parts of digital competence definition. Source: Ferrari (2012, p. 30).

Firstly, the learning domains are listed: to the three constituent parts of a competence (knowledge, skills, and attitudes) some frameworks add awareness and strategies. The tools generally include ICTs. It is important to note that the competence areas include other citizenship competences, such as communication and information management. The modes refer to "how" learners should ideally use digital media. Finally, purposes are in line with commonly agreed purposes for digital literacy.

Digital literacy and information literacy

Digital Competence is connected to digital literacy (DL) and information literacy (IL) (Ferrari, 2012). UNESCO (2008) proposed a definition of IL as the ability of people to recognise their information needs; evaluate the quality of information, apply information to create and communicate knowledge in a problem-solving context. Therefore, information literate people can recognise when information is needed in all aspects of personal decision-making (Koltay, 2011).

DL is a part of IL (Bielba Calvo, Martínez Abad, & Rodríguez Conde, 2016; Gane, Zaidi, & Pellegrino, 2018; Gilster, 1997; Guzmán-Simón, García-Jiménez, & López-Cobo, 2017; Testoni, 2014). It applied in the 1990s to denote the ability to read and comprehend hypertext (Bawden, 2001). Livingstone (2003) states that literacy is not user dependent but tools dependent: reading a printed book or an online one requires different skills. Newman (2008) proposes looking at DL as the use of critical thinking skills in the context of technology use.

Digital technologies and high mobility society

Digital technologies require more flexible learning environments adapted to the needs of a high mobility society (Carretero, Vuorikari, & Punie, 2017; Martín, González, Sanches-Ferrerira, & Diogo, 2018).

From an epistemological point of view there are various ways to consider high mobility (Viry & Kaufmann, 2015). One of those perspectives considers it as a practical consequence of an ideology of speed to which we are all subject, especially evident in the labour market: moving quickly, far and often has become an imperative for those who claim to be dynamic, motivated and ambitious.

In our paper we take into account this perspective for indicating new ways for students to learn (Gisbert, González, & Esteve, 2016).

Background: Digital Competence in Italy and Spain

Each European nation adapts the European Framework of Key Competences to national circumstances (European Commission/EACEA/Eurydice, 2012; Halász & Michel, 2011).

In Italy, for example, the Decree n° 139/2007 "Regolamento recante norme in materia di adempimento dell'obbligo di istruzione. Decreto ministeriale n. 139, allegato 2" (Ministero dell'Istruzione, dell'Università e della Ricerca, 2007) identified eight citizenship competences for compulsory education: Communicating, Problem solving, Acquiring and interpreting information (Digital Competence), Learning to learn, Collaborating and participating, Designing, Acting autonomously and responsibly, Identifying links and relationships.

In Spain, according to the LOE (Gobierno de España, 2006) and the LOMCE (Gobierno de España, 2013) these competences are: Language communication, Mathematical and basic competences in science and technology, Digital skills, Learning to learn, Social and civic skills, Sense of initiative and entrepreneurship, Awareness and cultural expressions.

The Digital Competence is important both for Italy and Spain. However, Digital Economy and Society Index (DESI) Report 2018 (European Commission, 2018) about digital inclusion and skills shows a very different rank between DESI of Italy and Spain. Spain is in tenth place, while Italy is twenty-sixth. In 2016, 44% of the EU population had an insufficient level of digital skills: Spain was eighteenth, while Italy is twenty-seventh.

Classical studies in Italy and in Spain

In Italy, *Liceo Classico* and *Scientifico* are part of the Upper Secondary School Education (*Scuola Secondaria di Secondo Grado*; Figure 1): these are the last European school addresses where it is compulsory to teach classical languages (Governo di Italia, 2010).

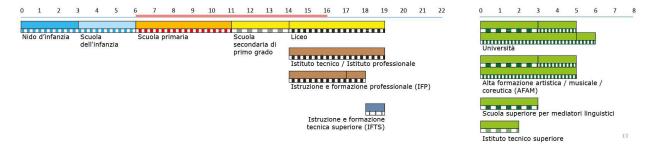


Figure 1. Schematic diagram of Education System in Italy. Source: European Commission/EACEA/Eurydice (2018, p. 18).

In Spain students start to study Latín at *Educación Secundaria Obligatoria (ESO*) with Classics Culture. Afterwards, students can choose the *Bachillerato* that has three modes: Sciences, Humanities and Social Sciences, Arts. Classics are in Humanities and Social Sciences (European Commission/EACEA/Eurydice, 2018).



Figure 2. Schematic diagram of Education System in Spain. Source: European Commission/EACEA/Eurydice (2018, p. 16).

As we can see in Italy Secondary School starts at 11 years old for Italian students and at 14 years old they start the *Liceo*; that it is divided in low studies (first and second year) and high studies (third, fourth, fifth year). On the other hand, in Spain, Secondary School starts at 12 years old with *Educación Secundaria Obligatoria* (*ESO*) and students start the *Bachillerato* at 16 years old.

Therefore, to facilitate the comparison between the two educational systems, we can consider lower studies the first two years of the Italian *Liceo* and the *ESO*, and higher studies the last three years of the Italian *Liceo* and the first and second of Spanish *Bachillerato*.

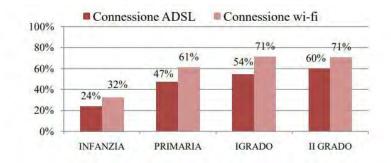
Classics and Digital Competences

In line with the demands of the knowledge society, in 2016 the Italian Ministry of Education (MIUR) organised a conference entitled "The *Liceo Classico* of the future: innovation for the identity of the curriculum" (MIUR, 2016) that brought together researchers from different disciplines (humanities, scientific, artistic, technological, legal, economic) with school managers and teachers. The conference concluded with the aim of exploring the relationship between competences and classics through other seminars. One of these took place in May 2018, during which the Portal of the National Network of Classical High Schools was presented (MIUR, n.d.). The aims were to encourage the process of spreading the humanities culture, as well as the renewal of the Classical Lyceum.

Regarding the relationship between classical studies and competences: Perla (2016) underlines that these words may seem semantically and historically distant: on the one hand, classics has a very ancient tradition, based mainly on theoretical rationality (from the Greek word *theoréo*: I observe). On the other hand, competence has a modern meaning, which is based on a practical rationality and has its roots in experience. According to Perla (2016), to overcome the old dichotomy between secondary schools, as schools of knowledge, and technical institutes, as schools of competence, it is necessary to make changes in didactics and curricula.

Indeed, the main method used by teachers of the classics up to 10 years ago was the grammatical translational approach, based on a deductive normative learning of the grammatical rules of the language. It is based on the translation of sentences appropriately chosen, because the translation is considered as necessary and indispensable for understanding of classics text and it is enough to use a simple dictionary (Mangiavini & Bettoni, 2009). However, these authors claim that a linear thinking and a transmissive logic are not useful to the challenges of the 21st century. Rather they emphasise how much translation should be understood as a true scientific "problem-solving" activity; this must take into account the complete evolution of the process. In this way a process oriented educational activity makes a real "transference", i.e. the acquisition of competences and resources that are dynamically transferable to another context, personal or professional (Mangiavini & Bettoni, 2009).

Some studies show how it is possible to integrate new technology in didactics of classics at University (Vlachopoulos & Gómez Cardó, 2013; Macías & Ortega, 2004; Van Hal & Anne, 2017). In fact, we have technological tools for asking more sophisticated questions to Latin and Greek sources and methods for studying texts at scales previously impossible (Bodard & Romanello, 2016).



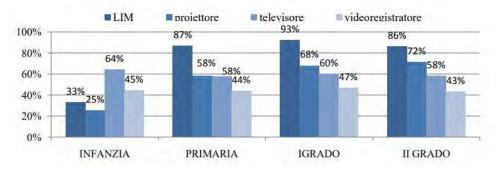


Figure 3. Availability of technology at school and percentage of respondents by school grade. Source: Calzone & Chellini (2016, p. 32).

What is the situation about this topic in secondary schools?

In Italy the law 107/2015 (Governo di Italia, 2015) promoted a new National Plan for Digital School, aiming for a new positioning of the educational system in a digital age.

The Report on the monitoring of teachers Digital Competences in South Italy (Calzone & Chellini, 2016) shows teachers use new technologies only for some activities. It is important to note that, for secondary school, among the teachers who participated in the survey, the percentage of those who teaches Latin and Greek and foreign languages is 14%.

Considering the availability of technology in schools, we observe (Figure 3) that the use of new teaching tools (IWB or LIM and projectors) increases with the growth of the scholastic grade compared to more traditional ones (TV and VCR).

Among the Upper Secondary Schools, the *Liceo* (Figure 4) has invested more in the purchase of the IWB: the teachers declare, in fact, that in their educational complex there are between 11 and 30 LIM (32%) and between 31 and 50 LIM (25%).

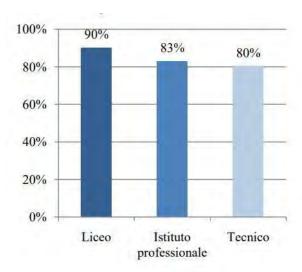


Figure 4. Percentage of respondents who declare that they have access to at least one IWB in their own school. Source: Calzone & Chellini (2016, p. 33).

However, there is a lack of specific studies into the student perception of using technology in their classes for classical languages.

Research question and aim

Therefore, we ask ourselves what is the student perception of classical disciplines in secondary school regarding the use of new technology in class and what competences would they consider to be developed within these studies.

2. Methodology

Study design

Using an advocacy/participatory worldview approach and a qualitative case study methodology (Creswell, 2013), we collected data in February 2018 from 3 Italian and 3 Spanish high schools, interviewing students from high schools in Italy and Spain.

Italy and Spain were chosen because the study is carried out within the framework of a doctorate in co-tutelage between the University of Palermo (Italy) and the University of Burgos (Spain).

Tools and materials

We conducted semi-structured interviews adapted for students from Lloyd's (2017) onwards. The interview questions investigated student opinions regarding: the reasons why they chose to study the classics, teaching methods, use of technology in the classroom and the links between competences and the classics.

Interview topic guides

Reasons why student study the classics

- 1a. Why did you choose classical studies?
- 1b. What competences would you like to develop through your studies of the classics?

Opinions on teaching methods

- 2a. Can you explain to me what takes place during a classics lesson?
- 2b. During the class, what are the moments that interest you the most?

Opinions on the use of technology

- 3a. What types of new technology does your teacher use during your class?
- 3b. Do you think it is beneficial to use technology in the classroom?

Links between life and study

- 4a. What competences would you hope to develop if you were to use technology more in your classics lessons?
- 4b. To what extent do you think this will help you in your future work?

Following the Ethical Guidelines for Educational Research (British Educational Research Association, 2018), letters of introduction were sent to all participants, requesting their informed consent to take part in the study, ensuring the appropriate use of the information obtained.

Participants and setting

We used a theoretical sampling (Bryman, 2016, p. 410): "What distinguishes theoretical sampling from other sampling approaches is the emphasis on the selection of cases with reference to the quest for the generation of a theoretical understanding".

We identified public schools based on teachers who were interested in research and we interviewed students in both lower and higher tiered classes.

The sample consisted of 40 students (20 Italians - abbreviated to IS - and 20 Spaniards - abbreviated to SS -) Secondary School near Turin (North of Italy) and Palermo (South of Italy) and near Madrid (Central Spain) and Burgos (North of Spain); aged between 14 and 18 years; male (8 Italians and 10 Spaniards) and female (12 Italians and 10 Spaniards). Five Italian students were from first and second years of *Liceo Classico*; seven Spanish students were from the fourth year of ESO. Fifteen Italian students were from third, fourth and fifth years of *Liceo Classico*; thirteen Spanish students were from first and second years of *Bachillerato* (Table 3).

In the categorisation phase of the variables, we distinguished between lower studies (the first two years of the Italian *Liceo* and the ESO) and higher studies (the last three years of the Italian *Liceo* and the first and second of Spanish *Bachillerato*).

Participant s	Male	Female	Lower studies	Higher studies	Average age
20 Italian Students	3	17	5 (IS 1, IS 7, IS 10, IS 18, IS 19)	15 (IS 2, IS 3, IS 4, IS 5, IS 6, IS 8, IS 9, IS 11, IS 12, IS 13, IS 14, IS 15, IS 16, IS 17, IS 20)	15,94
20 Spaniard Students	7	13	7 (SS 1, SS 2, SS 3, SS 7, SS 13, SS17, SS 18)	13 (SS 4, SS 5, SS 6, SS 8, SS 9, SS 10, SS 11, SS 12, SS 14, SS 15, SS 16, SS 19, SS 20)	16,60

Table 3. Study sample. Source: own processing.

Data collection and analysis

The semi-structured interviews were transcribed and imported into the OpenCode software (Umeå University, Sweden, n.d.) for data analysis through coding, an analytical process of assigning words, themes, or categories to pieces of texts that were relevant to the research study (Creswell, 2013).

The main categories of content that were taken into account were: use of technological resources, traditional teaching methods and competences for job placement.

3. Results

In order to analyse the material collected, we took into account the content categories mentioned below.

- 1. Use of technological resources: refers to the technological resources used by classical languages teachers. Student comments listed in order of most popular digital tools used within the classroom:
- a. The IWB (Interactive Whiteboard): is a large, touch-sensitive board, connected to a computer and to a projector which offers an attractive colorful picture, that enables manipulating of texts by deleting, coloring and saving them, including the combining pictures and applications.

"We do a lot of lessons using IWB and we do Latin competitions with phrases to translate and analyse" (IS19).

b. Another tool is the computer, which is used to watch slides or videos, as stated by Italian and Spanish laws.

"My teacher prepares slides to project and in these slides there is the essential information for the lesson" (IS 2).

"The PC compliments the digital screen, we can see images, or a YouTube video, they seem useful, I think, as it is said 'a picture is worth a thousand words' and sometimes it is worth seeing a picture" (SS 12).

"Videos, internet, the digital book. They are very useful, for example, he (the teacher) played a video for us and it gave me much more than all the theory he had provided us with" (SS 15).

"Very occasionally he puts some video on the projector screen, to project some literature sheets for us to read" (SS 17).

c. In one case we have also found the use games and mobile phones: as students find video games attractive and they may help to motivate students:

"Computer and mobile phones. We use a website called *Kahoot!*, it displays questions and we answer them with our mobile phones: it's like a quiz. " (SS 20).

2. Traditional teaching: this category refers to a traditional teaching methodology. The traditional learning is known as frontal teaching, or teacher-centered instruction, and refers to the practice in which a teacher stands in front of a class, talking to impart knowledge to the students.

"Normally it's all very routine, everything on the blackboard and that's it, sometimes we put the digital whiteboard on, to focus on texts like that, but it's very traditional" (SS 13).

"Surely not! Our teacher doesn't use any technology. She explains everything by voice or paper" (IS 1).

"It was always all paper. We only use the book or the notebook to take notes or write down the rules and exercises" (IS 10).

"Without technology, only the book, only the book, sometimes we use the multimedia whiteboard to look for some songs or some images" (IS 7).

"No, we have the IWB in the classroom but he uses blackboard and chalk, it's as if the IWB didn't exist..." (SS 7).

"No, our teacher is very traditional, he translates without using the dictionary, sometimes we use the IWB because maybe not everyone has the book to have the text in front of them, but not tendentially" (IS 14).

"We have the IWB in the classroom, but honestly for Greek and Latin we don't use it, we only have the traditional method... I've never tried other technologies, so I can't give an opinion" (IS 15).

"Actually almost none, if we need it because the version isn't in the book we put it in the IWB and we can see it and then print a copy... Latin also is very long and boring like a road, because it takes lots of memorising" (IS 18).

"We have the IWB, but in Italian, and not in Latin. We use it mainly to see some texts and some sites, but not, in general, it is very traditional" (IS 20).

"Usually our teacher handles the lesson, usually by following the book, she is very prepared" (IS 4).

"Mainly it is a frontal lesson" (IS 5).

3. Competences for job placement: refers to the student perception of the relationship between competences required in the labor market and those developed through the translation of classical texts (including Digital Competences).

"Frankly, I don't think so, because a pilot doesn't use Latin or terms derived from Latin, he uses English or Italian, not Latin!" (IS 1).

"I think zero. I think I will do business administration work in some company, so I don't think Latin is very useful, but you never know" (IS 16).

"In my opinion, it is also useful to study Latin, for those who want to take the path of medicine, many things in medical books are written in Latin" (IS 13).

"I don't know, because I don't know if it would be useful for the work I would like to do, I would like to be a policeman and I honestly don't know if there is any connection with this profession" (IS 19).

"At work, I don't think a manager would ever speak to you in Latin. I have never heard about it. Even in this case, you would make a great impression if you are able to say a Latin proverb without making a mistake" (IS 20).

"I believe that Latin helps a lot when organizing yourself, as I said before, it is such a logical language. I believe that when working, it helps you to prioritise and to have a kind of compartmentalization. I believe that Latin, above all effects organizational skills and it is fundamental" (SS 12).

"I don't plan to study Latin anymore because I want to be a policeman, but there are things that are related to the law and the police, so this could be useful" (SS 16).

"By studying Latin, one is more used to reflecting on the issues and then perhaps finding the solution quicker. This could be good when a job involves problem solving" (IS10).

"In the case of a translation from Latin or Greek, the fact of having to choose which one could be the best Italian lemma to express better a Latin or Greek word, can be useful. Also at work level as it can be in the case of a manager or where there is a need to make choices that then have a significant importance, certainly the fact of having to stop and reason accurately as you do during a translation, in my opinion that it's very useful" (IS 11).

To sum up, we can divide the perceptions of Italian and Spanish students into the following groups (Table 4): a) Those who use technological tools in classical studies; b) Those who don't use technological tools in classical studies; c) Those who are aware of developing competences, but not directly connected to Digital Competence.

a) Use technological resources		b) Do not use technological resources		c) Classics to develop job skills	
Italian students	Spanish students	Italian students	Spanish students	Italian students	Spanish students
2, 5, 9, 11, 12, 13, 16, 17, 19	1, 2, 3, 4, 5, 6, 8, 9, 10, 12, 14, 15, 16, 17, 19, 20	1, 3, 4, 5, 7, 8, 10, 14, 15, 18, 20	7, 11, 13, 18	6, 9, 17, 18: in order to communicate better	1, 2, 3, 4, 5, 7, 8, 9, 10, 11, 13, 15, 17, 18, 19, 20: in order to communicate better
				1, 13, 16, 19, 20: they don't see any connection	14, 16: in order to work (as a lawyer, archaeologist)
				4, 5, 7, 13, 14: in order to design	12: in order to design
				10: critical thinking	
				11: learning to learn	
				2, 8, 12, 15, 20: life skills	6: life skills

Table 4. Student perception of using new technologies in classroom. Source: own processing.

4. Discussion

On the whole, a reflecting on three categories considered (Use of technological resources; Traditional teaching; Competences for job placement) helps us to understand:

- 1. There are new technologies in the classroom, as stated by Italian educational authorities (Governo di Italia, 2015) and Spanish law (Gobierno de España, 2013). However, regarding the IWB use, only one student said they use it a lot (IS 19). Others say it is little used in the classroom (SS 7, SS 13, IS 14, IS 15, IS 18, IS 20; Glover, Miller, Averis, & Door, 2005). Some students state they use video projectors and computers for seeing slides, digital books or videos from Youtube in lessons (IS 2, SS 12, SS 15, SS 17). This shows generally there is a widespread and informative use of the technology, as said by UNESCO (2011). Although it is a first step for integrating TIC into didactics, it shows where the teacher training is required. Only one case has the second step of UNESCO (2011), with the use of specific app for learning Latin (SS 20).
- 2. Italian students of classical disciplines perceive the prevalence of the use of a traditional teaching methodology (IS 1, IS 4, IS 7, IS 10, IS 14, IS 15, IS 18, IS 20), as Perla says (2016). On the contrary, Spanish students show that they use more technological resources (SS 1, SS 2, SS 3, SS 4, SS 5, SS 6, SS 8, SS 9, SS 10, SS 12, SS 14, SS 15, SS 16, SS 17, SS 19, SS 20). It is in line with Digital Economy and Society Index Report 2018 (European Commission, 2018): Spain has a higher rank regarding digital skills than Italy.
- 3. Spanish students think the classics are useful for job placement, particularly with regards to communication skills (SS 11; SS 15). Italian students, on the other hand, did not see a clear relationships between classics

and future professions (IS 1, IS 13, IS 16, IS 19, IS 20), except for some who consider the development of critical thinking and Learning to learn Competence (IS 10, IS 11; European Council, 2018).

- 4. Some Spanish students confirm that ICTs add to motivation (Bassiouni & Hackley, 2016; Bielba Calvo et al., 2016; Gane et al., 2018) for the studying of Latin and Greek (Perla, 2016; Soler Pardo, 2017): "it is more fun" (SS 15); "it is more useful because images are worth more than words" (SS 12). This confirms what happens, even though in the university context, when the didactic aspect of the classics is innovated (Brailas, Avani, Gkini, Deilogkou, Koskinas, & Alexias, 2017). The authors describe that a course can be divided into four phases: a brief frontal lesson, a "practical" activity, a "reflection on practice" and the tutor aligns students toward theory elaboration and development. This design represents a paradigm shift from the predominant didactic pedagogical model to facilitate students reflection on the contents and processes of the subject.
- 5. Regarding the differences between low and high studies about the use of technology in the classroom, we can see there are no differences in Italy: both students of low studies (IS 1, IS 7, IS 10, IS 18) and high studies (IS 4, IS 5, IS 14, IS 15, IS 20) state a prevalence of traditional teaching and a general lack of technology in their classroom.
- 6. From student answers about their use of technology emerges that it does not depends on the level of schooling. It could be connected rather with the Digital Competence of teachers (Cervera Martínez, & Mon, 2016): if they have a low level of digital skills, they are not motivated to use technological tools in their classroom.
- 7. The use of technology in the classroom of classics is very low, student answers show, and there is a lack of communication between teachers and students regarding the development of citizenship competencies (Lloyd, 2017). It can be seen by the students low awareness of developing competences, it is difficult for students to consider the links between study and life. Lloyd (2017) in fact emphasises the necessity of alignment between objectives, assessments and teaching strategies between teachers and pupil. When students know the objectives, they have the opportunity to practice, get feedback, show their level of understanding, and subsequently the full formative success develops. Using new technology develops reciprocity and cooperation among students; encourages active learning; gives prompt feedback; emphasises time on task; communicates high expectations; respects different talents and ways of learning (Dee, Foradi, & Šarić, 2016). Hence, in fact, if teachers explain this advantages to students, they have a more coherent picture of what is expected of them and they are aware that new technology is useful both for solving problems in schoolwork and for future professional work (Calvani, Cartelli, Fini, & Ranieri 2008; Bielba Calvo et al., 2016; Carretero et al., 2017; Torrecilla-Sánchez et al., 2018).
- 8. To sum up, for an effective didactic innovation, it is not enough that digital tools are present in schools: it is necessary that classics teachers integrate them in their daily activities. For this reason, it is important to verify the IL of teachers (Calvani et al., 2008; Bielba Calvo et al., 2016; Carretero et al., 2017; Casado Muñoz, Lezcano Barbero, Delgado Benito, & Martínez Abad, 2013; Wen & Shih, 2008). In fact, standards for IL competence plays an important role in elevating teachers IL abilities (European Commission/Education, Audiovisual and Culture Executive Agency (EACEA), 2018).

5. Conclusions

We can conclude that students can therefore be divided into the following categories: a) Those who use technological tools in classical studies; b) Those who don't use technological tools in classical studies; c) Those who are aware of developing competences, but not directly connected to Digital Competence.

There are no differences between low studies and high studies, because, generally, in Italy all students perceive a lack or occasional use of new technologies. On the contrary, in Spain new technologies are used indifferently on both levels.

Therefore, according to Bernhard (2002), digital training is very necessary for students of classics because there is the need to know how to critically evaluate the sources of information increasingly available on the web, both during school and professional life. Moreover, there is the possibility of improving and mastering different types of technologies and developing problem solving skills thanks to them.

Indeed, the best way to teach these competences to students is to live them in educative practice, having a rapport with the students, in the way the contents is taught and presented (Casado Muñoz et al., 2013).

The recent developments regarding innovation to be made in the classical high school in Italy (MIUR, 2016) and the creation of the Portal of the National Network of Classical High Schools (MIUR, n.d.) indicate that the perception of an urgent growth in digital skills is shared at the political and institutional level. We have begun to change the classics curricula in view of an education more in line with the needs of today's life. For future lines of research, the perception of classics teachers about their Digital Competence should be investigated.

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