



COLECCIÓN CONOCIMIENTO CONTEMPORÁNEO

**Technologies, multimodality  
and media culture for  
gender equality.  
Advancing in digital  
transformation of education**

**Coords.**

Rocío Jiménez Cortés  
Laura Triviño Cabrera

*Dykinson, S.L.*

TECHNOLOGIES, MULTIMODALITY  
AND MEDIA CULTURE FOR GENDER EQUALITY.  
ADVANCING IN DIGITAL TRANSFORMATION OF EDUCATION



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ROCIO JIMENEZ CORTES  
LAURA TRIVIÑO CABRERA

*Dykinson, S.L.*

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## FEMINIST CONTRIBUTIONS TO EDUCATION IN THE FACE OF THE TRIPLE CHALLENGE: DIGITAL, MEDIA AND MULTIMODAL

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ROCÍO JIMÉNEZ CORTÉS  
*Universidad de Sevilla*

LAURA TRIVIÑO CABRERA  
*Universidad de Málaga*

The network society (Van Dijk, 2020) has completely blurred the traditional difference between virtual and real life. Our day to day is increasingly characterised by our continuous connection to the Internet. Multiple daily tasks merge with hybrid models of face-to-face and online activity, ranging from shopping to attending classes, and meeting for work or recreation, among others.

The moments, resources and contexts of learning in digital society are becoming more open and diversified while at the same time customised, depending on specific interests, motivations and needs. The network society allows and enables us to be part of very diverse groups and communities of effective learning, simultaneously ubiquitous and invisible (Cobo & Moravec, 2011). We could say that we are now facing a new social model characterised primarily by digital learning and interactivity with digital resources in virtual worlds. This places education in the foreground, through commitment and action. New increasingly disruptive digital technologies such as artificial intelligence, new social media and media culture require in-depth knowledge of multimodal learning - especially among those who are dedicated to education and training - where the digital component is omnipresent, inevitable and inalienable.

A few days ago, the press reported on the review that Sweden will carry out of its Digitalisation Plan to improve reading comprehension among students. In this regard, our schools strive to give shape to the digital world and integrate it into teaching. As feminist scholars and critics of

digital technologies and media culture in the field of education, we know that technology is an indispensable space of empowerment and learning that requires us to work conscientiously on multimodal, critical, creative, social and citizenship skills within the framework of a digital world and society, where feminist theories and gender perspective are indisputable (Jiménez-Cortés & Aires 2021; Jiménez-Cortés, 2023; Triviño, 2022).

Nowadays, children and teenagers are constantly and alarmingly exposed to degrading, discriminatory, anti-egalitarian, xenophobic discourses, experiences, content..., without control and without legislation that could help professionals and families to cushion the blow in social and personal terms, which could be devastating over the coming years. The impact of digital technologies on the lives of children and teenagers' mental health is the subject of study and reflection with regard to international regulation (Ghai et al., 2022; Livingstone, 2011; Livingstone et al., 2018). Actions are urgently needed at all political, educational and social levels, allowing digital technologies to be incorporated into the transformation of the world in a safe, equitable, healthy and sustainable way. Feminism becomes a theoretical and practical cornerstone for educational intervention in the framework of this digitalised and hopefully inclusive network society. Some formative experiences carried out by the Research Group on the Didactics of Multimodal Humanities (GRIDHUM1053) and the Permanent Group on Educational Innovation #FEEL (GpIE058) have demonstrated the importance of the feminist perspective in promoting a critical and creative education, committed to social justice. From the use of social media (Triviño et al., 2021) to the critical deconstruction of media culture and the creative construction of one's own multimodal productions that generate critical feminist thinking (Triviño & Chaves, 2022) to contribute to more just, egalitarian and equitable societies through teacher training.

We consider it a priority to incorporate the feminist perspective into recent lines of research on the metaverse and education that suggest the need for ethical education for citizen training in the virtual world (Kye et al. 2021). Indeed, this has become one of the central pillars to the research project entitled *Feminist Ethical Literacy and Multimodal Skills of Young People vis-a-vis Cultural Industries and the Metaverse*

(Universidad de Málaga). This triple challenge - digital, media and multimodal - can converge within a metaversal space that will not only change the entertainment industry but also affect our daily lives, our way of socialising and the global economic system itself (Kim, 2021). Therefore, the creation of metaverses can serve as a space of literacy from an ethical-feminist perspective.

In this context, feminist approaches are paving the way in an extreme quest for survival in new digital spaces full of counter-discourses that are detrimental to life and life in society. It is in these spaces that the gender gap persists (Varoy et al. al., 2023). In the digital and technological realm, women still face inequality both in the conception and design of technologies and virtual worlds and in the creation of emancipatory contents and non-discriminatory, non-intimidating, respectful and egalitarian participation, and even in the field disruptive technologies such as artificial intelligence (Lutz, 2019). Our starting premise is the conviction that we must ensure technologies and media culture are not distanced from feminism. For educators and for society in general, this is the only option available to achieve an inclusive world where women are not left out of decision-making and are not subject to multimodal forms of sexism and expressions of violence.

Therefore, this book represents an advance in the reflection and knowledge about the role of digital technologies, multimodality and media culture in the transformation of education, but in continuous and indispensable interaction with feminist perspectives. The chapters advance theoretical and practical principles and research results that analyse online training, incorporate multimodality, media culture and video games in an analysis from feminist and gender perspectives. The articles presented here develop experiences and research in feminist critical literacies in different digital learning environments and with different technological tools, from social media to video games, exploring the need for training in transmedia and multimodal literacy skills from the perspective of feminism. There are a total of four sections and ten chapters, presented below:

## SECTION 1. FEMINIST DIGITAL TEACHING AND ANALYTICAL LEARNING FOR GENDER EQUALITY IN HIGHER EDUCATION.

In the first chapter on *Theoretical principles and design guidelines for inclusive and feminist online teaching*, professors Miriam Arenas Conejo and Iolanda Garcia González from the Universitat Oberta de Catalunya present a practical guide for online training with a gender perspective, focusing on a feminist and inclusive approach. They analyse the relationship of women to online teaching spaces where the gender category is insufficient. In their chapter, they answer the question: how can feminist pedagogy contribute towards the achievement of an inclusive higher education in the digital society? To do so, they list eight key principles and challenges for the application of the proposal within Higher Education.

In the second chapter on *Learning analytics, teacher training in social sciences and gender. Definitions, references and trends*, Professor Daniel David Martínez Romera from the Universidad de Málaga explains what happens with the quantification processes associated with training in the field of higher education and the relationship it establishes, or can establish, with subjects as socially relevant as the concept of gender. This chapter presents the dating of teaching-learning processes in virtual environments as a unique opportunity to determine measurable evidence on gender singularities in terms of identifying patterns that may or may not converge with current learning models.

## SECTION 2. SOCIAL MEDIA, VIRTUALITY AND MULTIMODAL RESOURCES IN FEMINIST TRAINING EXPERIENCES.

In the third chapter entitled *Memes as an educational tool to analyse hate speech and its counter-narratives. The case of The Little Mermaid*, professors Arantxa Batres Vara and Elisa Isabel Chaves Guerrero from the Universidad de Málaga explore how the meme is a discursive unit capable of perpetuating hate speech and examine the potential of the meme as a multimodal teaching resource in the classroom to build

counter-narratives that encourage critical attitudes among future teachers of different educational stages.

The fourth chapter entitled *The multimodal project 'Observatube' for feminist teacher training through Disney narratives*, Professor Elisa Isabel Chaves Guerrero from the Universidad de Málaga presents a theoretical study that analyses how trainee teachers in their initial training tackle the influence of audiovisual productions present on the YouTube video platform and mainstream culture in the construction of gender identities.

The fifth chapter on *The use of virtual reality as an intervention tool to reduce sexism in video gaming: review and proposals* by Mariela Bustos Ortega, María del Mar Rodríguez Sáez and Gracia Cristina Villodres from the Universidad de Granada outlines an intervention programme to reduce sexism against women gamers through new technological tools: using virtual reality as a psychosocial tool.

The sixth chapter on *The use of the active TikTok app to motivate pre-teens in physical education: a literature review and teaching sequence from a feminist perspective* by Gracia Cristina Villodres, Mariela Bustos Ortega and María del Mar Rodríguez Sáez from the Universidad de Granada outlines a teaching proposal that uses the active TikTok app to promote motivation towards physical education from a feminist perspective.

### SECTION 3. MULTIMODALITY AND GENDER IN THE TEACHING OF SECOND LANGUAGES IN HIGHER EDUCATION.

In the seventh chapter entitled *Approaching education with a gender perspective at university using manga comics*, María Martínez Lirola and PhD student Alba Campoy Martínez from the Universidad de Alicante present a study where the use of multimodal materials can be useful to work with global issues such as gender equality in the English as a Foreign Language or Second Language (EFL/L2) classroom. Moreover, frameworks such as education with a gender perspective (EGP) should also be used so that students deepen their understanding of gender equality and other social issues. In this study, the multimodal texts

selected to work on gender are manga texts. The results show that the majority of students agree with the idea that manga multimodal texts with a gender perspective are effective tools to develop critical thinking, to bring cultural aspects to the classroom and to work on social skills.

The eighth chapter entitled *Informal use of authentic videos: the gender variable* by Ekaterina Sinyashina from the Universidad de Alicante presents a study aimed at analysing the influence of the gender variable on how university students studying English as a FL use authentic videos in the informal environment. The results of the study show that, unlike male students, female students watch authentic videos with their friends more often. At the same time, male students are more likely to look for authentic videos on the Internet than their female counterparts.

#### SECTION 4. DIGITAL TOOLS AND TACKLING SEXUAL AND GENDER DIVERSITY IN SECONDARY EDUCATION.

The ninth chapter on *Predictors of digital literary recommendations for education in sexual and gender diversity* by Professor Delfin Ortega Sánchez from the Universidad de Burgos presents a study describing the frequencies of differential gender construction / socialisation in the recommended digital reading set by Spanish teachers within the Compulsory Secondary Education system, and highlighting the specific influence of teachers' socio-demographic and formative factors in their reading recommendations for the construction and understanding of diverse gender and affective-sexual identities. The results highlight the lack of an integral and inclusive literary contribution, the persistence of traditional gender attributions in the recommended digital reading, and the invisibility of LGBTQ+ identities in the articulation of students' literary knowledge.

The tenth chapter entitled *The Transgender Narrative in Video Games: Analysis of A Normal Lost Phone as an Educational Tool* by Paula Rodríguez-Rivera from the Universidad de Vigo, Ana Manzano León from the Universidad de Almería, José Miguel Rodríguez Ferrer from the Universidad de Jaén and Rubén Camacho-Sánchez from the Universidad de Lleida is based on an analysis of the image of trans\* characters

in the video-game A Normal Lost Phone, taking into account the gender stereotypes with which they are presented in situations of discrimination and violence, and developing a teaching design to apply the video game in secondary education.

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# THEORETICAL PRINCIPLES AND DESIGN GUIDELINES FOR INCLUSIVE AND FEMINIST ONLINE EDUCATION

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MÍRIAM ARENAS CONEJO  
IOLANDA GARCIA GONZALEZ  
*Universitat Oberta de Catalunya*

## 1. INTRODUCTION

Online higher education has been around for decades, and face-to-face universities have been using technology to support teaching and learning for years. However, 2020 saw unprecedented mass exposure to digitally-mediated education, due to the lockdown measures imposed during the Covid-19 pandemic.

This sudden and unexpected situation of forced digitisation or “emergency remote teaching” (Hodges *et al.*, 2020) also raised questions about how universities could fulfil their mandate to move towards gender equality. To help tackle this problem, the Vives Network of Universities invited us to produce a guide on the subject (García & Arenas, 2022), as part of its series on teaching from a gender perspective<sup>1</sup>.

Although the guide was developed during the pandemic, it is not intended as an emergency response. Instead, it proposes careful design and planning within a framework of continuous improvement in teaching. It can also be applied at various starting points in the different disciplines, as well as to different levels of knowledge on gender or technological matters.

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<sup>1</sup> The Vives Network of Universities. Guide about online teaching from a gender perspective  
<https://bit.ly/469Ro08>

Some of the key elements of the guide are set out below, together with the thinking that went into its preparation and other issues that have arisen since its publication.

## 2. OBJECTIVES

Our original “guide” format involved approaching the subject in a form that was readily applicable for teachers. However, we felt it was essential that this guide be accompanied by a broader theoretical and pedagogical reflection. In this way, the approach would be meaningful and well-founded, making it easier for teachers to avail themselves of these tools in accordance with their own interests or position.

We also felt the need to go beyond the framework of the “gender perspective” and take a feminist and inclusive approach to the issue. In our analysis of women’s relationship with online learning spaces, the category of gender proved insufficient: other dimensions such as age, social class or level of previous studies, to name but a few, had to be taken into account at the same time. The feminist lens allowed us to move beyond gender equality towards an intersectional framework of inclusion and equity. Such a perspective is a departure from the deficit models that have pervaded analyses of the potential difficulties women face in virtual spaces. This way, rather than focusing on the specific difficulties of the student body, our aim is to transform higher education so that it is responsive to these diverse needs and attitudes to learning. This is a much more fruitful approach and more in line with what we do as teachers.

As such, our main objective is to provide an answer to the question: How can feminist pedagogy help in the quest for inclusive higher education in the digital society?

## 3. METHODOLOGY

We began with a comprehensive review of the literature on gender perspectives in the history of distance learning through to the current models of online or hybrid higher education. We also reviewed the discussions on gender inequalities in the use of ICT (García & Arenas, 2022).

This exercise did not provide us with a clear-cut and well-defined body of work. In the midst of this heterogeneity, however, feminist pedagogical thought emerged as a model of analysis and concretion that made it possible to put together a coherent approach. Although feminist pedagogy has a longer history in relation to face-to-face teaching, its propositions are easily transferable to online teaching. In fact, a group of authors is active in this field (FemTechNet, 2013) and their work has already allowed us to analyse how feminist pedagogy, from its various theoretical standpoints (Jiménez-Cortés & Aires, 2021), is taking shape in the so-called critical digital pedagogy (Köseoğlu *et al.*, 2023; Stommel *et al.*, 2020). We draw on this entire body of research, without dismissing other conceptual frameworks, to put together a sound and coherent theoretical approach that is at the same time applicable to the conception and design of teaching practice in online environments.

Along the way, we also set out to identify and select examples of good practice. To this end, we sent out a questionnaire to faculty members at our university and also contacted a number of female professors elsewhere in Europe who had experience of these issues. Although the results of this exercise were somewhat limited, they did help us to pin down a number of issues and are also included as examples of good practice in the guide. However, we have found that many practices that teachers would not *a priori* consider to be feminist or inclusive would in fact be so based on the criteria set out in our approach. The systemisation and dissemination of these practices is hampered by a lack of time, recognition and visibilisation on the part of academic institutions.

Finally, on the basis of this framework, we carried out a reflective analysis of the pedagogical design elements with a view to identifying possible gender biases or issues that could imply some kind of exclusion or discrimination, and came up with the approach described below.

#### 4. RESULTS

We begin by describing the pedagogical and technological foundations of our approach and the design pillars which underpin it. Towards the

end, we move on to develop the eight principles of practice for a feminist and inclusive pedagogy through which the approach takes shape.

#### 4.1. PEDAGOGICAL FOUNDATIONS

Feminist pedagogy draws its inspiration from the active pedagogical models of the early 20th century, with authors such as John Dewey, Paulo Freire or bell hooks, or from culturally relevant pedagogy, which emerged somewhat later. As a conception of epistemology and learning, these currents could be included under the umbrella of socio-cultural constructivism, understood to be the product of people's participation in situations of social interaction and in culturally structured contexts (Crabtree *et al.*, 2009; Köseoğlu *et al.*, 2020).

We also find fruitful perspectives for our work in the field of educational- and social-community design, such as gender-responsive design (Schmitz & Nikoleyczik, 2009), universal design for learning (Rao, Edelen-Smith & Wailehua, 2015) or design justice (Constanza-Chock, 2018).

Other contributions to feminist thought are also drawn upon, including the theories of intersectionality and situated knowledge, as well as the tradition of feminist scholarship (Davis & Hattery, 2018; D'Ignazio & Klein, 2020; Goel & Stein, 2012; Morgan & Houghton, 2011).

#### 4.2. TECHNOLOGICAL FOUNDATIONS

The pervasiveness of technology in all walks of life (especially among younger learners) produces a continuous or seamless experience through a variety of virtual and face-to-face scenarios. This “post-digital” experience involves moving beyond binary notions of “digital vs. real” or “online vs. face-to-face” and leads us towards hybrid learning models (Fawns, 2019). University environments thus become broader learning ecologies, the product of different configurations of spatio-temporal variables (Nørgård, 2021).

In this context, feminist pedagogy would give priority to open, participatory digital technologies that facilitate social contact and interpersonal relationships, network building and collaboration, and are controlled by

the users themselves, etc. with a view to fully harnessing their emancipatory and inclusive potential. These objectives are aligned with the participative and social philosophy of Web 2.0 technologies and practices that let us break away from the standardised usage of some eminently transmissive e-learning models, which fail to take into account the differences and inequalities between learners (Chick & Hassel, 2009; Kirkup *et al.*, 2010; Patterson, 2009).

#### 4.3. PILLARS OF LEARNING DESIGN TO GUIDE TEACHING ACTIVITY

Our approach to teaching is transversal and holistic and is teleological and epistemological rather than purely methodological in nature. In other words, it involves rethinking the very meaning of teaching and learning, as well as disciplinary knowledge and how it is constructed, distinguishing between the didactics of each discipline and the pedagogical approach or educational model (despite their complementarity).

The following design pillars help to articulate a set of guiding principles for teaching activity in different dimensions of learning design.

- a. Teacher positioning on the pedagogical approach and conception of teaching and learning
- b. Formulating competences and learning outcomes
- c. Methodologies and learning activities
- d. Learning environments and resources
- e. Space-time combination: virtual/face-to-face and synchronous/asynchronous
- f. Educational relationship and student involvement
- g. Evaluation of learning and teaching activity
- h. Student support

While these pillars are interdependent, they can be explored separately, in varying levels of detail and also through their different layers: individual or subject-teaching team (micro), curriculum (meso) or institutional (macro). They are generally designed for group teaching situations (undergraduate or postgraduate), but most can also be used in individual learning situations (tutoring or work supervision).

However, in order to support teaching practice and learning from a feminist and inclusive perspective, we draw on eight principles, as set out in the following section.

#### 4.4. PRINCIPLES FOR RETHINKING TEACHING AND LEARNING FROM A FEMINIST AND INCLUSIVE PERSPECTIVE

On the basis of the literature review, we developed eight theoretical and practical principles to guide teaching. Each can be applied to the various design pillars, levels and layers mentioned above. They can also be applied indiscriminately to face-to-face, blended or online contexts, although the way they are put into practice in each of these contexts will vary.

As each principle is developed, we offer some reflections on it and examples of how it may be used, which are in no way intended to limit the many possibilities for intervention and transformation of educational practice.

##### 4.4.1. Principle 1. Reshaping and negotiating the interpersonal and educational relationship between teachers and students

We believe it is essential to review the educational and interpersonal relationships that exist in online teaching spaces, in particular by making a shift away from hierarchical teacher-student roles and towards more horizontal relationships (Gravett *et al.*, 2021).

Do we open clear channels of dialogue that enable us to negotiate and adjust expectations, boundaries, commitments and responsibilities? The response to this question involves self-reflection on our position of power and privilege as teachers, and a commitment to dialogue and negotiation in the face of potential conflict situations. The teacher becomes a figure of support, encouragement and facilitation, gradually helping students to improve their capacity for self-direction and self-regulation. This therefore involves a degree of role flexibility whereby students take responsibility for managing and making decisions about their own learning, and teachers are open to ongoing reflexivity and questioning. This can be illustrated by two examples:

- *Synchronous or asynchronous communication.* Transactional distance theory, developed by Moore in the 1970s (Moore, 1997) states that in distance learning there is a psychological, relational and communicative barrier between teacher and learner and also between learner, which is also present in current online learning, especially in asynchronous models. From a gender perspective, there is some suggestion that asynchronous discussions may benefit women. The distance would encourage them to take part, thus reducing the tendency for men to monopolise face-to-face or synchronous discussion spaces (Biglia & Jiménez, 2012; Herman & Kirkup, 2008, 2017). It has also been found to be helpful in dealing with sensitive issues such as sexual and gender-based violence, as it allows for more personalised emotional adjustments and makes it easier to share certain experiences (Heikkinen *et al.*, 2008). However, synchronous communication (videoconferencing or chat sessions) can also help women who have more difficulty using technology by allowing more direct and fluid communication (Montes-Rodríguez *et al.*, 2019). Given such ambivalences, we should explore the different communication options with students, analysing what each mode or channel of communication brings to the educational relationship and the learning activity, and what it costs.
- *Involving students in the assessment of their learning.* This involves weighing up the extent to which we take a dialogical approach to assessment, by sharing the criteria, procedures and expected learning outcomes, or see it as something external, a given that must be accepted passively and uncritically by students. In order for learners to understand and participate in the evaluation process, it is necessary to develop their capacity for self-reflection and self-regulation in learning, as well as their critical judgement, for example by involving them in co-evaluation and self-evaluation processes (Grup d'Educació i Gènere, 2020).

#### 4.4.2. Principle 2. Empowering and recognising students by valuing their knowledge and previous experiences, in a horizontal exchange of knowledge

The previous principle goes hand in hand with the empowerment of students and a greater appreciation of the wisdom they can bring to the learning process and the collective construction of knowledge. Here, a number of actions can be taken:

- *Develop skills for understanding and overcoming inequalities.* These relate to understanding complex texts; analysis, synthesis and evaluation of arguments; written and verbal reasoning; and connective thinking, to name but a few. It involves developing their sense of agency in learning, which they can then also exercise in society and professionally (Chick & Hassel, 2009).
- *Value student input.* Instead of “disposing of their work”, it can be given a usefulness and value that goes beyond the learning exercise, by, for example, reusing such material as a learning resource in later years or in other subjects (Seraphin *et al.*, 2019).
- *Involvement in the configuration and self-management of university virtual learning environments or platforms.* Encourage student ownership of these environments so they can take a proactive role in them, making changes or structuring them to suit their needs. If the learning environment can only be managed/shaped by teachers, then this is an invitation to devolve all responsibility for learning to teachers (FemTechNet, 2013).
- *“Students as partners” or “partnerships in teaching and learning”.* This model redefines students as producers and agents of change in order to improve academic life. These are partnerships between students and academic staff that can encompass a wide range of activities, with varying degrees of student commitment and involvement: co-teaching; disciplinary or educational co-research; curricular co-creation or co-design; review,

analysis and reflection on learning activities; materials development, and so on (Healey *et al.*, 2016).

#### 4.4.3. Principle 3. Including students' voices and personal experiences as a basis for collective knowledge creation

This involves taking a holistic view of learning and learners, considering not only the intellectual dimension, but also the physical, relational and affective or emotional dimensions. This allows the curriculum to be more fully linked to students' individual and subjective experiences. As part of the learning process, their knowledge and experiences (personal, social or professional) can be included as valid contributions that can tie in with the disciplinary content in a process of collective knowledge construction. Examples include:

- *Competency-based learning and assessment models.* Although the competency approach may be associated with neoliberal and economic educational discourses, here we mean recognising the emotional dimension of learners and the values and beliefs they bring to learning. This can lead to a deeper and more critical understanding of reality and one's role in it, through a reflective analysis of the relationships between thought, experience, emotion and action (Valle-Ruiz *et al.*, 2015).
- *Planning authentic learning situations set in a real-life context.* These should be culturally, geographically and experientially accessible to students, helping them to engage with their own personal and professional backgrounds and encouraging self-reflection (Klebesadel & Kempfert, 2004). This can be achieved, for example, through visits, field work or sharing their previous professional practice or organisational experience. Personal web pages, portfolios and reflective journals, debates or role-playing activities, and so on, can also be used to explore the diversity of identities, realities and perspectives that each student brings to the table (Heikkinen *et al.*, 2008).

#### 4.4.4. Principle 4. Community building based on participation and partnership

For everyone to be able to make an active contribution to the production of knowledge, it is vital to create a safe and democratic space for relationships and work, one that serves as a learning community. The dynamics of learning activities should foster interdependent work, co-responsibility and the collective construction of knowledge. The features of the technological environments and tools used must be conducive to supporting participation, social interaction and collaboration. Furthermore, it is important to create a sense of belonging and mutual identification. The following strategies may be used:

- *Create a sense of presence.* In asynchronous spaces, presence is often created out of physical invisibility. This can facilitate the participation of groups who might otherwise feel stigmatised or marginalised in spaces where their image is on display (face-to-face or synchronous settings). From an inclusive perspective, however, such concealment is less than desirable and is actually a misleading idea, as gender or cultural differences are also revealed through written communication (e.g. in the length of messages, communication styles, varying use of silence, etc.) (Hughes, 2010; Kramarae, 2001). It will therefore be necessary to determine the situations in which it is advisable to enhance physical presence (for example, through synchronous or more innovative methods such as virtual reality or the use of mobile devices) and in which it is better to create this sense of presence via other personal forms of expression and sharing that do not involve showing oneself physically.
- *Collaborative or individual learning.* Some studies indicate that women would prefer more collaborative and interactive learning activities, while others suggest quite the opposite. Some e-learning models continue to attach more weight to individual work, which is more closely aligned with normative masculine expectations of independence and self-sufficiency (Kirkup *et al.*, 2010; Kramarae, 2001; Von Prümmer, 2004).

The feminist approach would be in favour of greater collaboration in and for student-to-student learning, but without overlooking the increased exposure involved and its potential consequences, as outlined above. Awareness is also needed of the challenges that may be involved in organising synchronous meetings for collaborative work. At the same time, such challenges are an opportunity to break with the myth of ubiquity and total availability that asynchronous relationships can engender. They are also a reminder of the often unevenly distributed material constraints within which the educational relationship unfolds.

#### 4.4.5. Principle 5. Creating a safe environment, which seeks to overcome prejudice, stereotypes and discrimination

The fact that interactions take place in virtual space and asynchronous time does not mean that they take place in a vacuum: they inhabit real times and places, but for the sake of flexibility they are multiplied and fragmented, with all the advantages and disadvantages that this brings. Thus, from a feminist perspective, we can focus on two dimensions related to learning spaces:

- *Material and personal study conditions.* Distance learning makes it possible to study without being tied to a fixed timetable or having to travel to a specific location. *A priori*, this should make it easier for students with family responsibilities to strike a balance between their personal and professional life and their studies. This does not apply equally to men and women, however, as women continue to spend more time on caring duties. Studying online thus ends up becoming a “third shift” for many women, taking place during the evening or early morning hours, after paid work and child-rearing tasks, and at the expense of personal time or rest. The same applies to access to spaces and equipment. For many women, studying online, often from home, means that they are forced to negotiate not only the time to study, but also the use of space and technological devices, which are also heavily gendered

(Hughes, 2010; Kramarae, 2001; Montes-Rodríguez *et al.*, 2019; Rensfeldt & Riomar, 2010; Von Prümmer, 2004). This complex scenario of intra-family power relations may also end up reinforcing the traditional concept of the home as women's natural space, including for studying. We would need to be aware of and take into account the material and personal conditions in which students undertake their studies, providing opportunities for flexibilisation and/or compensation where necessary. The different life circumstances that shape this private space are closely connected to the quality and quantity of time available and determine the conditions in which students approach the learning experience.

- *Creating safe learning environments.* These would be spaces of openness, freedom of expression and acceptance, based on dialogue, nurturing relationships, respect for diversity and where there is no fear of making mistakes, taking risks in learning or asking for help (Vivakaran & Maraimalai, 2017). Psychological safety encourages participation and contributes to the bonding process and the sense of community mentioned earlier. This applies to formal spaces, but also to the more informal spaces that students can create spontaneously in the virtual world with the help of teachers, for sharing information, clarifying uncertainties, commenting on aspects of the course, creating peer support networks, and so on. Efforts must be made to ensure that all these spaces are perceived as trusted and free of prejudice, where fears and concerns can be shared, and where hierarchies, power relations and forms of oppression can be exposed and subverted. Key to this will be to bear in mind the sexist dynamics and problems of gender-based violence in digital environments, which affect both female and male university students and professors (Cripps & Stermac, 2018; Donestech, 2020; Faucher *et al.*, 2014; Heikkinen *et al.*, 2008). To this end, we must use inclusive language, put diversity front and centre and encourage behaviours such as: moderation and intervention in debates, drawing up shared

guidelines for conflict management in group work and specific actions when situations of violence arise, among others.

#### 4.4.6. Principle 6. Towards personalised learning design: respecting the diversity of identities, learning paces and experiences

Given the diversity of the student body, there is a need for self-evaluation of our own knowledge and approach to diversity. To this end, we will review whether training and assessment provision is sufficiently accessible to all students and how we can encourage their positive engagement with academia. Moreover, genuine interest in and concern for the student body necessarily involves investing some time and energy in becoming informed and ever more aware of their realities, as well as being knowledgeable about the issues and dynamics that may affect them, both in the subject area and the wider university environment. We suggest focusing on the following three main issues:

- *Inclusive curriculum.* This involves content that is free of stereotypes and prejudices, avoids the use of stigmatising portrayals, or examples and materials that misrepresent any group, and puts forward alternatives that promote the subversion of normative roles. It is accessible to all students and reflects their diverse perspectives and experiences (gender, functional diversity, age, class, ethnicity, and socio-economic status, as well as their interrelationships (Morgan & Houghton, 2011).
- *Inclusive design.* This is student-centred, flexible and adaptable enough to accommodate changes based on individual cases and situations as they arise, including adaptable and versatile digital learning environments and tools to cater for learner diversity. The use of approaches such as Universal Design for Learning (UDL) can help to motivate students and develop their skills and knowledge (Alba, 2018; Collier, 2020).
- *Tackling sensitive issues.* When addressing controversial issues, there is a need to anticipate possible reactions and be prepared to deal with dissenting opinions, bearing in mind one's own responses and emotions as well as those of the students.

Personal prejudices and false expectations about students' behaviours and abilities should be recognised (Harquail, 2020).

#### 4.4.7. Principle 7. Critical perspective and questioning of the structural allocation of authority over knowledge

Feminism rethinks the definition of knowledge as a social construct subject to a cultural and historical context. It is assumed that official, validated or hegemonic knowledge contains biases that must be identified. For this reason, it is necessary to improve students' critical capacity. It is from this perspective that we can develop the following strategies:

- *A critical approach to subject content.* Approaches to learning should, for example, analyse the construction of gender in the corresponding professional field, problematising gender roles and possible stereotypes and biases within that profession's own relationships and communicative contexts. This allows for complex and ambivalent thought, and a plurality of voices and perspectives, using diverse resources such as: complex or narrative representations, which are contextualised and situated, and show the relationships and contradictions in the information; debates, dilemmas and processes of enquiry, among others (Chick & Hassel, 2009).
- *Questioning traditional systems of knowledge production within disciplinary research.* The idea that there is a shared authority for knowledge and that it is constructed within a community means recognising and reclaiming the role of open and social learning, including on the Web, in the context of open and distance learning (Aneja, 2018). This will involve encouraging participation in professional and social debate forums, as well as other places where knowledge is produced beyond the academic sphere.

#### 4.4.8. Principle 8. Emancipatory political pedagogical approaches geared towards justice and social change

Finally, feminist pedagogy's ethical and political agenda requires a willingness to transform reality and therefore also to analyse and evaluate this transformation. This brings us to educational initiatives that are grounded in reality, aim to address real societal problems or needs and encourage the social involvement of students at different levels:

- Problem- or project-based learning methodologies, and service-learning experiences, involving contact and networking with “expert” professionals, local and community stakeholders and/or groups in the contexts in question (Chick & Hassel, 2009).
- *Impact assessment*. Evaluation of the changes achieved should take place at subject, programme, institutional and societal levels. Besides students and teachers, the groups involved in learning initiatives must be involved consistently and by mutual agreement. This is to determine how and on the basis of what information or evidence the change or impact achieved is to be evaluated.

## 5. DISCUSSION

Our approach lays out an ambitious vision in which each teacher must establish their own point of departure and objectives and, based on this analysis, define what they wish to do in their teaching practice. Going beyond individual intentions, these changes must be driven forward at the institutional level, following the European Commission's guidance for moving towards more inclusive and connected higher education systems<sup>2</sup>, which are based on equity and non-discrimination, as set out in

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<sup>2</sup> European Commission (2017) Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of Regions on a renewed EY agenda for higher education. <https://bit.ly/3PmfK0N>

the LOSU (Spanish *Organic Law 2/2023*, of 22nd March, of the University System)<sup>3</sup>.

So where are we now? While there is no detailed diagnosis of the inclusiveness of online university education, some thoughts on the subject are set out below. We will look at the first two of three basic points of analysis (access to university, the educational process and academic results). Although our work focuses on the second (the educational process), the analysis is meaningless unless access to university has been made possible on the basis of a model of equity. So that is where we will begin.

### 5.1. BARRIERS TO ACCESS

Online university education is an advanced model of what was originally distance learning (via post, television, telephone and so on). This modality was conceived as an opportunity for those social groups that, for a variety of reasons, found it more difficult to access higher education, such as women, the working classes or disabled people, among others. Is this still the case today?

Women make up the majority of undergraduate students at Catalan-language universities, both on campus and online (Daza *et al.*, 2022). *A priori*, it would appear that gender-based barriers to access have been overcome. However, the percentage of women is lower in virtual universities and their distribution among the different studies is more uneven (horizontal segregation) than in face-to-face universities. Similarly, more married or cohabiting students with children, as well as students from less well-educated or underprivileged backgrounds, are found in virtual universities. Although these data cannot be extrapolated to online universities as a whole, they suggest that virtual teaching is improving inclusion in terms of social class or age, but that there are still outstanding challenges in terms of gender inequality, for example.

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<sup>3</sup> Article 37 of the Organic Law 2/2023, of 22nd March, of the University System: <http://bit.ly/3ZkqGNq>

## 5.2. BARRIERS IN THE PROCESS: IS IT THE TECHNOLOGY OR THE PEDAGOGY?

Once access to online higher education has been guaranteed, as it is in the face-to-face modality, we must analyse whether or not consideration has been given to the fact that in order to guarantee inclusion it is also essential to transform university spaces, starting with the curricula and continuing with the relationships and modes of teaching and learning.

When it comes to online education, there are also concerns about possible technological barriers for women, raising issues such as the digital divide or possible gender-based differences in online learning styles. While these debates pave the way for reflection and change, they continue to position women as passive consumers of technology, reinforcing the deficit model. Cyberfeminism, on the other hand, takes a more empowering approach: women are not only users, but also creators of technologies and content. From this position, we can review the androcentric biases of technological tools and platforms and transform them from a design perspective.

So, is technology currently a barrier to learning? Some preliminary data are available from studies conducted during the pandemic. The experience of students at Catalan-language universities during the 2020-2021 academic year (Pons *et al.*, 2022) showed that technology-related issues (lack of equipment for quality access, technological skills or physical study space) were perceived as being of lesser importance. However, the most problematic dimensions were those concerning sociability and communication (both with the teaching staff and the rest of the student body) and organisational and time management issues (workloads and difficulty in organising the subjects). Although the data are not disaggregated between face-to-face and online modes or by gender, they do show that the technological factor, which is directly associated with access to and basic use of technology, was seen as a minor barrier by the student body. However, more problematic were factors linked to the difficulty of creating better connection, communication and presence in virtual learning spaces; the need for better subject design, planning and

organisation; as well as the availability of support strategies to help with time management.

### 5.3. MORE RESEARCH IS NEEDED

This diagnostic analysis is a preliminary approach that needs to be further corroborated by further research. While it would seem that the main barriers are no longer strictly technological but rather pedagogical, from an intersectional feminist perspective we cannot ignore the fact that certain social groups continue to struggle to access and use technologies. As became apparent, also during the pandemic, not everyone has the same access to devices, nor the same high-quality connection needed to provide the right conditions for online study.

We must also not lose sight of the fact that different educational modalities and technologies are neither inherently inclusive nor exclusive, and when they are, this is not homogeneous for all students. Indeed, sometimes they can be both at the same time, leading to ambivalent situations. This is possible because of the fluid nature of the relationship between gender (and other social categories) and technology: digital technologies organise our lives and influence the way we relate to each other, but as users and, increasingly, as creators of technologies and content, we can use them to build new tools and relationships for more transformative purposes (Biglia & Jiménez, 2012; Bruestle *et al.*, 2009; Sørensen, 2013). As such, different technological environments and tools can enable or favour different models of participation, communication and relationships. At the same time, the tools that we may deem more appropriate from a feminist perspective may not suit the ways in which the students have been socialised and, in this sense, could hinder their learning. There is therefore a whole world of practice and analysis yet to be explored and studied in more depth from this feminist and inclusive perspective.

## 6. CONCLUSIONS

To conclude, we share some of the challenges that we have identified so far in the application of this approach. Our aim is to continue our efforts

to address these issues and to be alert to new challenges and opportunities that may arise in the years to come.

### Resistance to change

At the heart of transformation invariably lies teachers' belief systems, values and ideas, including their own positioning on gender inequalities (hooks, 1994). There may therefore be some resistance to the change of teacher identity involved in putting this into practice, as it involves ceding power to the students, being more adaptable and flexible, and being able to accept and show our own vulnerability. At the same time, we must be prepared to engage in a continuous process of learning and self-evaluation.

### Structural constraints

This changing teaching role also gives rise to some contradictions, as it entails a heavier workload in terms of coordination, emotional and relational activities, and the promotion of participation and collaboration (FemTechNet, 2013). This is all against a backdrop of job insecurity in digital environments, the undervaluation of this kind of work, both in terms of institutional incentives and opportunities and in the evaluation of teaching itself, as well as an expectation of flexibility and total availability, which jeopardises teachers' right to digital disconnection and work-life balance.

### Lack of coordination between different roles

Viewing change as a shared and collaborative task makes this easier and is more in line with a feminist approach. This is especially true for online teaching models, which require greater coordination between teaching teams and other figures, such as the people who design and run the digital tools or those with management responsibilities (Gajjala *et al.*, 2017). Unless these different groups work together, it will be difficult to put some of the proposals mentioned above into practice.

## The speed of technological change

The growth of fields such as artificial intelligence, datafication and data analytics, virtual reality and emotional technology, among others, is opening up many opportunities in the field of education and for feminist and inclusive pedagogical practice. However, it also presents challenges, such as respect for students' rights, which concerns the ethical boundaries around the use of these technologies. At present, for example, the widespread use of ChatGPT and similar generative AI technologies is provoking all sorts of reactions. It is feared, among other things, that they could be used by students to cheat. Rather than delegating educational responsibility to anti-plagiarism or remote surveillance software companies, we believe from a feminist perspective that students should be involved in discussions on how to make critical, ethical and transformative use of this technology (Bozkurt *et al.*, 2023).

## The appropriate time and space

Genuine inclusion calls for anticipation, flexibility, rationality, collaboration, transparency, fairness and so on, all of which require the appropriate time and space. Working in overcrowded virtual classrooms can make this very difficult, so institutional support in the form of manageable ratios and teacher training is also needed to give students the attention they need, not to mention the provision and recognition of the time and space necessary for individual and collective reflection on our teaching practice.

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# LEARNING ANALYTICS, SOCIAL SCIENCE TEACHER TRAINING AND GENDER. DEFINITIONS, REFERENCES AND TRENDS

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DANIEL DAVID MARTÍNEZ ROMERA  
*University of Malaga*

## 1. INTRODUCTION

The university, an institution of higher education since the Middle Ages, has undergone three major transformations in the course of its existence, running more or less parallel to the classical stages of history.

During the Middle Ages, the university was institutionally defined and consolidated. This was shaped by the *Studium generale* of Bologna and the disciples of Irnerius (12<sup>th</sup> century), as well as by the institutional and secular conception of the term *University*, which would eventually prevail with the granting of the Magna Carta of Salamanca by Alfonso X “the Wise” in 1254.

Its spread beyond Europe began during the early modern period. This was largely thanks to the Spanish Monarchy, which by 1519 had established the *Studium Generale* in the Americas and in 1538 founded the first of many universities on this continent, the University of St Thomas Aquinas in Santo Domingo. The same is true in Asia, with the Philippines getting its first university in 1590, but not before the first Christian educational establishment in these parts, the Santa Potenciana College and School for Girls, founded in 1589.

In the late modern period, universities underwent their second expansion, cementing their ubiquitousness as centres of higher education and research. Today, they are found in virtually every country in the world and are recognised not only for their role in the preservation and advancement of knowledge, but also as agents of social transformation. A second wave of transformation is now underway, driven by

technological changes that began in the mid-20<sup>th</sup> century and have since led to a university model that is deeply intertwined with the digital realm. This is so much the case that the idea of traditional teaching without some kind of virtual environment for each subject is now totally inconceivable. It is therefore both a live educational and social issue.

It is precisely this question that we will address in the following pages, to shed light on what is happening with the quantification of learning processes in the field of higher education, and what the relationship is, or could be, with socially relevant issues such as the concept of gender.

## 2. DEFINITION OF TERMS

Due to the proliferation of terms and their meanings, there is a need to establish a theoretical frame of reference that allows for a univocal understanding of the arguments to be developed.

The concept of *learning analytics* has been widely discussed in recent years (Álvarez et al., 2020; Arnold & Pistilli, 2012; Arroway et al., 2016; Baek & Doleck, 2021; Baepler & Murdoch, 2010; Baker, 2019; Bienkowski et al., 2012). It refers to the datafication of teaching and learning processes that can take place in virtual learning environments, which results in a need to define two new terms.

In terms of *datafication*, it is worth noting that Virtual Learning Environments (VLEs) are a diverse and rich source for measuring teaching and learning processes. This has forced the introduction of new analysis techniques under the paradigm of Big Data. Terms such as metadata, machine and learning analytics, and natural language processing have become ever more commonplace among the specialist scientific community.

The evolution of datafication processes parallels that of VLEs. As such, papers on the subject date back to the turn of the century, although the work of Willging (2008) is possibly the first to have had a widespread impact on the Spanish-speaking community. This was also thanks to these kinds of ideas making their way into prestigious journals with clearly overlapping thematic areas, as pioneered by the *Revista Hispana*

*para el Análisis de Redes Sociales* (Hispanic Journal for the Analysis of Social Networks).

In general terms, datafication can be approached in two ways: data and metadata. The first explicitly transforms the teaching and learning process into discrete variables of analysis, a process undertaken by teachers and researchers. The second is a result of the learning platforms' internal processes, which automatically generate data that contextualise user interactions, a process involving neither teachers nor researchers.

The latter is less well known and is a feature of IT applications like VLEs that generate and use vast amounts of metadata tailored to the user, paving the way for research into it. This is already being explored in the work led by Amare, Elatia, Ofori and Yunita. Virtuality is neither banal nor inconsequential; there is a clear and measurable relationship between social and educational dynamics in the digital and analogue spheres.

Works such as that of Mejías and Couldry (2019) remind us that this trend towards datafication is firmly linked to two interwoven dimensions: power and knowledge. There are obvious economic aspects associated with the dynamics of the economic model, but it goes without saying that this has its uses. As Jarke and Breiter (2019) have noted, from early childhood all the way through to higher education, data of educational value is being generated whether we want it or not.

Putting data and metadata to good use for the benefit of society is a task that deserves attention, all the more so when technology can still become a barrier to education for large swathes of the population, whether because of difficulty of access, ignorance of how to use it, or contextual conditions.

On the subject of *Virtual Learning Environments (VLE)*. As Veytia Bucheli (2016) notes, this concept already has a proven academic track record. It can be traced back to the mid-1990s at least, when Churches, as cited by Veytia Bucheli, defined it as necessarily having four dimensions, namely:

1. The physical, referring to the physical working environment in which the technological interaction takes place.
2. The functional, which relates to the educational purpose behind such an interaction.
3. The temporal, which determines the point in time and the duration of the interaction.
4. The relational, which identifies the people involved in the teaching and learning process and how it takes place (synchronously or asynchronously).

Over time, a number of other requirements have been added to this formal definition of VLEs, in the form of more obviously pedagogical attributes. Thus, Dillenbourg's group (2002) suggests that VLEs:

1. Must be by design; virtual archives or "catch-all" repositories should not be included.
2. Should allow participants to interact with each other.
3. Must be visually represented, from purely text-based formats to immersive 3D worlds.
4. Must allow the learner to play a proactive role, not only in interacting with the platform, but also in its development, to whatever extent.
5. Should also facilitate learning in face-to-face contexts, not just in distance learning situations.
6. Must provide a range of technologies and approaches; nowadays multimodality would be regarded as a must.
7. Will usually overlaps with the physical environment. When this list was written, the delocalising potential of mobile technologies had not yet taken hold. In our eyes, this is a feature that therefore requires some qualification. The static image of the IT classroom, for example, now coexists with mobile devices that require a dynamic approach to the relationship between the virtual and the physical, rather than one that is rigidly anchored to one place.

From this point it is possible to create other types of classifications focusing on aspects of interest to teachers and learners. Mention should be

made here of the ideas put forward by Rayón Parra's group (2019) on knowledge, collaboration, advice and support, experimentation and management environments. The focus here lies on how it is expected or intended to be used for learning. Another example is Boneu (2007), who speaks of interactivity, flexibility, scalability and standardisation, with a focus on the development of standardised SCORM (Shared Content Object Reference Model) type content.

What is more, all of this is currently undergoing a marked period of reformulation and change due to the gradual penetration of Web 4.0 with its learning machines and artificial intelligences. ChatGPT has been the first of many existing and pipeline projects to achieve global success.

In the university environment, the most widespread manifestation of these issues is undoubtedly to be found in the form of Moodle-type virtual campuses. Moodle was the first LCMS (Learning Content Management System) to go mainstream and is still the benchmark for open source platforms today. Its creator, Martin Dougiamas, single-handedly developed the first version of his idea in response to what he saw as the limitations of the software available at the start of the 21<sup>st</sup> century. Little did he know that he was spearheading an educational transformation that looks to be irreversible.

On the concept of *gender*. As is well known, there are three overarching perspectives at work here. Schematically speaking, they are:

1. Gender as a biological consequence. As such, it is equated with sex, which is determined by the 23<sup>rd</sup> pair of chromosomes one possesses (XX or XY chromosomes). Here, intersex situations are understood to be an anomaly in a clearly dichotomous situation.
2. Gender as a cultural construct. It is therefore conditioned, if not determined, by the customs and habits of the culture in which one grows up. No or little importance is attached to genetic inheritance of any kind.
3. Gender as self-perception. It is thus the outcome of the manifestation of one's own will. As such, all biological or cultural conditioning is rejected. It is, therefore, self-determined.

Taking these three positions as a starting point, it is possible to construct a whole range of intermediate situations, especially between the first two. The third, being atomistic in nature, can only be manipulated on the basis of statistical sampling. This is how we arrive at different stances on the number and meaning of genders in the human species or in the different societies recognisable today and in documented historical records.

The advantage of working with virtual environments is that this data can be obtained directly from student records or by asking the question on the platform.

Be that as it may, scientific research today, especially in or around the social sciences, tends naturally towards the first stance or, to varying degrees, towards a hybrid with the second. The conflict between the first and second is a common theme in politically discursive works, under the general umbrella of whether women are born or made.

To name just a few examples, there is work from the fields of ethology, with Morris (1971); philosophy, with Beauvoir (1998); history, with Beard (2017); sociology and anthropology, with Delphy (1977) or Mathieu (2018), art, with Nochlin (2018) or Paglia (1990), not to mention the historic controversy in Spain between two leading figures of their time, Clara Campoamor and Victoria Kent. This being so, the third stance can be seen to settle the biology versus culture debate by disavowing the debate itself.

While there is no doubt that this is an issue that is and will continue to be the subject of heated debate, at least in the short and medium term, it goes beyond the scope of this paper.

### 3. FRAMES OF REFERENCE

As the foregoing shows, addressing the state of play is a complex issue due to the myriad of approaches and criteria that can be used to sift through it. On this occasion, we have opted to provide an overview of trends that have led to or reflected a marked shift in scientific production

in the field of education in general, or social sciences teaching in particular, as a discipline closely linked to the concepts in the title of the paper.

There can be no doubt that the publication of Linda Harasim's article "The virtual university: A State of the art" (2002) was both a true reflection of the technological changes that were taking place in higher education teaching and learning practices and an early indication of some of the emerging trends. Based on a four-year longitudinal study involving 14 institutions, 250 faculties, 15,000 students and more than 450 courses, the author outlines what she observed to be the practical importance of some of the features outlined above. This included, in particular, flexibility in terms of interaction and presentation of content, the opportunity to measure academic performance gains, and the gradual emergence of universities designed to be virtual from the outset.

This year is particularly noteworthy as it saw the birth of the first version of Moodle, the benchmark for the LCMSs that were to follow, among them BlackBoard, Claroline, Canvas, Edmodo, Google Classroom, ILIAS, Kannu and Sakai. This signalled the start of a period of exploration of the various options, which explains why many of them failed to stand the test of time and why others eventually converged in terms of concept and design.

For this reason, the production of technical analysis was quite intensive during this period, culminating in works summarising and reorganising what had been discovered. Such is the case of the classic text "Web Interactive Multimedia Technology: State of the Art" by Md Ali and Richardson (2011), in which the title itself recognises the main educational virtue of these technologies, though not to the exclusion of others, of course. Familiar concepts such as blended learning or multimedia environments (sometimes referred to as audio-visual) are embraced here.

However, one thing that must stand out here is the clear practical commitment demanded of universities in the adoption of this new paradigm. This 2011 study therefore highlights another critical aspect that will be further developed, namely teacher involvement. In other words, it should be integrated into classroom design and practice, in this case the university lecture hall. Twelve years later, it is fair to say that this has,

by and large, been achieved. On that note, we should also highlight Willcox, Sarma and Lippel's work "Online education: a catalyst for higher education reforms" (2016).

The Hispanic literature has produced some interesting works on these same issues, with useful commentary on their potential based on learning contexts in non-English-speaking environments, the initial reference point for this process. Here we find Gabriel Ramírez, César Collazos and Fernando Moreira's "All-Learning: the state of the art of the models and the methodologies educational with ICT" (2018).

This clearly outlines and defines the main learning modalities enabled by virtual learning environments: Ubiquitous >> learning at any time and in any place, using a variety of technological devices and contexts (U-Learning); Mobile >> using smartphones, as they have become more and more widespread (M-Learning); Blended >> combining virtual learning environments and traditional methods, which is by far the most common, especially in university contexts (B-Learning); Virtual/Digital >> the exclusive use of technologies to deliver education at all stages without the need for face-to-face contact between the educator and the learner (E-Learning).

As can be seen, there are degrees of overlap between these categories. It is in fact a menu of possibilities rather than a list of exclusionary choices. The study was based on a review of 919 texts found in six databases of published scholarly output, out of which 129 finally met the selection criteria. Of these, 15 were written in Spanish, 12 in Portuguese and the remainder in English. What is interesting about this analysis is that it zooms in on didactic methodologies, rather than the mere technical side of things. We therefore find recognisable terms like Gamification and Reverse Classroom alongside more finely tuned ideas about delivery models, with the addition of TPACK to the established list of B/E/M/U-Learning.

As these technologies become more widespread and successful, they will gradually be overshadowed by the individualisation of the teaching and learning processes to meet the specific nature of each learner. In other words, we have to find ways of tailoring educational technology

to the different learning styles recognised in the pedagogical literature. Here we find a seminal work in Portuguese by Monica Raleiras, Amir Nabizadeh and Fernando Costa “Automatic learning styles prediction: a survey of the State-of-the-Art (2006-2021)” (2022).

This powerful meta-analysis of 192 papers published during this period raises a critical issue: the need for research on progressively more specific contexts to ensure that methods, content, environments and learners are tailored to each other. However, the authors acknowledge that a greater focus on increasingly meaningful areas makes it correspondingly more difficult to obtain representative samples and tacitly put forward the importance of the metadata generated by learners as they interact with the applications. This is a source of information that needs to be considered.

This brings us to one of the most recurring present and medium-term concerns: datafication as a teaching resource, i.e. learning analytics. It is here that individual characteristics such as sex or gender can be explored as an area of research, while touching on the questions raised earlier in this paper regarding their measurement.

On the subject of general datafication we find Sofie Flensburg and Stine Lomborg’s powerful literature review of 463 publications in the field of higher education, “Datafication research: Mapping the field for a future agenda” (2021).

However, the work of Marcela Hernández, Rubén Morales, Carlos Escobar and Ricardo Ramírez “Learning analytics: state of the art” (2022) may be more relevant to the context at hand. It not only helps to overcome the polysemy and synonymy inherent in the concept, defined as “analyzing educational data to enhance the learning experience”, but also to distinguish it from other related emerging concepts, such as Educational Data Mining (EDM), which can be seen as similar approaches under complementary paradigms.

While learning analytics leads us to explore work social networks, performance, learner emotions and discourse analysis, educational data mining shifts towards the application of automata and mathematical models and the Big Data paradigm. This is useful for establishing

patterns in the data and identifying underlying relationships in the data, creating a visual representation of them and identifying classification patterns and courses of action for teachers that could improve any aspect of the e-learning process (the design of the environment, the presentation of materials, evaluation methods or the multimodality available, for example).

It is here that the subject of gender is approached in some of the ways mentioned earlier but, above all, it is where it can be used as an independent variable to be compared with the development of the subject over time. At present, most studies choose to use the sex variable typically recorded at the time of enrolment in a Bachelor's or Master's degree. However, this variable can be collected from students in a simple questionnaire for the purpose of carrying out studies to this effect. While this is the case, the norm is for research that takes gender plurality into account to focus on discrimination, integration or diversity issues, and not on questions about the nature of the content and the possible nuances of learning styles that this may entail.

#### 4. TRENDS AND FINAL CONSIDERATIONS

In view of the above, there is a need to articulate what we see as the main lines of work and possible areas for future development.

Bearing in mind the points emerging from the major studies mentioned above, we believe that work now and in the immediate future should further develop the issues previously explored. These include a deeper exploration of the technological component and interface relationships. As early as the 1960s, Licklider (1960, 1968) defined this as man-machine relationships by resolutely exploring incipient but necessary avenues, three of which are highlighted here.

The first is to enhance the value of metadata, the set of records generated automatically by users as they interact with applications. The aim is to explore the new forms of social and educational relationships that take place inside and outside virtual classrooms and materials. Parallels are drawn here with approaches like CyberGeography with works such as those by Gustavo Buzai's "Paradigma Geotecnológico, Geografía

Global y CiberGeografía, la gran explosión de un universo digital en expansión” (2001), Mei-Po Kwan’s “Cyberspatial cognition and individual access to information: the behavioral foundation of cybergeography” (2001), Kajsa Ellegård’s new ChronoGeography “Thinking Time Geography Concepts, Methods and Applications” (2018), or the Sociology of Education and Sociometrics, to cite just a few examples.

Linked to the previous point, but reverting to the core areas of each discipline rather than their frontier situations, the second focuses on specific didactics. Pedagogical and general education studies account for the lion’s share of relevant contributions in the last two decades. Despite their undoubted value and use as a theoretical and practical basis, clear objective evidence must also be put on the table: teaching activity is based on subject matter that is not without its effects on teachers or learners alike. In other words, teaching Physics is not the same as teaching History, Chemistry or Geography; the specific nature of this knowledge requires a specific didactic approach. This is due in particular to the greater difficulty and complexity of rigorous and objective research and teaching in disciplines such as the Social Sciences, where subject neutrality cannot be achieved. Here, the ideologies, preferences and personal interests of teachers and students are a unique barrier that is not found with the same intensity and complexity in disciplines such as Mathematics, to pick an obvious example. Objectivity has to be defined in other terms and reality has to be studied in other ways. However, the fact that the range of certainties obtained is more temporally and spatially contingent does not negate their existence; on the contrary, it vindicates it. Otherwise, we would be faced with dogmatic teaching or the nihilistic denial of the very existence of knowledge.

Thirdly, we believe that the proper datafication of teaching and learning processes in virtual environments is a unique opportunity to obtain measurable evidence on gender singularities in terms of identifying patterns that may or may not align with the learning models currently used as a benchmark. This can only be achieved by recognising the importance of going beyond generalist approaches and focusing on disciplinary singularities (what happens, and what it means, to learn Geography and History in such a context). Seen in this light, VLEs are genuine

laboratories for experimentation and for testing social theories that should not be overlooked.

Finally, we believe that the technical sophistication that makes the quantification of teaching and learning processes possible will let us revisit datafication both as a useful tool for training processes, as already demonstrated in previous research (2017, 2019, 2020) and also as an aid to reflection and training for Social Science teachers (Martínez Romera, 2022; Martínez Romera et al., 2021, 2021, 2022).

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## APPROACHING EDUCATION WITH GENDER PERSPECTIVE AT UNIVERSITY USING *MANGA* COMICS

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MARÍA MARTÍNEZ LIROLA

*Universidad de Alicante y University of South Africa (UNISA)*

ALBA CAMPOY MARTÍNEZ

*Universidad de Alicante*

### 1. INTRODUCTION

Education has to respond to the demands of the XXI century. In this sense, active methodologies and multimodal resources must be implemented in the English as a foreign language classroom so that students have a central role while they learn at the same time that they feel motivated in the teaching-learning process (González Mujico & Lasagabaster, 2019; Llorente-Cejudo et al., 2022). Moreover, teaching practices must relate to real life situations and contribute to the development of critical and committed citizens.

For this reason, introducing gender issues in the classroom contributes both to the development of political responsibility and of critical thinking. Thus, activities and exercises focused on the use of multimodal texts in the classroom are appropriate to introduce global topics, since these texts include social content that can be used to deepen not only on the contents of the subject, but also on the acquisition of social competences such as communication, cooperation, or leadership, among others. The use of multimodal texts involves the development of multiliteracies and some knowledge on the principles of visual grammar (Kress & van Leeuwen, 2021) in order to understand how the said texts are designed, how they have to be read and interpreted, how the different modes are combined to express meaning, etc.

Therefore, the XXI century is the time to open the corpus of the educative curricula to other literatures or world literatures. As Kapur (2018) states, traditional learning has become obsolete, “needing to be replaced with more dynamic and interactive strategies, to make the classroom more relevant to the twenty-first century learner and the world they inhabit, thus becoming less of an anomaly as it appears now.” (p. 5). In addition, any language classroom should offer prodigious opportunities for the language-learning context which could be characterized by meaningful activities. Nowadays, there are many multimodal texts available that can be used with pedagogical purposes, such as films, texts from advertisements, videos, videogames, among other resources. In this article, we will use some examples from *manga* due to not only their multimodal nature, but also to their cultural content taking into consideration their reading habit, their drawing style, and their pacing. Thus, these texts are useful to teach grammar, to deepen on multimodal texts and especially on social issues. In fact, the topic of the two *manga* titles selected, i.e., *Inuyasha* (Takahashi, 1996) and *Gurren Lagann* (Mori, 2007) has been chosen to introduce gender and the principles of education with gender perspective in the classroom. For this reason, the titles used throughout the sessions portray female identities with a focus on gender issues.

Although comic books were mainly considered a superficial reading, or even linked to distraction exclusively, nowadays they have established themselves as an increasingly popular reading genre due to their usefulness as a pedagogical resource (Murakami, 2009), being the topic and multimodal characteristics of these materials the main motivation for the realization of the following teaching proposal. Despite any previous prejudice, comic books are greatly present in our culture, and this project focuses on *manga* ones –Japanese comics that combine both visual and linguistic elements– since their visual nature makes them an attractive medium not only to enjoy reading, but also as an instrument for promoting criticism and reflection while working with meaningful materials.

Consequently, comics can be considered an effective pedagogical resource that can motivate university students to learn and to deepen on social aspects such as gender roles and gender stereotypes, as we will

see in this article. In our teaching proposal (see section 5.1), students will be introduced to the principles of visual grammar (Kress & van Leeuwen, 2021) so that they can learn how to read images and can work comfortably with these materials while they apply visual grammar in the analysis. This is the first step to observe the relationship between teaching and real texts (in this case, from *manga* comics), and the presence of cultural and gender aspects in university classrooms.

## 2. HYPOTHESIS, OBJECTIVES AND RESEARCH QUESTIONS

As it has been previously advanced, the hypothesis of this paper assumes that it is possible to foster gender equality using *manga* materials. To that end, the main objectives of this article are the following:

1. To teach English grammatical contents using *mangas* that introduce gender issues at tertiary education, and
2. To teach students how to read *manga* comics using visual grammar at the same time that a genre-based perspective is incorporated in the teaching-learning process.

Regarding the main research questions, they are as follows: Are *mangas* appropriate multimodal texts to teach grammatical contents? Does the use of these *manga* comics contribute to promoting gender equality among students?

## 3. LITERATURE REVIEW

This section is divided in three subsections: firstly, Education with gender perspective (EGP) will be presented. Next, we will concentrate on *manga*. Finally, the fact that *manga* is a multimodal text justifies that this section finishes referring to multimodality.

### 3.1. EDUCATION WITH GENDER PERSPECTIVE

Education with gender perspective is characterized by its commitment to equal opportunities for girls and boys in access to education, by its commitment to the empowerment of girls, by advancing in inclusive curricula that includes the achievements of women in the different

disciplines, among others (Farré, 2020; Martínez Lirola, 2017; Ortega Sánchez & Pagés Blanch, 2017). The fact that gender inequalities are observed in educational institutions (Barrientos et al., 2022; García, Díaz & Hernández, 2020) justifies the convenience of using the EPG approach in teaching. This pedagogical proposal encourages students to become aware of the inequality in the distribution of power, of the examples of symbolic violence suffered by women, etcetera.

The selection of EGP entails a firm commitment to equality between women and men and to comprehensive education that goes beyond the acquisition of knowledge and contributes to the formation of critical citizenship that knows how to respond to the demands of the 21st century (Martínez Lirola, 2022; Murga-Menoyo, 2018). It is a pedagogical proposal that makes visible the way in which women are discriminated and made invisible in order to avoid forms of oppression and discrimination. To do this, it is necessary to deconstruct gender stereotypes and patriarchal ideas present in the collective consciousness that give women and girls an inferior place. As López Hernáez and Sabater Fernández point out (2019, p. 124): "Gender is not a natural quality of people but a complex set of cultural beliefs related to each other, which stipulate the social meaning of masculine and feminine".

This pedagogical perspective claims the human dignity of people regardless of their sex, and it also seeks equal opportunities that lead to a balanced distribution of power and a responsibility to the construction of a global citizenship committed to the construction of an egalitarian society in which women and men have equal opportunities (Mesa, 2019). For this reason, the EGP is an important contribution to eliminate the sexist stereotypes that exist in the collective consciousness (Martínez Lirola, 2017). The studies that have implemented EPG highlight that this approach is adequate to overcome discrimination or undervaluation by gender and that it contributes to promoting equality and diversity (Delbury, 2020; López Hernáez & Sabater Fernández, 2019; Ruiz-Bejarano, 2020). There are also researchers that indicate that the implementation of the EPG contributes to fostering models of new masculinities, a fact that is associated with a liberating education (Martínez Lirola, 2020; Rios, 2015).

Apart from this, EGP also combats and denounces any type of discrimination suffered by girls or women, both privately and publicly (media, religion, or cultural practices in general) (Ruiz-Bejarano, 2020). It is about making gender inequalities visible and offering alternatives to combat them (Galarza et al., 2016). Consequently, introducing the gender perspective in education contributes to the empowerment of women and girls, which traditionally has not been taken into account. Therefore, the EPG encourages the critical analysis of the roles that have been granted to the different sexes throughout history, a fact that means that despite the fact that we are in the 21st century we have to continue claiming the need to introduce the perspective gender at all educational levels. In addition, this educational proposal makes visible the achievements of women in society in general and in the different disciplines in particular. Another of the fundamental challenges is to offer alternatives of an inclusive and egalitarian language in the face of sexist language.

In fact, EGP is essential for students to receive a comprehensive education that allows them advancing as critical citizens in the 21st century. We are therefore faced with a pedagogical proposal that goes beyond the acquisition of content, since equality between women and men is promoted. Gender equity occupies a central axis because it is considered a matter of human rights and social justice. It is related to objective 5 of the Sustainable Development Goals (SDG) that the United Nations proposes in 2015, as we have previously indicated.

Then, the educational proposal offered in this article is framed in the two SDG that the United Nations proposes for the year 2030 (United Nations, 2015), related to promoting education and gender equality: SDG 4. Guarantee inclusive, equitable and quality education and promote lifelong learning opportunities for all, and SDG 5. Achieve gender equality and the empowerment of all women and girls. Thus, the social nature of the SDG contributes to introducing social issues in the classroom such as gender, poverty, sustainability, etc. so that students can discuss them and deepen on social competences such as communication or cooperation.

### 3.2. MANGA

The term *manga* came into common use in 1814 by Katsushika Hokusai, a Japanese painter who published his collected sketchbooks under the name of *Hokusai Manga*. According to McCarthy (2014), the first part of this word (“man-“) is usually translated as whimsical or unrestrained, so on the whole (*manga*), it means “irresponsible pictures” (p. 80), and even though at first it was used to refer to a set of drawings of a didactic nature which served as a model to others, nowadays it is just referred to as comics.

In the 1950s onwards, Japanese comics made their way to the West through occupation, trade, immigration, among others, and they professed a culture that embraced all ages and all sorts. Therefore, it was a cultural exchange, and it still is. Also, Murakami (2009) declares in her article that there are many scholars who have shown that hybrid texts – this is, works which combine both visual and textual materials– are great options regarding efficient learning and understanding.

Indeed, these materials will “contribute to a dynamic and multifaceted repertoire of knowledge both of the word and the world.” (Bland, 2018, p. 6). There are myriad genres of *manga* which are broadly differentiated based on the target audience; thus, they can be divided into five basic types: *shōnen*, or young-boy readers; *seinen*, or men readers; *shōjo*, or young-girl readers; *josei*, or women readers, and *kodomo*, targeting children. However, this is not a rule as such: originally, these stories were targeted this way, but it does not mean that girls cannot read *shōnen* or *seinen* stories, neither that boys cannot read *shōjo* or *josei manga*, as all genders constitute readership nowadays. Furthermore, professors should include cross-curricular topics, apart from fostering the intercultural competence and promoting students’ awareness of the Japanese culture with some key concepts as the following ones:

Beginning with their cultural differences, *manga* comics and books in Japan open from right to left –just the opposite to Western books–, and their lines of writing are vertical, since Japanese population write from the top to the bottom. Because of this, American and European readers need some time to adapt themselves to this new way of reading. If

Japanese comics had to change their reading direction, both drawings and diagrams would suffer from alterations. Therefore, *manga* comic pages must be read like an “S”, so the reader must start reading it at the upper-right corner and end it at the bottom-left corner of the same page.

Another significant cultural difference is the pacing: *manga's* is much slower, and it places less importance on action. As these comics give more value to the emotional side, they tend to dedicate full pages to emotional reactions, whereas Western comics do the same with action. This is one of the reasons why *manga* creators –also called *mangakas*– do not rush to finish the story line, since they can publish many volumes before finishing a single *manga* series.

According to their style differences, many *manga* artists place their pictures as though they were film frames, since animation and cinema inspired them at the beginning of the XX century. For this reason, Japanese illustrators used changes in perspective and other visual effects closely related to cinema's ones, also known as cinematic techniques. Then, *manga* characters are portrayed in more dramatic angles, conforming a storyboard which represents a snapshot of the action which corresponds to the dialogue. Thus, the reader experiences the sense of watching a movie by reading through the frames. Furthermore, these frames are usually characterized by simple, monochromatic drawings showing characters with background scenery which lack of narration, so these readings are meant to be scanned promptly, with the advantage of understanding most of its story only by observing their images.

### 3.3. MULTIMODALITY

The concept of multimodality is used as a reference to the fact that human beings tend to process information by combining different modes of communication, which can be classified into music, written text, images, among other aspects. There are many experts who have developed this theory (Baldry & Thibault, 2006; Bezemer & Jewett, 2010; Bowcher, 2012; Painter, 2018, inter alia), but special allusion must be made to the work done by Kress and van Leeuwen (2001, 2006, 2021).

A multimodal text one that combines different modes of communication (written text, images, diagrams, music etc.) to express its meanings. For this reason, students must be aware of the potential of multimodal texts, stepping monomodal ones aside, so that the class can be studied as a multimodal learning environment (Triviño Cabrera, 2018; Zammit, 2019).

Multimodality –in other words, creating meanings throughout the use of different modes of communication such as images, sounds, language, music, gestures, among others– has been developing in our society. All these different semiotic resources can be found only by themselves or by the combination of various ways simultaneously. Following Kress (2010):

“Each mode does a specific thing: image shows what takes too long to read, and writing names what would be difficult to show. Colour is used to highlight specific aspects of the overall message. Without that division of semiotic labour, the sign, quite simply, would not work. Writing names and images shows, while colour frames and highlights; each to maximum effect and benefit.” (p. 1)

Moreover, van Leeuwen (2014) also points out that “the term multimodality refers to the integrated use of different semiotic resources (e.g. language, image, sound and music) in texts and communicative events.” (p. 281). For this reason, these modes of communication are significant in our everyday life, yet some of these authors remark the importance that images have according to their capacity to capture people’s attention (Kress & van Leeuwen, 2021; Kress, 2010; Unsworth, 2010).

The various components of multimodal texts have, as Triviño Cabrera (2018) defends, a function. They are designed that way and not in a different one because they have a purpose in order to achieve a certain objective: persuading, convincing, disclosing information, etc. For this reason, all the different modes of communication are semiotic resources that contribute to the development of meaning.

Using multimodal materials is increasingly spreading in language classrooms, since these are suitable places when it comes to promoting critical thinking, thus bringing students closer to different contexts that demand the use of some skills that are requested in social realities, and also

developing multiliteracies regarding their communicative nature. Opting for a multimodal approach implies several points of view during the teaching-learning process, since students are able to work actively with the different modes of communication that are present in those materials. That is the reason why many teachers and professors have incorporated multimodal perspectives and tools in their teaching practices in the last decades. Quoting Martínez Lirola (2013), “we understand the classroom as a multimodal learning environment in which modes of communication, different to language, are present to facilitate the teaching-learning process.” (p. 198).

It is important that teachers, professors and students are aware of the power that multimodal materials have in order so that they can contribute to developing classrooms that are multimodal learning environments (Baldry & Thibault, 2006). That being the case, a multimodal teaching proposal should leave aside traditional written and monomodal texts and should focus on integrating different semiotic modes in the foreign language teaching. In addition, teachers should help students understand how those modes are created, which elements are likely to be interpreted, and how to examine any multimodal material in detail.

As it has been stated, conducting dynamics which entail a both meaningful and multimodal teaching experience facilitates student’s learning process (Martínez Lirola, 2014). Nevertheless, there are other aspects that should not be put aside: teaching not only multimodal materials per se, but also social topics such as intercultural aspects, ecology, gender issues, cultural differences, human rights, among others, to encourage students to be self-aware within a social and cultural context, and then promote a sense of ethical responsibility and community spirit. After that, students will be able to develop social skills of cooperation and mutual understanding through those awareness-raising lectures.

Consequently, the relationship which exists between discourse and society is understood by a proper analysis of multimodal texts and the way in which the aforementioned texts interact with people every day. As it has been noted, these materials are highly productive and should be present in educational contexts, as it happens with university classrooms,

since they are spaces to learn about how society works (Hidalgo & Murillo, 2016; Martínez Lirola, 2017).

## 4. METHODOLOGY

The methodology used has followed a qualitative-descriptive model with an exploratory nature since it focuses on the notes that the professor took in class while students participated in the designed activities. In addition, some quantitative data are provided based on a questionnaire in which students expressed their opinion anonymously on certain aspects related to the didactic proposal and on a rubric that both the professor and students completed in at the end of the teaching-learning process (see Table 1).

### 4.1. CONTEXT AND PARTICIPANTS

English Grammar as FL/L2 is an optional 6 credit subject which is taught during the first semester of the Master's degree in Spanish and English as a Second and Foreign Languages. Its fundamental purposes are to offer students techniques, theories and pedagogical proposals to teach grammar at different educational levels, taking into account the educational demands of the 21st century.

The practice that is presented in this study was carried out with students enrolled in said subject. The total number of people enrolled in the 2022-2023 academic year was 14, 11 women and 3 men, all graduated in English Studies, Education or Translation. All the students participated in two practical classes of two hours each (see section 5.1).

### 4.2. INSTRUMENTS

The research instruments used consisted, on the one hand, of the notes taken by the professor while students carried out the activities framed in Education with gender perspective and in the rubric that the professor completed during the teaching-learning process (see Table 1). On the other hand, the anonymous questionnaire was prepared at the end of the semester in order to know students' opinion about multimodality, *manga* and gender issues (see Appendix 1).

The questionnaire provides quantitative data that helps to identify the contribution of the didactic experience in the integral formation of students. As it was aforementioned, this questionnaire was based on the notes that the professor took in each class while students were participating in the different activities designed so that they could be aware of different grammar aspects and gender issues. For this reason, the questions were designed to make students reflect on the main aspects that the professor had taken into account both in the design of the activities. The data was collected anonymously at the end of the semester and analyzed manually. There are 4 dichotomous questions, 3 short-answer questions, 1 multiple choice question, and 2 questions in which a Likert scale is used (5 = strongly agree, 4 = agree, 3 = neutral, 2 = disagree, 1 = strongly disagree). The data obtained from the questionnaire were statistically analyzed using Excel software (Microsoft office), in order to obtain univariate statistical parameters.

#### 4.3. PROCEDURE

Regarding the procedure, in the first place, the professor compiled multimodal texts where gender topics were foregrounded so that students could be critical with gender issues. Consequently, some chapters from different *manga* comics mainly starred by female characters, with a focus on a future gender analysis, were selected. At the same time that the texts were collected, the professor prepared both the rubric and the questionnaire in order to observe aspects related to multimodality, *manga* and gender issues in the teaching-learning process (see Table 1 and Appendix 1).

When selecting the *manga* materials that gathered different gender issues, as it has been explained throughout this document, it was decided to search for *manga* titles in which a female character appeared throughout a whole chapter. The fact that they belonged to different compositions was crucial in order to compare all of them during the session. MyAnimeList (Top Manga, 2022) is an online platform which has nearly 60,000 titles collected in its database. All these comics were filtered according to the 47 different themes in which they are distributed, and taking into account the gender component, there were some themes

more welcomed than others, such as adult cast, gore, historical, mecha or robot *manga*, military, mythology, organized crime, psychological, school, superpower and even the vampire one.

Once the said themes were selected, the professor read the first twenty *manga* entries that appear throughout the platform, all of them ordered according to the maximum score they had. Then, the professor proceeded to choose one title from each theme, being this title familiar to the knowledge of the said professor so that the session could be well-driven. After this, two titles were obtained, consisting of multimodal materials with which students could work with different female characters: On the one hand, Gurren Lagann (Mori, 2007): Chapter 2, starring Yoko Littner (Theme: Mecha) and, on the other hand Inuyasha (Takahashi, 1996): Chapter 1, starring Kagome Higurashi (Themes: Historical; Mythology; Time travel).

## 5. DIDACTIC PROPOSAL AND ANALYSIS OF THE RESULTS

This section is divided into two subsections: the first one concentrates on the didactic proposal designed in order to accomplish the objectives of this article; the second one offers the results of the questionnaire and the rubric.

### 5.1. TEACHING PROPOSAL

As it has been pointed out throughout this article, the designed activities pursued the objective that students could delve into the use of *manga* comics to review grammatical aspects in a dynamic way while applying basic aspects of multimodality and deepening into gender issues. Consequently, different grammar aspects were emphasized to work with throughout the session which was about to be carried, such as articles, verbal tenses, modals and semi-modals, relative clauses, among other equally relevant elements. Likewise, the selected *manga* comics offered the possibility for students to advance as gender egalitarian citizens because they make direct allusion to women's empowerment, overcoming gender stereotypes, breaking with gender roles, and other significant aspects.

The teaching proposal was held in two sessions of two hours each, and they followed this structure: In the first practical session, the teacher introduced the concept of education with a gender perspective along with its most important notions so that students were familiar with this approach. Later, the teacher explained the main principles of visual grammar following Kress and van Leeuwen (2021) and referred to *manga* culture. Students were given time to ask questions and to comment critically the examples and concepts presented in the classroom.

Once students were introduced to the main theoretical concepts, the professor explained the activities that students had to carry out applying the theory to some practical activities. Students were given an outline with the most important aspects they had to pay attention to in their analysis. First of all, they needed to provide a brief analysis of the physical appearance of the female character which was portrayed in *Inuyasha* (Takahashi, 1996). This was relevant so that students could point out if there were fan service methods, or sexual elements which served to please the audience. Then, they had to refer to the personality of the female character to show if she was independent, strong or capable enough. Next, students should present at least two extracts of visual grammar that they found interesting, sharing how the images contribute to their meaning. In the end, they had to state if they considered this character a model example.

Once the explanation about what students should do was finished, the professor started grouping them in pairs so that they could work deeply on the *manga* texts. During this time, they were provided with the *manga* extracts, and the professor guided and advised them in reference to the *Inuyasha*'s (Takahashi, 1996) chapter. After this part, students worked on the different extracts until they were presented in class. Some screenshots taken from the aforesaid *manga* titles are displayed below, which help to understand what students had to do during the practical session (see Figures 1 and 2):

FIGURE 1. Kagome telling his brother not to be afraid of the situation



Source: *Inuyasha* (Takahashi, 1996). © VIZ Media

FIGURE 2. Kagome confronting the demon without hesitation



Source: *Inuyasha* (Takahashi, 1996). © VIZ Media

During the second session, students worked with Gurren Lagann's (Mori, 2007) chapter 2 in the same way that they did with the Inuyasha's (Takahashi, 1996) one in order to continue delving into the portrayal of the different female characters and observing how meanings were expressed throughout the written text and images. Some of the pages with which students had to work in this session are as follows (see Figures 3 and 4):

**FIGURE 3.** Yoko arriving for the first time at the place where Simon and Kamina were



Source: *Gurren Lagann* (Mori, 2007). © Bandai Entertainment

FIGURE 4. Yoko being saved by Kamina and getting angry because of his manners



Source: *Gurren Lagann* (Mori, 2007). © Bandai Entertainment

As the previous figures show, angles when portraying the female character in Figure 4 are placed that way on purpose, showing a more submissive and vulnerable female protagonist. In Figure 3, there is a sentence which can read “it was a woman”, instead of “it was that woman”, since the female protagonist is again shown as something strange to be there.

After this, a debate on aspects related to grammar and gender issues in both *manga* materials took place, and at the end of the session, the teacher indicated the most relevant aspects of said interventions by way of feedback for all students who were presenting during that session. This feedback was characterized by being always positive, encouraging students to reflect and evaluate their own learning and strategies with a view to future improvements. Before finishing the lesson, students filled in the questionnaire (see Appendix 1) and the rubric, while the professor also completed the rubric regarding students’ participation (see Table 1).

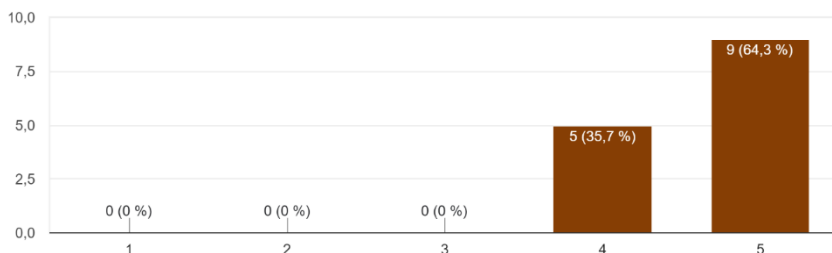
## 5.2. RESULTS

The first subsection refers to the analysis of the results of the questionnaire that was completed by the students at the end of the sessions, whereas the second subsection shows the interpretation of the data found in the rubric.

### 5.2.1. Results of the questionnaire

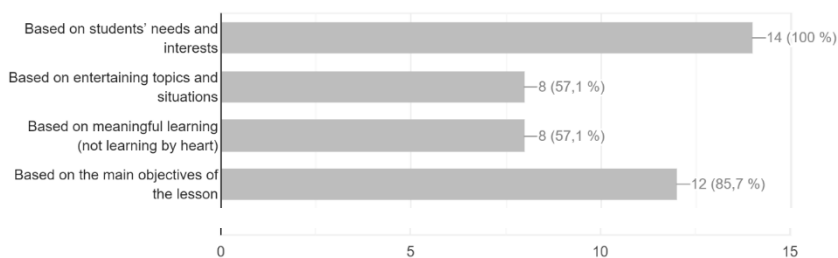
Firstly, 100% of the students answered affirmatively when they were asked if they agreed with the fact that learning to read multimodal texts was useful, thus providing some of their reasons in the second question: some of them mentioned that these texts combined different modes, and for this reason different topics could be learnt at the same time; others referred to the idea that they allow society to communicate effectively with each other; also, that we live in a multimodal reality, so these texts are found everywhere; among others. In the third question, students had to select through the Likert scale to what extent a class should be multimodal, where 64.3% chose the highest importance and 35.7% stated that it should also be high, as indicated in Figure 5.

**FIGURE 5.** Results of the third question.



The fourth question sought to know if students believed that teachers and professors should present visual grammar explicitly in order to teach various contents, in which 85.7% answered affirmatively, compared to 14.3%, the ones who did not see it as entirely appropriate. Regarding the fifth question, students could choose among different options when selecting multimodal resources and taking them to the class, resulting in 100% that pointed out these materials should be based on students' needs and interests; 85.7% indicated that it would be positive if these materials took the main objectives of the class into account; 57.1% made reference to the fact that they were based on entertaining themes and situations; and another 57.1% chose that they turned out to be significant learning (see Figure 6).

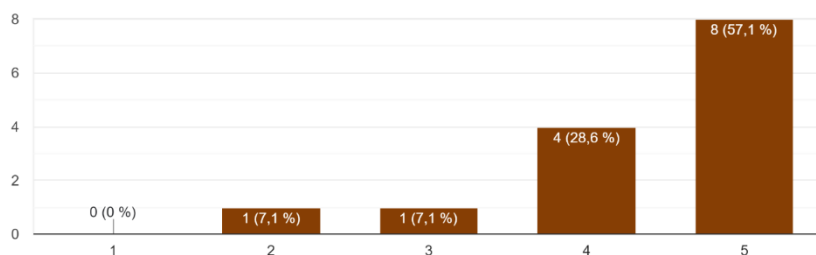
**FIGURE 6.** Results of the fifth question.



Focusing on the sixth question, in which students were asked if *manga* was indeed an appropriate multimodal text to introduce gender issues, 92.9% were totally in favour, in contrast to the disagreement of 7.1%. Those students who answered positively to this question in the seventh one included relevant comments such as seeing their great potential to

teach gender aspects at the different educational levels and to be aware of the breaking of certain gender stereotypes. The negative justification pointed out that students' ages and interests need to be taken into consideration, otherwise, the proposal would not work. With reference to the eighth question, closely related to the previous ones because it tried to find out if students considered that gender issues could be introduced through *manga* materials, the Likert scale used showed that 57.1% and 28.6% respectively agreed with this statement, compared to 7.1% remaining neutral and the discrepancy of another 7.1% (see Figure 7).

**FIGURE 7.** Results of the eighth question.



The ninth question showed that 92.9% of students had delved into gender issues through the *manga* comics in the sessions, compared to 7.1% answering negatively. The main reasons for this good reception in the tenth question were that studying and analysing those multimodal texts had helped them become more aware of gender equality and thus sharing their different points of view, apart from helping them broaden their visions and encountering myriad gender issues. Regarding the negative reason, the person felt that an effective discussion about those topics was not really made.

### 5.2.2. Results of the rubric

The professor started writing down students' contributions and thus transferring them as quantitative data to the rubric while they were presenting their different points of view in the debate. Once the discourse was finished, students also completed the aforementioned rubric individually. The results are shown below, where the professor's responses are indicated on the first line and students' ones are below:

**TABLE 1.** Results of the rubric regarding Multimodality, manga and gender issues.

	Likert scale				
Aspects to measure students' multimodality, manga and gender issues	1 Professor: Students:	2	3	4	5
Use of the terminology associated with visual grammar	0% 0%	0% 0%	42.8% 28.6%	28.6% 42.8%	28.6% 28.6%
Application of the contents on visual grammar in the task	0% 0%	0% 0%	14.3% 14.3%	35.7% 57.1%	50% 28.6%
Vocabulary and idiomatic expressions on gender issues	0% 0%	0% 0%	42.8%	28.6% 14.3%	71.4% 42.8%
Promote reflection on different gender issues	0% 0%	0% 0%	0% 0%	28.6% 35.7%	71.4% 64.3%
Connection between multimodality, grammar and gender issues	0% 0%	0% 0%	14.3%	28.6% 50%	57.1% 50%
Acquiring skills that will be useful not only in other subject areas, but also in everyday life	0% 0%	0% 0%	28.6%	42.8% 35.7%	57.1% 35.7%

The teacher noted down that 42.8% of students used visual grammar terminology occasionally, compared to 28.6% that used it very frequently (5) and 28.6% that employed it frequently (4). Regarding students' answers, 42.8% selected that the aforementioned usage was mainly frequent (4), in contrast with 28.6% who stated that it was very frequent (5) and 28.6% marked the more occasional option (3). With respect to the application of the contents on visual grammar in the task, the professor found more difference with regard to the previous objective, since she considered that 50 % were able to handle these notions without hesitation (5), 35.7% referred to some aspects of this grammar (4) and only 14.3% adopted a more passive position (3).

Furthermore, the professor pointed out that 71.4% of students used concepts related to gender issues in a really frequent way (5), and 28.6% did it frequently (4). Nevertheless, 42.8% of students answered that this objective was achieved occasionally (3), compared to another 42.8% who

stated that this happened very frequently (5), together with 14.3% who opted for the frequent alternative (4). All these indicators helped both the reflection on different gender issues and its subsequent connection between multimodality and grammar in turn, since the professor highlighted that 71.4% and 28.6% of students respectively achieved those items effectively. The results of students with respect to these indicators are quite close to the professor's ones due to the fact that 64.3% considered that it was fully effective (5), leaving 35.7% marking a favourable promotion (4). In the case of the connection, those percentages showed that 50% of students selected that it was totally effective (5) and the other 50% went for a convenient choice (4).

Through the arguments presented in the classroom, the acquisition of certain skills was promoted due to the fact that the results of each of the aforementioned aspects were satisfactory. For this reason, the professor indicated that 57.1% had truly achieved those abilities (5), compared to 42.8% who had successfully achieved them (4). Students' responses, however, did not differ so much with respect to their answers either, since it is pointed out that two percentages of 35.7% reached them both completely (5) and adequately (4), and only 28.6% remained neutral regarding this indicator (3).

## 6. DISCUSSION

After analysing the results obtained in the questionnaire filled in by students and those of the corresponding rubric completed by both the professor and the classroom, it can be stated that the Inuyasha (Takahashi, 1996) and Gurren Lagann (Mori, 2007) *manga* materials are useful to make students aware of the potential of the different modes of language communication, leaving monomodal texts aside in this way. For this reason, and in line with what was provided by Triviño Cabrera (2018), the answer to the first research question that sought to answer whether gender-based *manga* comics were suitable multimodal texts to teach English grammatical contents has turned out to be entirely affirmative, since it has been proven that these materials offer the possibility of revising grammar in a dynamic and innovative way to the teaching-learning process.

Thanks to the practical sessions presented in this study it has been possible to make gender inequalities visible, apart from offering alternatives to combat them (Galarza et al., 2016). This can be observed when students made direct allusions to how Gurren Lagann's (Mori, 2007) female protagonist was portrayed throughout the *manga* materials: she is not always represented as an independent female, being constantly saved by another male character, and then becoming vulnerable while she is being grabbed. Moreover, comments on how the two female protagonists were supposed to behave when they were in danger support the assumption that gender is indeed a social construct, as López Hernández and Sabater Fernández (2019) state.

Both the questionnaire and the rubric show that students were aware of different gender issues that were present in the *mangas* used for the activities. For instance, the female main character in Inyasha (Takahashi, 1996) is shown as a brave leader with great power, since she has to fight a monster. One of the groups pointed out that the representation of models like her could be beneficial to other girls, with which we totally agree. In Gurren Lagann (Mori, 2007), however, the female main character is hypersexualized, with lots of unnecessary close-ups of her breasts and bottom. What is more, she is not dressed in a suitable way, as she is supposed to confront other enemies.

Therefore, the second research question was successful, since it focused on finding out if the selected *manga* materials contributed to learning visual grammar and gender equality at the same time. Moreover, students could also be critical thinkers, and develop some competences such as decision making and emotional competences among others during the teaching-learning process, some of which they could use in their everyday life in a fully effective way.

## 7. CONCLUSIONS

This study shows that *manga* comics are educational tools with great advantages both in the study of the English language and in terms of gender equality. Consequently, students' learning process is benefited by the implementation of this type of texts because these materials

involve students in the classroom due to the topics presented in them. Thus, the use of *mangas* at tertiary education is an example of how multimodal texts are useful to introduce culture and global topics such as genre into the classroom at the same time that students revise English grammar and apply the principles of visual grammar to the analysis of texts.

One of the most significant conclusions of this didactic proposal is that the use of *mangas* on social content contributes to raising awareness of global topics such as gender. For this reason, professors should offer opportunities to work with multimodal texts such as the ones presented in this article to revise or teach English grammar at tertiary education. Consequently, the use of the said materials encourages openness to other points of view and favours respecting and valuing differences in order to banish the idea that there are genders superior to others. In fact, working on these aspects implies the development of a global awareness that entails banishing some prejudices and contributing to a more egalitarian society.

Likewise, the questionnaire showed that university students were conscious of the importance of using multimodal texts such as *manga* comics in the classroom, as these materials offered very significant information, apart from making concepts and terms easier to understand by combining visual and verbal texts within the stories. Finally, the rubric also presented that university students took into account gender issues throughout the *mangas* selected because they made them reflect on gender stereotypes such as typical female characters in trouble, inadequate dressing to reach a larger audience and being saved and protected by a male character. Consequently, the *mangas* selected make the teaching-learning process dynamic and go beyond grammar teaching by incorporating the principles of EGP in the classroom so that students delve on global issues such as gender at the same time that they revise or learn grammatical content and visual grammar.

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APPENDIX 1. Questionnaire on Multimodality, *manga* and gender issues

1. Do you think that learning to read multimodal texts is useful?

Yes | No

2. Why? Please, justify your answer.

3. In your opinion, up to what extent do you consider that a classroom should be multimodal? (1 is the lowest and 5 is the highest)

1 2 3 4 5

4. Do you think that teachers should teach visual grammar explicitly to teach (grammatical) contents at the different educational levels?

5. What criteria would you use to select multimodal resources to teach (grammatical) contents at the different educational levels? Choose among the following or add your personal criteria:

- Based on student's needs and interests
- Based on entertaining topics and situations
- Based on meaningful learning (not learning by heart)
- Based on the main objectives of the lesson
- Others:

6. In your opinion, is *manga* an appropriate multimodal text to introduce gender issues?

Yes | No

7. Why? Please, justify your answer.

8. Up to what extent do you consider that multimodal texts in general and *manga* in particular can contribute to introducing gender issues? (1 is the lowest and 5 is the highest).

1 2 3 4 5

9. Have you been able to deepen on gender issues with the multimodal texts used during the sessions?

10. Why? Please, justify your answer.

## INFORMAL USE OF AUTHENTIC VIDEOS: THE GENDER VARIABLE

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EKATERINA SINYASHINA  
*Universidad de Alicante*

### 1. INTRODUCTION

Developments in ICTs (Information and Communication Technologies) have opened up doors to taking language learning into the informal out-of-class setting, in which acquisition of a language can take place while performing different online activities whose initial purpose is not learning itself (Wilson, 2004; Sockett, 2014). It is particularly true when the target language is English as its role of an international language is undeniable in all areas of people's lives (e.g. Crystal 2003; Dewi, 2013; McKay, 2018; Seidlhofer, 2005). Viewing authentic videos is one of many informal online activities that can be beneficial for English language learning (Sinyashina, 2022; Alonso Alonso, 2023, etc.). Not only do they provide valuable exposure to natural language and English culture, but also modern ESL (English as a Second Language) and EFL (English as a Foreign Language) learners are enthusiastic about engaging in this activity during their free time. In addition, there is an ample choice of authentic videos on the Internet and video-on-demand platforms (Netflix, HBO, etc.), which includes a record number of 599 original scripted TV series and 449 movies that were released in the United States and Canada in 2022, according to Statista Research Department (2023).

The process of informal language learning is complex and can be influenced by various factors, including personal traits of FL or SL learners, such as gender. Studies that have considered the gender variable reveal certain similarities as well as differences regarding how male and female learners use technology for language learning purposes, learning

strategies, beliefs about language learning, etc. (Bernat & Lloyd, 2007; Ehrman & Oxford, 1989; Catalán, 2003; Pahom et al., 2015, etc.). There is, however, limited research on how male and female English learners use authentic videos for informal learning and their reasons for engaging in this activity outside of class. This study described in this chapter sheds light on this issue.

### 1.1. INFORMAL ENGLISH LANGUAGE LEARNING AND AUTHENTIC VIDEOS

When defining informal learning, scholars generally agree on the idea that the acquisition of a language during such practice usually takes place incidentally, that is without a clear intention to acquire new information about the target language and its aspects (e.g. Krashen, 1989; Nation, 2004; Barcroft, 2015). Sockett (2014, p. 2), for example, explains that informal learning “occurs naturalistically, using resources not specifically tailored for educational purposes and which are situated outside of any institutional context”. Meyers et al. (2013, p. 356) and Trinder (2017, p. 402) agree with Sockett (2014) on that informal learning occurs in contexts “that take place outside of school” and that it is usually “not linked to any course or institution”.

By authentic videos or authentic audio-visual material we refer to various forms of media, such as “feature films, documentaries, commercials, game shows, etc.” (Sherman, 2010, p. 1), which were originally produced and released in English speaking countries as a source of entertainment for native speakers (Talaván, 2007). When used by non-native speakers, however, the option of subtitles/captions<sup>4</sup>, either in English (reversed or intralingual mode) or in the mother tongue (standard or interlingual mode), is frequently activated to facilitate the understanding

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<sup>4</sup> The Merriam-Webster Dictionary defines subtitles as a “printed statement or fragment of dialogue appearing on the screen between the scenes of a silent motion picture or appearing as a translation at the bottom of the screen during the scenes of a motion picture or television show in a foreign language”. Captions, on the other hand, differ from subtitles in that they provide more information to viewers. In addition to the type-written version of the audio component, captions also include a visual display of the dialogue, narration, music, and sound effects, as explained by Jelinek Lewis in 1999.

of the audio component of the audio-visual material and consequently of the content of the video material.

A variety of studies in different parts of the world, including Spain, have analysed the attitudes of ESL and EFL learners to the use of authentic audio-visual material in the informal atmosphere. In general, English language learners express positive attitudes to the use of authentic videos in their free time and are exposed to them with more or less frequency. Thus, for example, Hyland (2004) found that Hong Kong students of English frequently watch videos and TV programmes. Similarly, Toffoli and Sockett (2010) reported that non-specialist learners of English from France turn to authentic videos (e.g. TV series and films) as one of the most frequently carried out informal activities for acquiring English. Inozu et al.'s questionnaire (2010) reveals that watching television programs and movies were cited among the most frequently practiced informal activities carried out by Turkish university learners of English. Trinder (2017) reported that Austrian university students named films and TV series as one of the most preferred sources of informal English language learning, particularly for informal “vocabulary acquisition, listening, and pronunciation” (Trinder, 2017, p. 406). University students from two public universities in northern Taiwan state that they “watch YouTubers’ English-teaching videos mostly for finding learning resources” (Wang & Chen, 2020, p. 342).

With regard to Spanish learners of English as a FL, this issue has been brought into focus among others by Talaván and Ávila-Cabrera (2015), Muñoz (2020), Muñoz and Cadierno (2021), Sinyashina (2022) and Alonso Alonso (2023). Talaván and Ávila-Cabrera (2015, p. 155), for example, reported that the majority of the students from the UNED (Universidad Nacional de Educación a Distancia) were exposed to authentic videos “almost on an everyday basis”. Muñoz (2020) discovered that watching YouTube videos was the second most frequently practiced out-of-class activity by Spanish adolescent and adult learners of English. Muñoz and Cadierno (2021), in their turn, analysed the exposure of Danish and Spanish adolescents to authentic audio-visual material with subtitles in L1 and English. The results showed that in general the Danish students were more frequently exposed to authentic videos in

comparison to their Spanish counterparts, particularly to authentic audio-visual material with L1 subtitles. Sinyashina (2022) by means of a survey discovered that the great majority of Spanish university students watch authentic video in their free time with more or less time of exposure: more advanced learners (C1 level of proficiency) tend to practice this activity with more frequency and unlike B1 students “tend to focus on the entertaining side of it and find authentic videos useful for acquiring some cultural knowledge” (Sinyashina, 2022, p. 78). Alonso Alonso (2023) analysed how learners of English from different educational contexts (secondary education, baccalaureate, state language school and university students) engage in out-of-class activities in English, such as, for example, watching films, listening to music, video gaming, etc. The results revealed that with the exception of the youngest participants (secondary education students), “the rest of the groups engaged in a variety of activities, mainly watching YouTube videos and Netflix” (Alonso Alonso, 2023, p. 85).

## 1.2. GENDER IN SL AND FL LEARNING

Until 1970 the terms ‘gender’ and ‘sex’ were treated as synonyms and used interchangeably, the phenomenon which sometimes takes place even nowadays (see Pryzgodna & Chrisler, 2000). The distinction between these two terms was first made by sociologists in 1970 (Holmes, 2007). As a result, people who study sex and gender differences nowadays usually define ‘sex’ as biologically determined difference between males and females. The term ‘gender’, on the other hand, is used to describe “socialized behavior patterns” (Pryzgodna & Chrisler, 2000, p. 554) or “socially produced differences between being feminine and being masculine” (Holmes, 2012, p. 2) and it “is becoming more common in scientific publications to describe biological variation traditionally assigned to sex” (Torgrimson & Minson, 2005, p. 785). As a result, there is an increasing body of research examining the impact of gender on SL and FL learning including studies on vocabulary acquisition, the use of learning strategies, learners’ attitudes, beliefs about new language learning, etc.

Thus, for example, regarding language learning in general, Siebert (2003) observed statistically significant differences between males and

females concerning beliefs about English language learning. Female students from her study were “more interested in the social aspects of language learning “, whereas “male students were almost twice as likely as female students to strongly agree with the statement that it is important to speak a language with excellent pronunciation” (Siebert, 2003, p. 30). Difference was also found in their assessment of how long it takes to learn a language, with males having more optimistic perception in comparison to females. Using the BALLI (Beliefs about Language Learning Inventory) survey, Bernat and Lloyd (2007) reported many similarities concerning female and male respondents’ views about language learning. Nevertheless, the respondents differed in two items: females believe more than males that “intelligence plays a greater role in language learning” (Bernat & Lloyd, 2007, p. 88), while males tend to enjoy more practicing English with native speakers. Similarly, Gómez Paniagua (2018), with the help of the BALLI dimensions noted that although both males and females overall hold very similar beliefs about language learning, they differed in the dimensions of aptitude, nature of learning, strategies used for learning and communication, expectation and motivation. With respect to language learning strategies use, Oxford et al. (1988) reported that females seem to use a wider range of learning strategies, with particular preference of social strategies, in comparison to their male counterparts. Ehrman and Oxford (1989) registered that females, more so than males, rely on a variety of strategies for comprehending the meaning of a text in the L2. Gu (2002) reported that Chinese female EFL learners demonstrated the wider use of vocabulary learning strategies. Catalán (2003) studied how male and female students of Basque and English language make use of vocabulary strategies and found that females tend to use more strategies than males. Moreover, certain differences were observed for the range of strategies used for learning English: females make “greater use of formal rule strategies, input elicitation strategies, rehearsal strategies and planning strategies”, whereas males prefer image vocabulary learning strategies (Catalán, 2003, p. 54).

In reference to reading comprehension and vocabulary acquisition and knowledge, Scarcella and Zimmerman (1998) examined if male and female ESL students differed in the knowledge of academic English

vocabulary and observed that on the whole males outperformed females and scored higher at the reading habits, interactional styles, educational backgrounds, and cultures parameters of the Test of Academic Lexicon (TAL). Nevertheless, Scarcella and Zimmerman (1998) point out that the results cannot be entirely attributed to the effect of the gender variable. Gu's survey (2002) with Chinese EFL learners revealed that female students performed better in vocabulary and general English language proficiency tests. Grace (2002) in her turn studied the effect of L1 translation on female and male French students long-term and short-term retention of receptive vocabulary tests in CALL lessons and found no significant differences between the two genders. Brantmeier (2003) focused on how gender affects reading behaviour of students studying Spanish as SL and observed that males show better comprehension of male-oriented content and females of the female-oriented one. Lin (2011) found that while females did better at tasks of videotexts comprehension and immediate and delayed vocabulary tests, male participants were significantly better at comprehension of difficult videotexts. Pahom et al. (2015) by means of questionnaires and various vocabulary tests examined the impact of gender on the recall of abstract and concrete words by students studying Spanish as a FL. No gender effect was observed for the recall of abstract and concrete words. Male participants, however, did "significantly better on the overall recall of all words" (Pahom et al., 2015, p. 158).

Concerning the influence of the gender variable on the use of technology in general, certain differences were reported in the study by Venkatesh and Morris (2000, p. 115): while men's technology use was "influenced by their perceptions of usefulness", women were more subjective to "the perceptions of ease of use". Slate et al. (2002) observed that males expressed more favourable attitudes to computer and Internet use in comparison to females. Moreover, "males reported more comfort and less confusion in using the Internet than was reported by females" (Slate et al., 2002, p. 90). Goswami and Dutta (2016), in their literature review, report not only gender differences in how females and males use computers and email services, but they also highlight similarities regarding the use of social media and in the field of mobile/electronic commerce.

As to technology use for language learning, Siebert (2003, p. 31) found that “female students do not consider mechanical/technological language learning devices as beneficial to language learning as do male students”. Aydin’s questionnaire (2007) analysed Turkish EFL learners’ attitudes to the use of the Internet. According to his findings, males demonstrate more positive attitudes than females regarding the use of the Internet for finding any kind of information and cultural exchange information in particular. Hou (2019) analysed how gender affects mobile-assisted technology use (Kahoot!, Socrative and Classdojo) by Taiwanese English as FL learners. While both male and female students displayed favourable attitudes, female students had a more optimistic perception and greater agreement and expectations concerning the use of mobile-assisted tools in various learning situations compared to their male counterparts. In the Spanish context, Muñoz (2020) found gender-related differences between male and female students who answered the survey in terms of the frequency of gaming and watching You-Tube activities, with males being more active. At the same time female adolescents showed “a higher frequency of talking face to face, particularly with friends” (Muñoz, 2020, p. 192). Another interesting observation from the Muñoz’s survey (2020) is that female adolescent respondents reported that they are exposed to movies in English with more frequency than male adolescent respondees.

Finally, despite the abundant gender-oriented research described in the paragraphs above, very few studies (Muñoz, 2020) have addressed the issue of how gender impact s SL and FL learners’ use of authentic videos in the out-of-class environment. This aspect comes into focus of the present paper.

## 2. OBJETIVES

The aim of this study was to analyse the influence of the gender variable on how university students studying English as FL use authentic videos in the informal environment. Therefore, by means of a questionnaire the present study set out:

- to analyse how female and male EFL university students manage authentic audio-visual material in the out-of-class environment and their reasons for performing this informal activity;
- to determine possible differences and similarities concerning how female and male students use authentic videos in their free time and the motives that drive them to perform this activity.

### 3. METHODOLOGY

The data was collected during three consecutive academic years (2020-2021, 2021-2022 and 2022-2023). A total of 71 male and 209 female respondents studying the English Studies at the University of Alicante answered a questionnaire during one of the university sessions. The majority of the survey respondents were Spanish, but there were also students of Arab, Italian, Ukrainian, German, Russian, Polish and other nationalities. The main reason of the considerable difference in the number of female and male respondents is the fact that normally more females register to study the English Studies degree comparing to males. The prevalence of female students was also one of the motives why the survey had to be administered during three consecutive years.

The questionnaire was designed in the Google Forms format. It was first piloted with 15 students and 3 university professors in order to ensure that the questions included in the final version were adequate for the purpose of the study and did not pose difficulties in terms of understanding to EFL learners of different proficiency levels. The final version of the questionnaire contained a total of 12 questions, which were divided into two sections. The first section was comprised of 6 questions that were designed to collect background information concerning participants' age, mother tongue, English language proficiency level, degree, gender as well as whether they normally watch authentic videos in their free time. The results of the age and English language proficiency level questions are presented in Table 1. Answers to this part of the survey allowed not only to collect background information about the participants, but also to select only those students who answered that they watch authentic videos in English their free time.

**TABLE 1.** *Characteristics of the respondents.*

Gender	Males	Females
Age		
18-20	49	160
21-23	19	39
24-26	2	7
26+	1	3
Proficiency Level		
B1	18	51
B2	30	87
C1	23	65
C2	0	6

The second section of the survey, which forms the main bulk of the present study, consisted of 6 questions. They enquired about the frequency of exposure, the use of subtitles/captions while watching videos, with whom the respondents normally watch authentic videos, using which services and on which devices and, finally, students' reasons for engaging in this informal activity. In answer to the first two questions, the respondents could mark only one option, whereas for the rest of the questions more than one option was accepted.

Respondents' answers were subjected to frequency count and firstly analysed in percentage form. After that, a statistical Fisher test analysis was performed to determine if there was any statistically significant difference in the results obtained.

#### 4. RESULTS

The first question of the survey enquired about the frequency with which female and male university students of the English Studies Degree are exposed to authentic videos in English. As is reflected in Figure 1, 65% of male and 67% of female respondents watch authentic videos every day. The option '2 or 3 times a week' was marked by 24% of the female respondents and 27% of their male counterparts. Very similar number of participants of both genders perform this activity once a week or 2 or

3 times a month. These two options were also the least marked. The Fisher test analysis did not find any statistically significant difference between females and males with the  $p$  value of 0.955.

**FIGURE 1.** Frequency of use of authentic videos

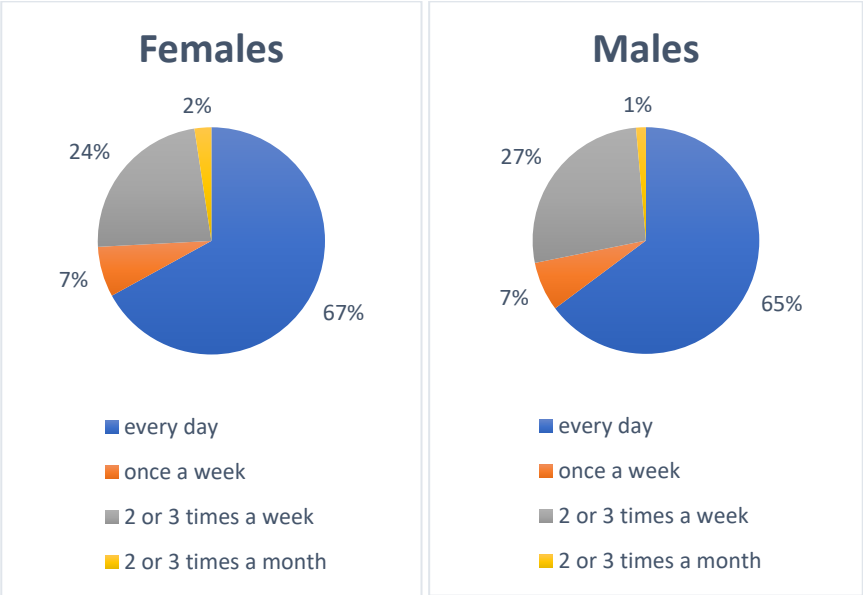


Figure 2 shows the percentage results related to the use of subtitles/captions by female and male students while viewing authentic audio-visual material in their free time. Over half of the respondents (58% females and 52% males) normally watch authentic videos with subtitles/captions in English. While 18% of the male survey respondents indicated that they habitually watch them with subtitles/captions in Spanish, this number was slightly higher for the female respondents (24%). One third of the male respondents do not activate any of the two types of subtitles/captions modes, whereas this percentage was lower for the female students (17%).

The Fisher test was not significant with the  $p$  value of 0.084.

**FIGURE 2.** Use of subtitles/captions

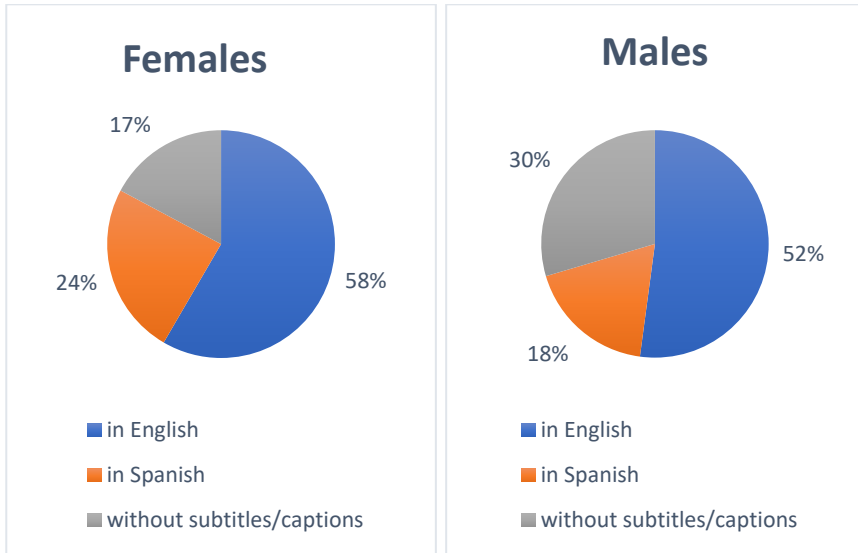


Figure 3 illustrates the number of female and male students who normally view authentic videos alone, with their friends, family members or with their partner. The great majority of the respondents prefer to watch authentic videos alone: 98% and 97% of the female and male respondents, respectively, marked this option. An equal number of female and male students (14%) replied that they watch them with their family. While around 28% of the female participants responded that they view authentic videos with their friends, this number was lower for the male respondents (16%). Slightly more males (13%) selected the option of viewing authentic videos with their partners comparing to their female counterparts (9%).

Regarding the possible effect of the gender variable on the answers to this question, a statistically significant difference was detected for the option ‘with my friends’, with the  $p$  value of 0.039. No statistically significant difference was found for the rest of the items: ‘alone’ ( $p$  value of 1.000), ‘with my family’ ( $p$  value of 1.000) and ‘with my partner’ ( $p$  value of 0.353).

**FIGURE 3.** *With whom*

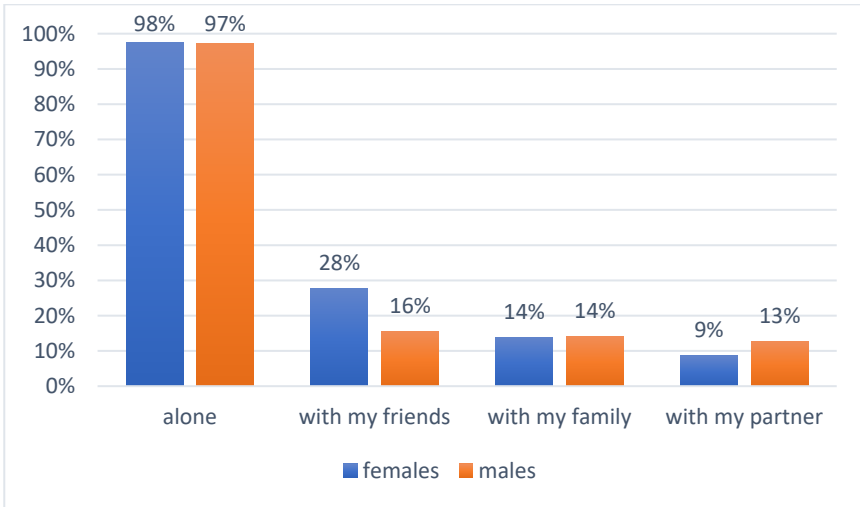


Figure 4 shows the percentage results related to the type of devices that female and male university EFL learners use for viewing authentic videos. The majority of the female and male respondents in the sample indicated that they use their laptops/computers (87% males and 81% females) and mobile phones (80% males and 78% females), with very little difference in the percentage results for both genders. Around one third of the female and male students who answered the questionnaire watch authentic videos on TV by changing the audio to English or viewing satellite television. Tablets were marked as the least used device by both female (25%) and male (23%) students, with very similar percentage scores.

The Fisher test was not significant for all of the options in this question with the following  $p$  values: ‘on my computer/laptop’ - 0.279, ‘on my mobile’ - 0.740, ‘on my tablet’ - 0.750, ‘on TV’ - 0.391.

**FIGURE 4.** Devices used for viewing

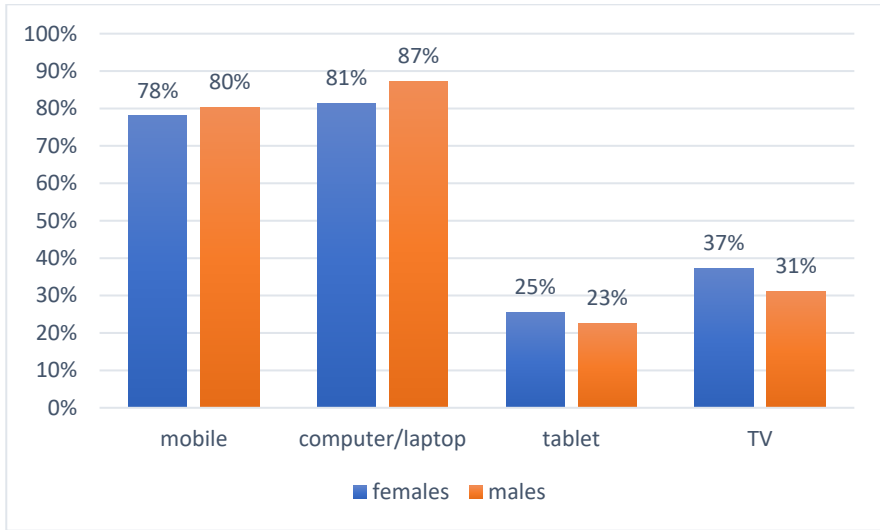
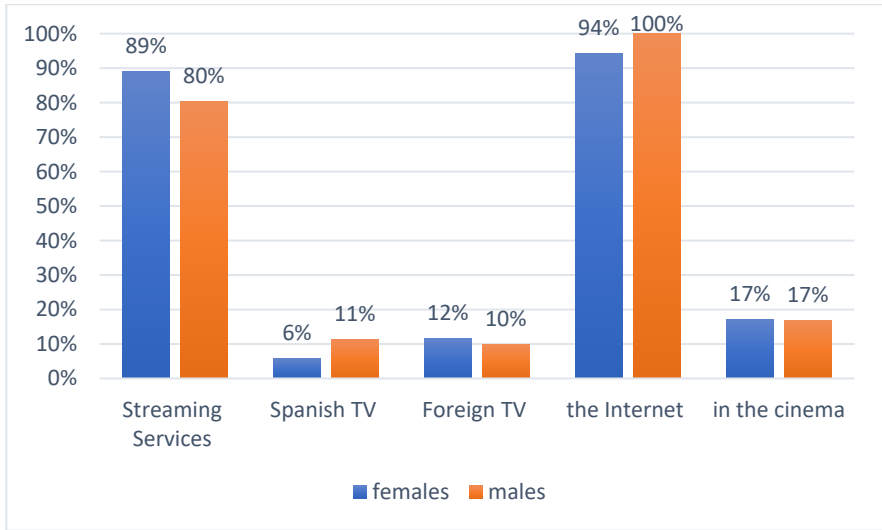


Figure 5 reflects the results of the fifth question of this survey concerned with the sources that female and male EFL learners use for viewing authentic videos in English. The great majority of the female and male students, with a slight difference in percentage scores (100% males and 94% females), marked the Internet as the most frequently used source. ‘Streaming Services’ (such as Amazon, Netflix, HBO, etc.) was the second most commonly marked option, 89% of females chose this option comparing to 80% of their male counterparts. Only 6% of the female respondents and 11% of the males make use of Spanish TV as a source for watching authentic videos. Less than 20% of the female and male respondents watch them in the cinema or on Foreign TV channels.

Regarding the possible effect of the gender variable, statistically significant difference was observed for the option ‘the Internet’ with the  $p$  value of 0.041. For the rest of the items in this question, the Fisher test result was not significant: ‘Streaming Services’ -  $p$  value of 0.69, ‘Spanish TV’ -  $p$  value of 0.179, ‘Foreign TV’ -  $p$  value of 0.829 and ‘in the cinema’ -  $p$  value of 1.000.

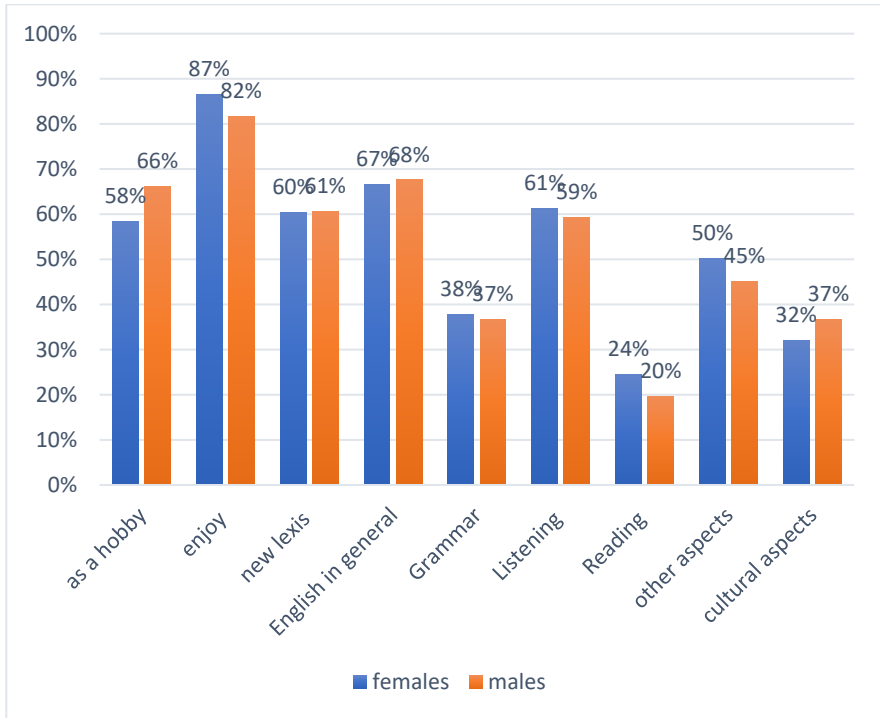
**FIGURE 5.** Sources of authentic videos



Finally, the results of the sixth question are presented in Figure 6. They are concerned with the reasons why the university EFL students engage in the informal activity of viewing authentic videos. The great majority of female (87%) and male (82%) students choose to watch authentic videos because they enjoy this activity. More than half of the respondents perceive this activity as a hobby and find it useful for improving their English knowledge in general and vocabulary and listening aspects in particular. Around half of the female and male respondents believe that authentic videos can help them acquire other aspects of English, such as pronunciation. One third of the respondees find it useful for learning cultural aspects and English grammar, whereas one fourth of the female (24%) and male (20%) respondents believe they can improve their Reading skills.

With regard to the effect of gender, the Fisher test did not find statistically significant difference for any of the items: ‘as a hobby’,  $p$  value of 0.264; ‘I enjoy watching them’,  $p$  value of 1.000; ‘to improve grammar’,  $p$  value of 0.888; ‘to improve my Listening skills in English’,  $p$  value of 0.780; ‘to improve my Reading skills in English’,  $p$  value of 0.516; ‘to improve other aspects of English’,  $p$  value of 0.493 and ; ‘to learn cultural aspects’,  $p$  value of 0.560.

**FIGURE 6.** Reasons for viewing authentic videos.



## 5. DISCUSSION

The present study set out to analyse the impact that gender has on the informal practices of female and male students majoring in the English Studies Degree. The results of the answers to the first question reveal that the majority of students are exposed to authentic videos at least 2 or 3 times a week, which is consistent with previous research indicating that students from different parts of the world tend to perform this activity frequently (e.g. Hyland, 2004; Toffoli & Sockett, 2010; Inozu et al., 2010; Trinder, 2017; Talaván & Ávila-Cabrera, 2015). Furthermore, there is a large body of research that provides statistical evidence that supports the effectiveness of authentic videos for incidental learning of various aspects of English, such as pronunciation, vocabulary, etc. (e.g. Mitterer & McQueen, 2009; Zellers et al., 2011; Damar, 2014; Chan &

Leung, 2014; Arndt & Woore, 2018; Peters & Webb, 2018; Pujadas & Muñoz, 2019; Wisniewska & Mora, 2020, etc.). Therefore, EF and SL learners should be encouraged to engage in the out-of-class informal activity of viewing authentic videos due to their potential benefits for language learning. These benefits include the motivational effect that authentic videos have on teenagers and young adults (Prensky, 2001) as well as the multimodal input of visual, audio and verbal information (see Williams & Lutes, 2007; Lin & Siyanova-Chanturia, 2014), which according to the *Dual Coding Theory (DCT)* can contribute to language processing and acquisition in different contexts (Paivio & Sadoski, 2011).

Regarding the use of subtitles/captions, more than half of the respondents tend to activate subtitles in English, which is in agreement with the studies by Talaván (2001) and Talaván and Rodríguez-Arancón (2014). The percentage results showed that male respondents are more likely to watch authentic videos without subtitles/captions comparing to their female counterparts. Female students, however, seem to activate subtitles/captions in Spanish more frequently than males. These percentage results, however, were statistically not significant, thus revealing no gender difference in how male and female students of English use different subtitling/captioning modes. This finding suggests that both genders can benefit similarly from these techniques of adaptation of authentic videos and enrich their language knowledge from different perspectives (Lin & Siyanova-Chanturia, 2014) comparing to watching authentic videos without any type of subtitles (e.g. Koolstra & Beentjes, 1999; d'Ydewalle & Pavakanun, 1995; Koskinen et al., 1996; Neuman & Koskinen, 1992). It is important to note, however, that subtitles in L1 and in L2, can facilitate learning of different aspects of the target language: while subtitles/captions in L1 improve the comprehension of the content of a video (e.g. d'Ydewalle & Van de Poel, 1999; Bianchi & Ciabattini, 2008), L2 subtitles can help acquire vocabulary (e.g. Danan, 1992; d'Ydewalle & Pavakanun, 1995) and tune in different English accents (Mitterer & McQueen, 2009). The lack of the effect of the gender variable on the choice of subtitled/captioned modes seems to point to the idea that other factors (e.g. the proficiency level of students) can be determinant. For instance, Sinyashina (2022, p. 70) discovered that students with the C1

EFL proficiency level "watch authentic videos without subtitles/captions more often than the EFL students of the B1 and B2 levels".

With respect to whether EFL students watch videos alone or accompanied by friends, family members or their partners, the study found that the great majority prefer to view authentic videos alone. This finding can be explained by their living situation of young adults, who either live with their parents or on the university campus with similar-aged students. Also, difference in tastes in videos should be taken into account. The data also showed that female participants selected the option 'with my friends' more often than their male counterparts. Most importantly, this difference was found to be statistically significant. One possible explanation for this result of the study may lie in the fact that, according to various studies, women are more emotional and intimate in their friendships comparing to men and tend to have more friends (e.g. Aukett et al, 1988; Sapadin, 1988; Felmlee & Muraco, 2009, etc.).

With reference to the devices used for viewing authentic videos, both male and female respondents identified mobile phones, laptops, and computers as the most commonly used devices. Only around one third of the respondents reported watching authentic videos on TV or on their tablet, which supports the idea that younger people are less likely to watch broadcast TV than those over the age of 65, as stated in the report from regulator Ofcom (Gerken, 2022). Furthermore, there was no statistically significant difference concerning the devices usage between male and female students. This finding is in line with the study by Economides and Grousopoulou (2008), who did not find gender difference in the use of mobile phones. It, however, contradicts the results of the studies by Mitra and Steffenmeier (2000) and Ching et al. (2005).

Concerning the sources that EFL students use for viewing authentic videos, on the whole, the Internet and Streaming Services were by far the two most commonly marked answers. Only one third of the participants give use to Foreign and Spanish TV or watch authentic videos in the cinema. The statistical Fisher test analysis revealed difference between female and male respondents in term of the Internet use: male students opt for the Internet services (e.g. YouTube and other webpages and sites) as a source of authentic audio-visual material more frequently than

females. This finding, on the one hand, comes as a surprise given the fact that although “men are slightly more intense internet users than women” (Fallows, 2005, p. ii), since the 2000s “women have caught up to men in being online” (Fallows, 2005: vi). Thus, for example, according to the statistics portal Statista, in 2022, “the share of internet users in Europe was the highest in the world, with 89 percent of the female population and 90 percent of the male population accessing the internet”. Moreover, in 2023 the number of female and male YouTube users was very similar with only very slight prevalence of men: 54.4 percent of male YouTube users comparing to 46 % of female users (Statista). In Spain, in particular, *ITU facts and Figures* website registered equal number of female and male users of the Internet in 2019. On the other hand, males and females differ in how they use different social media platforms and websites. While it is possible that males are more frequent users of the video sources that the Internet has to offer, females, for example, are more active on the Instagram platform: “in December 2022, 55.7 percent of Instagram users in the United States were women, and 44.3 percent were men” (Statista). Moreover, women are more enthusiastic about online communicators and “use email in a more robust way” (Fallows, 2005, p. iii).

Finally, regarding the motives that drive EFL learners to engage in the informal activity of viewing authentic videos, no statistically significant differences were found for the 9 items analysed in this question. Therefore, both female and male students are guided in a similar way by a diverse range of motivations. The majority choose to watch authentic videos because they enjoy this activity, which is logical as it is a leisure activity performed in their free time. In terms of the aspects and skills of the English language that authentic videos can help improve, both female and male respondents are of the opinion that authentic videos can be beneficial for improving almost all aspects of English, which the English Studies degree students are supposed to master during the four years of their university studies. This finding concurs with previous studies into this matter by Seferoğlu (2008), Ismaili (2013), Shabani and Pasha Zanussi (2015), Talaván and Rodríguez-Arancón (2014), Kabooha (2016), Talaván et al. (2016), and Trinder (2017).

## 6. CONCLUSIONS

The results of the present study reveal that unlike male students, females watch authentic videos with their friends more often. At the same time, males turn to the Internet services as a source of authentic videos more than their female counterparts. These two items, however, do not affect the overall picture, which suggests very similar use of authentic videos in the informal environment by male and females EFL learners in terms of time of exposure, use of subtitles/captions, with whom both female and male respondents normally watch authentic videos, on which devices, the majority of sources used for viewing authentic video material and the reasons for performing this activity. Therefore, both genders can equally take advantage of viewing authentic videos in their free time. Further research with a bigger sample size, particularly of male participants, is desirable as it can confirm or discard the tendency observed in this study.

## 7. ACKNOWLEDGEMENTS

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## THE MULTIMODAL PROJECT ‘OBSERVATUBE’ FOR FEMINIST TEACHER TRAINING THROUGH DISNEY NARRATIVES

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ELISA ISABEL CHAVES GUERRERO  
*Universidad de Málaga*

### 1. INTRODUCTION

In just one minute, YouTube plays 4.1 million hours of video worldwide. This figure shows the tremendous potential of this audiovisual content platform. Today’s children are growing up in the digital age. They no longer consume audiovisual content in the traditional way through television channels, but through digital platforms such as YouTube, available anytime and anywhere, which induces them to consume more content than ever before. According to a study by Ofcom (2018), in the UK, 73% of children between the ages of 5 and 15 are YouTube users.

The continuous development of new devices is one of the main causes of the increased use of YouTube among children. Children have access to many electronic devices such as tablets and smartphones, which are highly conducive to consuming content on digital platforms such as YouTube.

In the past, traditional media such as film and television made famous a number of so-called ‘child prodigies’, who had outstanding talent as actors or singers. Today, children have been displaced from television programming (with the exception of specific kids’ channels) and the diversity of technological devices that they have in their hands allows them to access content whenever and wherever they are. This is how YouTube, one of the most widely consumed video platforms, has become the new factory of child prodigies, whose talent is based mainly

on their communication skills and their possessions, which are the subject of advertising messages under contract. These Kid YouTubers have millions of followers, also children, and generate high revenues (Tolbert and Drogos, 2019).

Ramos-Serrano and Herrero-Diz (2016) classify the usual contents generated by Kid YouTubers into: experiences or activities (excursions, trips or family outings), challenges (tests, games or video games), tutorials, product analysis (hauls or reviews), product presentation (unboxing) and development of a real or fictional story (storytelling).

The key to the success of these YouTubers is the sense of closeness and relatability they create among children's viewers (Berzosa, 2017). The fact that anyone can create their own content, as *prosumers*, breaking out of the constraints of the private sphere in their lives (Regueira et al., 2020), generates the feeling that they are close to their followers, that they identify with them and might even consider them to be friends. As a direct consequence, these individuals become role models in identity building. Westenberg (2016) points out that Kid YouTubers connect with their audience because they share the same age, cultural context, and the content they produce falls within the same frames of reference.

From a young age, digital natives have internalised the digital language and handling of these tools. This opens them up to a digital world full of possibilities, but also dangers.

Many of the children who consume this content on YouTube daily are between two and seven years old and are, therefore, in the pre-operational stage of development according to Piaget (1964), when they begin to associate with a gender and also begin to understand the concept of representation through the observation of other people of their gender, which allows them to explore the role of their gender in society. Therefore, we need to analyse the content they consume at this stage to ascertain the gender representation they are assimilating, since the gender discourses they receive can have a long-term effect on the way they understand the role of their gender and the way of developing it in society.

Albert Bandura's Social Learning Theory (1965, 1977), illustrated through his well-known experiment with the Bobo doll, explains that

children learn not only through rewards and punishments, as advocated by behaviourism, but through learning by observation, by contemplating how someone receives a prize or reward for a certain behaviour.

This theory, later called Social Cognitive Theory (Bandura, 1986), applied to both YouTube and other media, supports the need to analyse the contents consumed by boys and girls through which they learn to reproduce stereotypes, especially if the person who is watching and modelling a behaviour receives a reward which, in the case of YouTubers, usually consists of an advertised product (toys, costumes, etc.). Children see these Kid Influencers as role models from whom they can learn certain values and ways of being a child, from a normative point of view, in society. This affects not only their perception of themselves, but also of people belonging to another gender.

Bushman and Huesmann (2006) demonstrated that this effect of reproducing a behaviour can be reinforced by a number of factors such as: the character is (a) realistic; (b) similar to the child (age or sex); (c) receives a positive reinforcement; and (d) the act can be imitated by the boy or girl.

Cultivation Theory (Gerbner et al. 2002) is another approach that can explain the power of YouTubers' messages in children's learning about the world. This theory establishes that the more time you spend watching a medium, in this case YouTube, the greater the shift of social perception towards the version of reality that is represented in this medium, generating prejudices, stereotypes and misconceptions and decisively affecting their perception of their gender's role in society.

From a psychological perspective, gender is understood as the result of socialisation within society, in the family and at school (Adriany and Warin 2014). Poststructuralist feminist theories aim to go beyond biological and psychological perspectives. In this study, we start from Foucault's approach to gender and power in relation to education, as well as gender and power in relation to discourse.

Foucault (1972, p. 8) defines discourse as "a regulated practice that accounts for a number of statements". In other words, discourse is a set of practices and statements that have regulatory and controlling effects. A

discourse of femininity, for example, becomes a set of rules that will determine what it means to be a girl or a woman (Paechter 2007).

Kamler (1999) and Yelland (1998) also point out that there is an interaction between the discursive practices of school, home and society in general. Each of them seems to contribute to the construction of gender in boys and girls. Therefore, in order to understand the construction of gender in childhood, one must take into account the multiple discourses of society.

To promote understanding of the discourses generated on the YouTube platform and foster the development of multimodal literacy among future teachers of Early Childhood Education, the project “ObservaTube for Teachers” (Triviño and Chaves, 2021) was launched in the 2016/17 academic year, within the subject Education for Citizenship and Human Rights taught on the Degree in Primary Education at the University of Malaga.

## 2. OBJECTIVES

The present theoretical study aims to analyse how teachers during their initial training can tackle the tremendous influence of audiovisual productions present on the YouTube video platform and within mainstream culture in the construction of gender identities among children (Triviño and Chaves, 2021).

A further goal is for future teachers to reflect on social media that are most familiar to pupils in the stage of Early Childhood Education and which they consume without the possibility of filtering critically. Even more so bearing in mind that future teachers take on new postfeminist (Crocco, 2018; McRobbie, 2004) and postsexist identities from the messages transmitted to them by cultural industries. We understand that exploring the messages broadcast through YouTube for the mass consumption of children can stimulate learning within the feminist training of future Early Childhood Education teachers.

Finally, the objective is to incorporate critical multimodal literacy from a gender perspective into the initial training of teachers in order to

explore new formulas that bring us closer to educational innovation through social media.

### 3. METHODOLOGY

The “ObservaTube for Teachers” project is based on the development of Critical Multimodal Literacy (CML). In the words of Triviño (2018), if digital platforms have expanded the concept of text, education must necessarily move from single modality to multimodality (Kress and Leeuwen, 2001). Thus, “proposing multimodality as an articulating axis in the training of Social Sciences teachers seeks to tackle principles and concepts contemplated in the research developed within the Didactics of Social Sciences” (Triviño, 2018, p. 73).

A mode is understood as “a social and culturally given resource for the creation of meaning; thus, there are different modes: image, writing, music, gesture, speech, etc.” (Kress, 2009, p. 54). Therefore, Critical Multimodal Literacy (CML) is presented as a strategy through which competences can be developed by students that

allow them to articulate different semiotic resources in the interactions and contents used in the teaching and/or learning processes. The objectives of CML are: to manage different types of knowledge to educate (including knowledge of the lifeworld); to produce collective learning and interlearning, oriented towards the generation of alternative and critical projects; and to promote the production – expansion – distribution of meaning. (Baquiro, n.d., p. 81)

### 4. RESULTS AND DISCUSSION

Early Childhood Education in Spain is governed by the provisions of the LOMLOE legislation through Royal Decree 95/2022, of 1 February, which establishes the educational requirements and structure of this stage. Among the pedagogical principles, it is established that Early Childhood Education “will encourage children to acquire personal autonomy and develop a positive, balanced and egalitarian image of themselves, free from discriminatory stereotypes”. And, within the objectives, it is indicated that Early Childhood Education will contribute to developing capacities that allow children to: “Relate with others as

equals and progressively acquire elementary patterns of coexistence and social relations, as well as exercise the use of empathy and the peaceful resolution of conflicts, avoiding any type of violence”; “promote, apply and develop social norms that foster equality between men and women”; and “know their own body and that of others, as well as their possibilities of action and learn to respect differences”.

In line with these pedagogical objectives and principles, as we have seen, the media is one of the most important sources of information through which girls and boys develop their identities and, therefore, understand the role that gender plays in society, as well as the rules that regulate it. Before the existence of such media, this function was performed by folk tales in the oral tradition and fairy tales. First turned into literature by Perrault or the Brothers Grimm and then into film productions through Disney adaptations, they have shaped the patriarchal and heterosexual idea of gender and all the stereotypes and roles that compose it.

The female characters in these Disney versions have shaped the universe of so-called “Disney princesses”, defined by certain shared traits: beauty, submission, kindness, servitude, sacrifice, passiveness. One of the dangers we talked about is, therefore, the perpetuation of gender stereotypes embodied by the princesses of classic Disney films.

Where Disney’s interpretations of children’s literature consolidated the hegemonic representation of a patriarchal society – white and upper-middle class – the new revisions created by Kid YouTubers update the same discourses to adapt to the new languages typical of YouTube Kids, which brings these new mainstream narratives much closer to the new generations and therefore makes them more damaging, by encouraging the maintenance of strict patriarchal gender roles, which contribute to the crowning of princesses as toxic aspirational models for girls and, therefore, for boys, by shaping a similarly toxic masculinity.

To address this problem, the “ObservaTube” project was launched, developed with the students enrolled on the subject “Education for Citizenship and Human Rights” on the Degree in Early Childhood Education taught at the University of Malaga, Spain. This project aims to apply

a process of critical multimodal literacy, as an educational strategy to favour the combination of semiotic modes, with the purpose of “promoting knowledge management and achieving learning, understood as cultural and pedagogical mediations for the production of meaning” (Baquiro, s.f., p. 82-83).

The first step in the process is to select a video that presents in its content the necessary characteristics for analysis. One example of the thousands of videos you can find on YouTube by entering the term princess in the search field is *Diana and new Cinderella story*, from the Kids Diana Show channel, which has more than 110 million views to date. The description provided by the channel, which appears at the bottom of the video, indicates the following:

Diana, like Cinderella, she really wants to go to the ball. But Brother Roma makes a mess at home and makes her do the cleaning. It's good that a fairy godmother appears in time, which will add a little bit of toys and magic to this story [*sic*]. (Kids Diana Show, 2018)

The narrative of the video, inspired by Disney's audiovisual interpretation of the classic story in 1950 (and its live action version of 2015), revolves around the idea that Diana wants to be a princess, something that she expresses by talking straight to the camera. In order to achieve this, she asks for instructions from her brother Roma, whom we can interpret as a symbolic representation of the patriarchy, who gives his sister consecutive instructions on how to achieve such an ideal model. These instructions are: clean and tidy the house, iron clothes, feed the baby, pick up her brother's mess, etc., in other words, follow the precepts of her gender, defined by the classic story of Cinderella.

Diana carefully completes each of the instructions she receives from her hierarchical superior, until her fairy godmother appears, who provides her with the essential accessories to become a princess: a dress, high heels and a tiara.

In the next phase of the process, students are presented with a critical multimodal analysis of the video *Diana and new Cinderella story* as a complex text, as hypertext and transmedia narrative, based on exploring

the narrative elements present in it through the texts written in 1697 (Charles Perrault) and 1812 (Jacob and Wilhelm Grimm).

Firstly, we see that, in the Disney version, Perrault's version and the Brothers Grimm version, the role played by Roma, the brother of the Kid YouTuber in the subjugation and oppression of Cinderella, is developed by the figure of the stepmother. Perrault's text reads:

The stepmother gave her the meanest work in the house to do; she had to scour the dishes, tables, etc., and to scrub the floors and clean out the bedrooms. The poor girl had to sleep in the garret, upon a wretched straw bed, while her sisters lay in fine rooms with inlaid floors, upon beds of the very newest fashion, and where they had looking-glasses so large that they might see themselves at their full length. The poor girl bore all patiently, and dared not complain to her father, who would have scolded her if she had done so, for his wife governed him entirely

The text by the Brothers Grimm tells us that the figure of the stepmother, along with the stepsisters, is not only placed in the same hierarchy of power as Roma, but they also perform the same function of determining what Cinderella must do to achieve her long-awaited happy ending of becoming a princess:

The new wife brought two daughters home with her, and they were beautiful and fair in appearance, but at heart were, black and ugly. And then began very evil times for the poor step-daughter. "Is the stupid creature to sit in the same room with us?" said they; "those who eat food must earn it. Out upon her for a kitchen-maid!" They took away her pretty dresses, and put on her an old grey kirtle, and gave her wooden shoes to wear. "Just look now at the proud princess, how she is decked out!" cried they laughing, and then they sent her into the kitchen. There she was obliged to do heavy work from morning to night, get up early in the morning, draw water, make the fires, cook, and wash. Besides that, the sisters did their utmost to torment her, mocking her, and strewing peas and lentils among the ashes, and setting her to pick them up. In the evenings, when she was quite tired out with her hard day's work, she had no bed to lie on, but was obliged to rest on the hearth among the cinders. And as she always looked dusty and dirty, they named her *Cinderella*.

(...) Now it came to pass that the king ordained a festival that should last for three days, and to which all the beautiful young women of that country were bidden, so that the king's son might choose a bride from among them. When the two stepdaughters heard that they too were bidden to appear, they felt very pleased, and they called Cinderella, and

said, "Comb our hair, brush our shoes, and make our buckles fast, we are going to the wedding feast at the king's castle."

Cinderella, when she heard this, could not help crying, for she too would have liked to go to the dance, and she begged her step-mother to allow her. "What, you Cinderella!" said she, "in all your dust and dirt, you want to go to the festival! you that have no dress and no shoes! you want to dance!" But as she persisted in asking, at last the step-mother said, "I have strewed a dish-full of lentils in the ashes, and if you can pick them all up again in two hours you may go with us."

Then the maiden brought the dish to her step-mother, feeling joyful, and thinking that now she should go to the feast; but the step-mother said, "No, Cinderella, you have no proper clothes, and you do not know how to dance, and you would be laughed at!"

Secondly, another narrative element is observed that coincides with the version generated on YouTube, since in both the written texts and in the Disney film, as well as in the video *Diana and new Cinderella story*, a magical figure appears that turns the ragged girl into a normative princess that can fit perfectly into the canon imposed by the patriarchal system. She appears in the form of a fairy godmother in Perrault:

Well, you see here an equipage fit to go to the ball with; are you not pleased with it?"

"Oh, yes," she cried; "but must I go in these nasty rags?"

Her godmother then touched her with her wand, and, at the same instant, her clothes turned into cloth of gold and silver, all beset with jewels. This done, she gave her a pair of glass slippers, the prettiest in the whole world.

(...)

There was immediately a profound silence. Everyone stopped dancing, and the violins ceased to play, so entranced was everyone with the singular beauties of the unknown newcomer. Nothing was then heard but a confused noise of,

"How beautiful she is! How beautiful she is!"

In the version by the Brothers Grimm, this role is played by a bird:

Then the bird threw down a dress of gold and silver, and a pair of slippers embroidered with silk and silver. And in all haste she put on the dress and went to the festival. But her step-mother and sisters did not

know her, and thought she must be a foreign princess, she looked so beautiful in her golden dress.

We see in these written texts that in the normative and patriarchal model in which Cinderella has managed to fit in, physical beauty is valued above all else. With this, the video *Diana and new Cinderella story* sends a clear message to the children who follow this channel. Girls must be beautiful to be accepted into society. Beauty based on the acquisition of specific ornamental elements: a dress, a tiara and heels, which are quite plainly Disney merchandising. The only quality of her personality that appears to be rewarded is servitude and submission to the dictates of her brother in accordance with the guidelines that are expected of her gender. Boys, on the other hand, learn that they have a superior hierarchical power and, although at the end of the video Roma is punished by the fairy godmother to sweep the house, this is seen to be a way of ridiculing him, which it was not in the case of Diana, where it was assumed to be a naturalised task fitting of her gender.

## 5. CONCLUSIONS

Through the process of Critical Multimodal Literacy, we see that one of the biggest distractions contributing to post-feminist rhetoric begins at a very young age in girls with a cultural obsession with princesses, which Orenstein (2011) has described as very harmful. Orenstein writes,

since when did every little girl become a princess? According to the American Psychological Association, the girlie-girl culture's emphasis on beauty and play-sexiness can increase girls' vulnerability to the pitfalls that most concern parents: depression, eating disorders, distorted body image, risky sexual behavior. (Orenstein, 2011, p. 4).

The princess phenomenon, more than a mere fantasy or a costume, represents complicity with the patriarchy, what sociologist Raewyn Connell (1987) called "emphasised femininity" for girls. They are "forms of femininity that disempower women" (Griffiths, 2006, p. 403), marginalising themselves and calling it empowerment.

According to Connell (1987), we are normalised through two constructs established in a hierarchical relationship: hegemonic masculinity and emphasised femininity. The former necessarily sustains its existence in

relation to the construction of the latter, which Connell defines as the construct that is expected of women, built and represented for men and indispensable to maintain the hierarchical order for the benefit of men. Connell (1987; Connell and Messerschmidt, 2005) explains that the term “emphasised” and not “hegemonic” is used because there is no hegemonic femininity as is the case with masculinity. In the same vein, Ranea (2021) recovers the concept of surplus value from Donna Haraway to explain the benefits that masculinity obtains from the subaltern position of women, and defines hegemonic masculinity as promoting practices that not only serve to benefit men, but also, in addition, contribute to the maintenance of the patriarchal hierarchical order; and emphasised femininity, or hyperfemininity, as that “which seeks to satisfy man and adapts to the organisation of male power” (Ranea, 2021).

These two concepts, hegemonic masculinity and emphasised femininity, provide an instrument of analysis for the recognition and identification of discursive representations and practices that consolidate gender inequalities. Hegemonic masculinity is “a culturally idealised form” (Donaldson, 1993, p. 645), and such idealisation has been solidly built through narratives constructed in the media, where representations of women constantly reproduce emphasised femininity.

Assuming our gender role is the way we accept our place in the hierarchical order within the patriarchal system of privileges and inequalities. Assuming that the future teachers of Early Childhood Education are fundamental agents for social transformation and the development of new generations from within the classroom, discussion of these narratives offers many possibilities to trigger learning within feminist teacher education for the development of multimodal and digital literacy skills regarding these new mainstream narratives.

All this together with the analysis of new alternative feminist narratives such as *Princesses fart too* (Brenman, 2011), *The boy who didn’t want to be blue and the girl who didn’t want to be pink* (Fitti, 2019), or *Is there anything more boring than being a pink princess?* (Díaz Reguera, 2020), can provide future teachers with tools and counter-discourses that offer opportunities for media and hypertext experiences to trigger learning that promotes positive skills and knowledge about the real world in

which they live, so that we can address the necessary feminist multimodal literacy of children in Early Childhood Education.

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# MEMES AS AN EDUCATIONAL TOOL TO ANALYSE HATE SPEECH AND ITS COUNTERNARRATIVES. THE CASE OF THE LITTLE MERMAID

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ARANTXA BATRES VARA  
*Universidad de Málaga*

ELISA ISABEL CHAVES GUERRERO  
*Universidad de Málaga*

## 1. INTRODUCTION

In 2021, the United Nations Children’s Fund (UNICEF) published its report on the impact of technology in teenagers, examining relationships, risks and opportunities (Andrade et al., 2021). It includes a study that links health to the use of relationship information and communication technologies (R-ICTs) among adolescents aged 11 to 18 in Spain.

This work reveals crucial data about the context in which children and teenagers develop and form an image of themselves and their interpersonal relationships. The results show that students aged 11 to 18 largely occupy their leisure time in four different ways: Mobile, tablet or computer use (96.3%), music (93.6%), social media (90.9%), and streaming films or series (86.3%). Other figures show the circumstances surrounding the way in which they occupy this leisure time: 64.3% of participants spend between 2 hours (21.5%) and more than 5 hours a day (19.7%) online on weekdays, with this latter percentage increasing on weekends (29.7%). As for social media, 98.5% of the sample has a social media profile on at least one site, and 83.5% have a profile on 3 or more sites.

These data published by UNICEF show that children’s leisure time outside the classroom is dominated by mobile devices, the internet and social media (94.8% of the sample has their own telephone with an Internet connection). This means being totally immersed in a scenario that has

brought with it a new way of understanding and mediating communication with others and our way of exploring the world (Khosravinik, and Esposito, 2018). Likewise, social media “have transformed culture, especially popular culture, which is the main way young people learn about themselves, about others and about the rest of the world” (Giroux, 2001, p.14). We see this as a worrying reality if we take into account the vulnerability of children and teenagers in the process of building their own personality and self-esteem (Cantillo and González, 2018).

### 1.1. THE CHALLENGE OF CRITICAL MULTIMODAL LITERACY IN INITIAL TEACHER TRAINING

The process by which a person learns to interpret different forms of representation and manage them effectively in order to communicate is called multimodal literacy (Baeza and Badillo, 2017).

With advances in media, this type of literacy should have been progressively incorporated into the classrooms; however, this has not been the case. Addressing the development of communicative competences in the classroom today needs to move beyond immobility around literacy and adapt to the wide variety of current possibilities to produce, express and disseminate an idea, story, opinion, etc. (Kress, 2005). In particular, and bearing in mind the current interests of students outside the classroom in light of the data set out above, analysing social media is an interesting issue within the field of education. Social media has tremendous power to transmit information about the world in which we live (Camas and Vendrell, 2018).

These apps and sites allow anyone with an ICT device to access a multitude of semiotic resources to construct discourse (we will examine the use of this term more closely in the next section).

In recent years, we have witnessed a profound change in the communicative paradigm in terms of the form and content of information, how we communicate and talk about reality and the people who are part of it. We cannot ignore the fact that this directly affects the kinds of communicative and social skills students currently develop in schools and the learning that facilitates this. Therefore, it is time to make a

qualitative leap in our classrooms, moving beyond the notion of the written text as the only possible element in the teaching exercise.

The ability of children to move between new fashions and media is a reflection and symptom of global changes in the creation of meaning, in addition to a review and redefinition of possible practical outputs of literacy (González, 2018, p.2)

In a recent interview, Theo Van Leeuwen, one of the main proponents of the multimodal perspective within Critical Discourse Studies, was asked about how to prepare students so they are able to function in a socio-communicative context such as the one we now have, stating that:

The prioritisation of monomodal and logocentric texts produced clear and teachable rules [...]. Today, literacy teaching should not only include a variety of ways [...] Teachers now need to teach not what should be done, but what can be done. And they need to develop flexible criteria to assess what [their] students do with the multimodal media they now have available (Fidelix et al., 2022, p.175).

However, going against this idea, the textbook is still the main means by which teachers practice teaching in the classroom (Fernández and Caballero, 2017; Osuna, 2018; González, 2018) either on paper or in an electronic format. In this regard, the words of Van Leeuwen clearly point to the need to rethink teaching in the classroom. Adapting these words to our work reinforces our conviction that we must rethink the literacy process from a multimodal perspective in the initial training of teachers for any educational stage. This would allow teachers to incorporate into their professional practice different semiotic resources through which meanings can be constructed with specific purposes. This is particularly relevant in view of the UNICEF data, but not only those presented at the beginning of this work. The report provides data on Internet use by children aged 11 to 18. 33% of the sample has a user pattern described as “problematic” (Andrade et al., 2021, p. 44) and of that 33%, 96.5% do so on social media.

Education must direct its gaze towards the phenomenon of social media, focusing on the way in which these platforms have transformed the daily use of language (González, 2018). Even more so bearing in mind that practically all students between 11 and 18 years old use these platforms as their main source of leisure, so this challenge of multimodal literacy

must be taken on by teachers from a “critical attitude” (Foucault, 2018, p.50), understood as the predisposition to seek different ways from which to understand and analyse a “type of truth” (Foucault, 2018, p.50) that is, a discourse, a statement, a text, an image, etc., instead of assuming it as an absolute truth as it is given. Therefore, we do not conceive of multimodal literacy without the addition of critical attitude, since one of the most important and widespread problems in this area is “the increasing incidence of online hatred or cyberhatred” (Khosravanik and Esposito, 2018, p.47).

Consequently, paying attention to the didactic strategies of future teachers and the place of multimodality and critical attitude in their initial training period is essential to ensure that this progress is possible in the right direction.

## 1.2. SOCIAL MEDIA, MEMES AND DISCOURSE. NEW MEDIA, OLD NARRATIVES

Social media can be considered the main means of communication today, and for each platform in which a teenager has a profile, there are multiple possibilities to generate, disseminate or receive a message or information. This is the unique communicative feature of social media: they have “created a range of new genres, contents and communicative practices” (Khosravanik and Esposito, 2018, p.46).

In this regard, the content generated in social media is a perfect fit for the multimodal perspective of discourse, since such platforms are filled with symbolic codifications loaded with semiotic resources that go beyond the written text. Among these new narrative or communicative genres are memes, referred to by many who have investigated them as one of the great revolutions in the recent technological waves (Huntington, 2013, cited by Camas and Vendrell, 2018, p. 122).

### 1.2.1. What is a meme?

Although one of the most important resources of social media, the meme is a concept that dates back to 1976, when Richard Dawkins in his work *The Selfish Gene* coined this term to refer to the minimal unit of culture

that is transmitted between individuals either by imitation or by copy (Leyva et al., 2020). With this first approach, in line with the proposal put forward by Leyva et al. in their detailed study on this resource (2020), the meme is a “minimum unit of information and cultural replication” (p.606).

The meme has attained prominent status as a particularly effective vehicle for the multimodal use of language (Pérez et al., 2014; Cantillo and González, 2018). This is due, above all, to the fact that they are constructed from images, which are “catalysts of situations and powerful tools for creating meaning” (González, 2014, p.49). Using new forms of representation, in the words of Leyva et al. (2020), memes act in social media as “a set of discursive indexes” (p.608) with the ability to evoke meanings associated with the signs that constitute them as a discursive unit (Lissack, 2004), so their semantic sense depends on the context in which they occur. A decontextualised meme does not work; it does not construct meaning for anyone but those who created it.

So, one might ask: what makes a meme effective from a narrative perspective? First of all, we infer that the success of a meme is necessarily based on being composed of signs that allude to socially shared frameworks of understanding beyond the local realm or culture of the one who constructs that narrative. Otherwise, it would not be possible for memes to go viral globally. Second, replicability (Lissack, 2004; Pérez et al., 2014; Camas & Vendrell, 2018; Cantillo & Gonzalez, 2018; Leyva et al. 2020). This is interesting because memes are built around very broad and flexible structures of meaning, which means that they refer to equally broad frameworks of understanding, thus ensuring that they can adapt to a variety of contexts and circumstances in which the meme would work and construct valid meaning. Finally, “consilience [...] the willingness to unite knowledge and information for the purpose of creating a unified framework of understanding” (Leyva et al., 2020, p. 607).

In conclusion, Van Dijk (2001) tells us that, “in the broadest semiotic sense, discourses can also include non-verbal expressions such as drawings, pictures, gestures, mimicry, etc.” (p.193), so the meme functions as a discursive unit. It seems that the author is defining this new narrative genre, when in fact he is pointing out the ways in which a racist message

can be transmitted beyond the written text. In fact, he further refines the list of possibilities by adding that “racist messages can also be transmitted through photos, films, derogatory gestures or other non-verbal acts” (Van Dijk, 2001, p.193).

It is for this reason that we are focusing on social media here, on the problems with students’ internet usage outside the classroom, and on the ideological charge and consequences of certain types of discourse that students can receive, construct and spread on these platforms.

For these reasons, the virality of racist hate speech, reflected in the number of memes that were generated and continue to circulate when it was announced that the lead role in the live action remake of *The Little Mermaid* (2023) would be a Black actress, is the driving force behind this work. We want to expose the need to include professional skills in the initial training of teachers that take into account multimodal and critical literacy as a perspective in this training. Thus, we should take into account the place that the image occupies in the construction of meanings (Unsworth, 2006; Baeza and Badillo, 2017), and, therefore, the didactic possibilities of memes in the classroom to foster the construction of counter-narratives to hegemonic discourses that promote the oppression of different social sectors.

### 1.2.2. The virality of hate speech on social media and the meme as a vehicle

At this point, we must explore a term we have used several times, which is the crux of the entire theme we are dealing with in this article and its importance in the field of education: discourse.

The educational sociologist Stephen Ball, applying Michel Foucault’s postmodernism theory, began to introduce the notions of discourse, power and performativity into the theory of education.

In a Foucaultian reading of the educational process, talking about discourse means focusing on what is said; but it also means pointing to who says it, why they can say it, when they say it and the authority they have to produce a statement or discourse (Ball, 2001). The importance of focusing on this definition and nuances encompassed by the term

discourse is because “they are practices that systematically configure the objects that are spoken of. Discourses do not refer to objects; they do not identify objects; they construct them” (Foucault, 1974, p.49). For this reason, we share Ball’s (2001) understanding that educational environments as generators of discourse are also involved, in the fundamental sense, in the propagation and selective dissemination of discourses, in their social adaptation (p.7).

This brings into play, on the one hand, the communicative potential of social media to spread memes, which we have previously defined as minimum discursive units; and, on the other hand, through multimodal and critical literacy on the part of teachers, the capacity of the meme to be replicated and generate counternarratives to hegemonic discourses seeking to eradicate serious social problems such as sexism and racism, among many others.

As pointed out previously, one major problem with social media is their capacity to spread the discourse of hatred, or hate speech, and the unveiling of the first trailer for the live action remake of *The Little Mermaid* in 2022 is a good example of this.

The European Commission against Racism and Intolerance in 2015 published *General Recommendation No. 15 on combating hate speech and explanatory memorandum*, recalling that

freedom of expression and opinion is not an unqualified right and that it must not be exercised in a manner inconsistent with the rights of others [...] hate speech is to be understood for [...] as the advocacy, promotion or incitement, in any form, of the denigration, hatred or vilification of a person or group of persons, as well as any harassment, insult, negative stereotyping (European Commission Against Racism and Intolerance, 2015, p.4)

Therefore, we understand that the phenomenon that occurred around the skin colour of the lead actress in the new film *The Little Mermaid* complies with what is officially defined, in a recommendation of the Council of Europe to its member states, as hate speech and racist discourse.

### 1.3. ISSUES ADDRESSED IN THIS STUDY: ONLINE HATE SPEECH AROUND THE LITTLE MERMAID (2023)

At this point, we will define the three problems that can and should be addressed within the field of education and which are the object of this study.

Within the current new socio-communicative context, attention is drawn to the rise of hate speech on digital platforms and the ease with which children and teenagers access these narratives.

Social media in themselves. These platforms have strong potential to spread discourse and are spaces where teenagers spend long periods of time outside the classroom.

Critical multimodal literacy, since this shift in communicative paradigm must be integrated into initial teacher training, with a view to the future educational process of students, in the form of critical and reflective competences to deconstruct hegemonic discourses that perpetuate certain social problems and to build counternarratives that promote social justice.

These three problems are grouped together within the object of study tackled by this article which, as noted previously, focuses on the backlash seen when it was announced that a Black actress had been cast as The Little Mermaid in Disney's live action remake.

## 2. OBJECTIVES

In accordance with the above, the research goals established in this paper are as follows:

Demonstrate that memes are a discursive unit capable of perpetuating hate speech.

Explore the potential of memes as a multimodal teaching resource in the classroom to construct counternarratives that encourage critical attitudes in future teachers of different educational stages.

### 3. METHODOLOGY

We spoke earlier about frameworks of understanding. From a socio-cognitive perspective on the study of how discourse functions, Van Dijk calls these “mental models” (2016, p.22), and they are the way in which each individual interprets a specific fact, regardless of whether or not they participate in it. But the replicability and virality of memes show the existence of socially shared mental models. Therefore, in this article, we propose an analysis of memes through the lens of Critical Discourse Analysis because this discipline allows us to ascertain the underlying discourse of any narrative resource and its instrumentalisation by the producer (Van Dijk, 2009). This discipline aligns with our two objectives since, in both, the key idea is to know the intentionality of a narrative and how its respective meme is constructed.

We have already shown that memes are a set of varied semiotic resources that transcend written text and orality in communication. For this reason, we propose Critical Discourse Analysis together with a multimodal perspective since, according to Kress and Van Leeuwen (2001) “discursive practices are manifested in action, that is, in their articulation in one or more semiotic modes” (p. 40).

We will also present in this article the intersectional feminist perspective as an analytical and heuristic tool (Carbado et al., 2013) since this framework will allow us to take into account how identities influence the structural construction of exercises of power and oppression and how these combinations generate different levels of vulnerability (Cho et al., 2013). We decided to bring in the perspective of intersectional feminism after analysing the selected memes, specifically figures 1, 3 and 4, since without this approach a great deal of analytical and critical nuance is lost.

### 3.1. SELECTION CRITERIA FOR MEMES

After collecting a large number of memes on Twitter, we defined three selection criteria to be able to screen and select the most interesting ones for our study, these criteria being:

- It depicts clear manifestations of racist discourse
- It depicts clear manifestations of hegemonic discourses that enable intersectional feminist analysis
- It depicts clear manifestations of discourses of resistance with counternarratives underlying the hegemonic androgenic and racist discourse.

### 3.2. ANALYTICAL CATEGORIES OF THE SELECTED MEMES

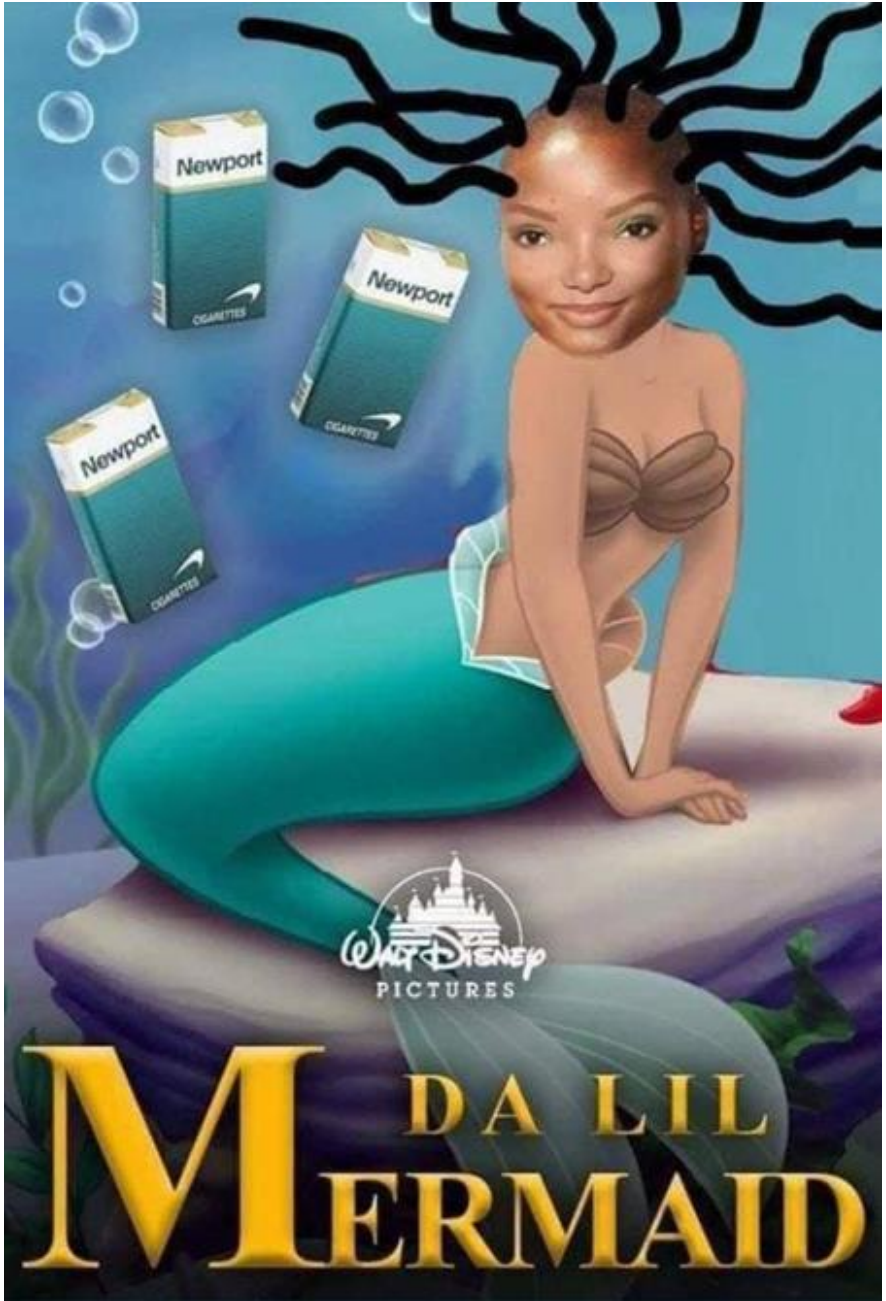
To conduct a critical analysis of the multimodal discourse of the selected memes, we defined three categories or elements on which to focus our study, defined or adapted as a category of analysis based on the characteristics that Shifman defined in 2014 as relevant in memes as a rhetorical figure. These are:

1. Content: idea or ideology underlying the meme.
2. Form: symbolic representation and metaphors that construct the semiotic elements that constitute the meme in its entirety.
3. Stance: the communicative function itself.

## 4. RESULTS AND DISCUSSION

This next section present the discursive analysis of the memes selected for the final sample of this work, composed of two memes of hate speech (Figures 1 and 2), two memes of counternarrative or discourse of resistance (Figures 3 and 4) and, finally, an example of the meme's capacity as discursive unit and its replicability (Figure 5).

FIGURE 1. Hate Speech Meme No. 1



Source: Twitter

In Figure 1, combining the content, form and stance of the meme, a caricature is constructed, with an “emphasis on the exaggerated, deformed and ridiculed graphic representation of people or situations” (Pedrazzini and Scheuer, 2010, p.97). Specifically, there are three elements or stereotyping that shape the caricaturisation of Black people:

The three packs of cigarettes. These are Newport brand menthol cigarettes, which socially are associated with Black people. We know this thanks to Carballo and Lee (2004), who in a study of tobacco use in the United States found that 77.5% of young people who use this brand are Black. In another study, Richardson et al. (2015) discovered that the cigarette brand itself is advertised exclusively in magazines aimed at young Black people. Therefore, we can say that this is the first clear instance of stereotyping.

The hair that is drawn on the Black actress. Hairstyles are an extremely important hallmark of identity and cultural sign in the Black community. This is because “colonial systems establish specific cultural forms” (Lawo-Sukam and Morales, 2015, p.39) and the beauty standards of white Western women prevails and annuls the cultural and aesthetic identity traits of African women. Here it is used as negative stereotyping to caricature the new protagonist of *The Little Mermaid*.

The wording. The spelling of the film’s title is changed, based on vernacular African American English or Black English dialect, associated with and used mainly by the Black urban working classes in the United States (Mateo, 1990), a form that is socially associated with the ghettos. We can identify it thanks to two concrete features: changing the pronunciation of the vowels in short words for a long *ah*, in this case *The* for *Da*; and the loss of the final sounds in many words, as in this case, the change from *little* to *lil*.

**FIGURE 2.** *Hate Speech Meme No. 2*



Source: Twitter

Figure 2 shows another stereotyped representation to mark differences between the Black and white people depicted. The semantic game here lies in the contrast between the two images that make up the meme. The archetype shown is based on presenting a comparison between two dance styles: using the characters from the animated film of *The Little Mermaid* from 1989 on the one hand, and a Black couple on the other.

Body language is the basis of the discursive strategy used, since both dance styles have very specific social connotations: in the first case, a form of dance associated with ballroom dancing is shown, and our cultural background and previous experiences tend to associate it with the upper social echelons, while the Black couple are showing a dance style similar to reggaeton, associated with lower social and even racialised groups. Here, taking an intersectional approach, racism and classism come into play, because the full meaning of the meme presupposes and marks a hierarchy between both photos based on stereotyping.

Let us now explore how discursive units of resistance or counternarrative (Figures 3 and 4) are constructed in opposition to racist hate speech (Figures 1 and 2).

Both figures (3 and 4) present discursive constructions that, although with different nuances, maintain the same line of arguments in the underlying final result of both memes: to flag the inconsistencies of racist discourse.

Figure 3 presents a visual and textual composition in which the conclusion of the argument is reached through the three previous examples. A classic character from the narrative genre of memes appears here: “Wojak or *feel guy*” (Hernandez, 2023, p.9), who depicts the emotions triggered by the underlying discourse of the meme.

**FIGURE 3.** *Counternarrative or discourse against hate speech meme no. 1*



Source: Twitter

Wojak is reacting to the changes made to characters from comics or animated films in their live action version, first in three different cases, all accompanied by a smile and the adjectival qualifier *cool*, giving his approval:

The first is the live action version that Disney produced based on the story and characters of “Prince of Persia: the Sands of the Time, a classic video game that began in 1989” (Davidson, 2008, p. 358) set in ancient Persia. Bearing this in mind, and the physical characteristics that a person native to this area would have, the live action film starred a white American actor with blue eyes. This is validated by Wojak with a smile and the adjective *cool*.

The second case is the adaptation, again by Disney, of the story of the Lone Ranger in 2013. In this example, the meme presents the image of Tonto, the main character’s sidekick. For this live action film, bearing in mind that the character in question is Native American, the actor playing this part is once again White American; and, again, this is validated by Wojak in the same way.

The third example shows the protagonist of the manga Ghost in the Shell, that is, a story produced within the classic Japanese narrative genre. This part is played in the live action film by a white American woman. Once again, Wojak, with that qualifying adjective, *cool*, accompanied by a smile, validates this representation.

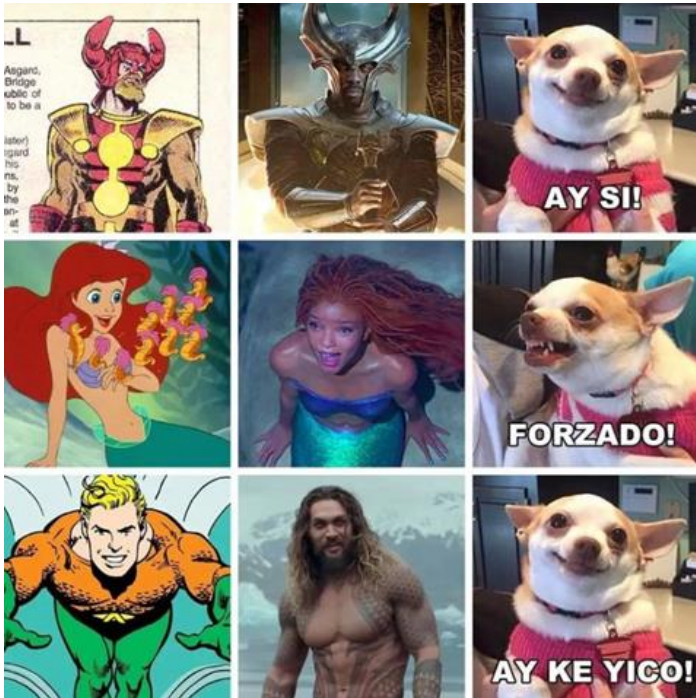
However, a fourth case is presented that provides the counternarrative conclusion: the case of the Little Mermaid and its Black protagonist. Here we see Wojak with his head in his hands, crying, next to the phrase *Respect the ethnicity of the character*. In this statement, the imperative form of the verb is used: *respect*. With this verbal use, the omitted subject is assumed to be *You*. As a transitive verb, the action, or in this case (through the imperative use) the request or order it expresses falls on what is its direct complement – the word or group of words that allow us to understand the function of the verb. In this case, crying Wojak is making a request or issuing an order to those who have failed to respect *the ethnicity of the character of the Little Mermaid*

The word *ethnicity*, therefore, is particularly relevant in this meme. The whole discourse and the final conclusion of the meme hinge on it: to present cases in which the ethnicity of the characters portrayed has or has not been respected in the live action versions, compared to the originals, and the reaction in each case, favourable or otherwise.

The other counternarrative meme is Figure 4, which builds a very similar argument.

Here again we see cases prior to *The Little Mermaid* which highlight the concordance between the original aspect of certain characters and the actor who plays them (in this case two men) in the live action version .

**FIGURE 4.** *Counternarrative or discourse against hate speech meme no. 2*



Source: Twitter

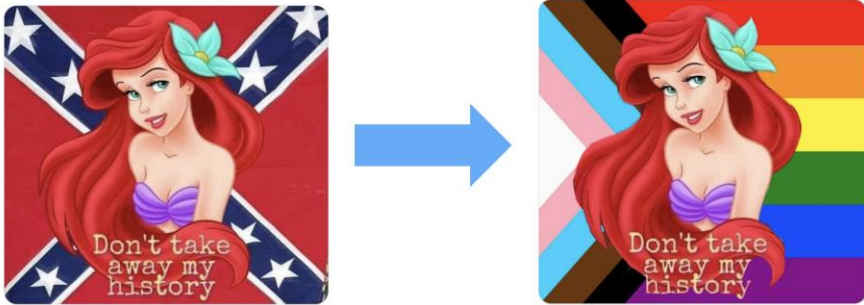
Here, the discourse is once again constructed using the same type of semiotic resources as in Figure 3, although the character representing the emotion or opinion triggered by each example in this figure is a dog.

The first model presented is Heimdall, one of the Norse gods and a character from the Marvel Comics series Thor, based on this mythology. He is played in the films by a Black British actor, which is validated in the meme by the image of the dog with an expression similar to a smile, accompanied by the words *Oh yes*, which ends with an exclamation mark, emphasising that enthusiasm.

Secondly, we see the case of the Little Mermaid. Here, the expression of the dog is baring its teeth, accompanied by a single word: *Forced*, closed again with an exclamation mark. The verb *force* here is presented in its passive or impersonal participle, functioning as an adjectivisation, describing the fact that the actress of the Little Mermaid is Black.

Finally, another example is shown, in this case Aquaman, a white blond character within the American comics. When portrayed on the big screen, this character is played by an American actor, but born in Hawaii and of Native Hawaiian descent. Here, it is validated once more with the same image of the dog that was used to validate the first personification in this meme, this time accompanied by the words, *Oh so cute!* closed again with the emphasis of the exclamation mark.

**FIGURE 5.** Exemplifying the replicability of the meme



Source: Authors' own based on memes taken from Twitter

Finally, Figure 5 provides empirical evidence of the capacity of the meme as a discursive unit through one of its key characteristics, replicability. As we can see, varying one of the elements that constitutes the meme completely changes the meaning and intent of the underlying discourse.

In this case, the background flag in each of the images constructs, on the one hand, the discourse based on an ideology associated with the symbolic framework that the Confederate American flag supposes, so we could consider it to be hate speech. However, swapping it out for the LGBTQ+ flag builds the counternarrative, because it resignifies the underlying discourse through the frames of meaning constructed through the use of this flag, accompanied by *The Little Mermaid* of 1989 and the wording.

## 5. CONCLUSIONS

In this study, we have been able to situate memes as a new narrative resource that combines different semiotic strategies, giving them a symbolic charge that makes them very powerful discursive units. In this regard, we highlight the ease of constructing a frame of meaning that also has a broad social reach.

Thanks to UNICEF, we have seen that students outside the classroom are very likely to be exposed to such discourse, so if we can conclude that memes are a very effective tool for the free movement and perpetuation of hate speech, as with the première of the trailer for *The Little Mermaid* (2023), this conclusion reinforces our initial proposal regarding the need to incorporate multimodal literacy into initial teacher training programmes. However, from a perspective of optimism, we have also found that memes are equally effective in dealing with such dangerous narratives.

The replicability of the meme is the key factor in the discursive power of this resource. We have seen a small example in Figure 5 of how, in a very simple way, changing one of the elements that construct the narrative of the meme can lead to the development of new meanings around the same concept or idea.

Thus, we find the meme to be an interesting resource to explore within the classroom both in the initial training of teachers for the different educational stages, and in the school classroom with students, who we could consider to be natives in these new narrative genres that have been popularised on social media. Therefore, their replicability is the key factor that enables the development of creative and critical competences in teachers and students, seeking to deconstruct the problems that involve hate speech at a social level, and, therefore, to improve quality of life, promoting and actively participating in the search to solve these problems through social justice.

The question of who we are, and how, based on our perception of ourselves, we have built the image of others is crucial to tackle hate speech that is currently emerging in Western culture (Chaves, 2022, 107-108)

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# USING THE ACTIVE TIKTOK APP TO MOTIVATE PRE-TEENS IN PHYSICAL EDUCATION: A LITERATURE REVIEW AND TEACHING SEQUENCE FROM A FEMINIST PERSPECTIVE

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GRACIA CRISTINA VILLODRES  
*Universidad de Granada*

MARIELA BUSTOS ORTEGA  
*Universidad de Granada*

MARÍA DEL MAR RODRÍGUEZ SÁEZ  
*Universidad de Granada*

## 1. INTRODUCTION

### 1.1. SEXISM IN THE CLASSROOM

Sexism in the classroom is a persistent problem affecting the education of children around the world. Although significant progress has been made in the fight against gender discrimination in education, sexism remains present in many schools, perpetuating gender stereotypes and limiting student learning and development opportunities.

Recent research has examined the subject of sexism in the classroom (Pérez-Pérez, 2016), pointing to the existence of discriminatory practices and attitudes based on gender. Sexism in the classroom manifests itself in the form of differential and unequal treatment toward pupils, such as the assignment of stereotyped gender roles, the minimisation of intellectual abilities and the tolerance of sexist behaviours by male pupils. Such differential treatment may include the assignment of traditional gender roles in activities such as group projects, where girls are assigned caregiving or domestic activities, while boys are assigned more active and leadership roles (García-Ramírez, 2014).

In addition, the presence of gender stereotypes in study materials and classroom interactions also contributes to perpetuating sexism. Textbooks and other educational resources often present stereotyped gender roles (Matsuno, 2002; Bautista-Mezquita, 2019) where women are depicted as less active or less courageous than men, reinforcing the idea that women are less capable. These stereotypes are also reflected in the comments and attitudes of current and future teachers (Pérez-Martínez, 2017; Sánchez-Torrejón y Barea-Villalba, 2019), who may have lower expectations about the abilities and aptitudes of female pupils, limiting their learning and development opportunities.

Sexism in the classroom also manifests itself in the form of gender violence, including sexual harassment and verbal or physical violence toward female pupils (Cuenca-Piqueras, 2013; Mingo and Moreno, 2017). Sexual harassment in classrooms is a form of sexism that affects the safety and well-being of female pupils, creating an environment of intimidation and gender discrimination that affects their participation and interest in the education process. This can have a significant impact on female students' self-esteem and academic performance (Franco-Cerdeño, 2019), creating an environment of gender inequality in classrooms.

It is important to note that sexism in the classroom not only affects female students, but also has negative implications for male students (Blanc, 2020). Social pressure to fulfil traditional gender roles can limit their ability to express emotions or interests considered "feminine", and perpetuate the idea that men are superior or have more rights than women. Sexism in the classroom propagates the idea that men are superior to women, limiting their ability to develop emotional, social, and conflict-resolution skills, and perpetuating forms of toxic masculinity. This can have negative consequences in the formation of healthy relationships and in the construction of an egalitarian society in the future (Garaigordobil-Landazabal, 2020).

To combat sexism in the classroom, it is essential to implement strategies that promote gender equality and non-discrimination in education. Education based on gender equity is needed, in which the active and meaningful participation of all students is promoted, and stereotyped

gender roles are questioned and challenged. Study materials, classroom activities and interactions between students and teaching staff should be free from gender stereotypes and promote equality and respect.

It is also important to train teachers in the identification and prevention of sexism in the classroom, as well as in the promotion of a culture of gender equality. Teachers should be aware of their own gender attitudes and beliefs, and work to build inclusive and respectful environments where all students are encouraged to participate actively and equally, and equal opportunities are promoted.

It is also essential to involve the education community in the fight against sexism in the classroom, including families, school authorities and society in general. It is necessary to promote awareness and sensitisation around the issue, as well as the active participation of all in the promotion of gender equality in education. Only through a comprehensive and committed approach can sexism be eradicated in the classroom and a respectful and equal educational environment be built for all students.

#### 1.1.1. Sexism in Physical Education Lessons

Physical Education is a subject that is usually considered a space for play, sport and recreation, but it can also be a terrain where gender stereotypes are reproduced, and sexist practices are perpetuated. Physical Education (PE) lessons are not exempt from the gender dynamics present in other educational contexts, and it is important to critically analyse how these dynamics influence the formation of gender stereotypes and the reproduction of sexist roles and behaviours in the field of education (Alvariñas-Villaverde & Pazos-González, 2018).

In PE lessons, gender stereotypes are present in both role assignment and performance expectations. Men are generally expected to be more competitive, strong, and skilled in sporting activities, while women are expected to be more passive, less competitive, and more focused on physical appearance. This reinforces the idea that men are superior in sports, while women are inferior, thus contributing to the perpetuation of sexism within the subject of Physical Education (Núñez-Rivas et al., 2019).

In addition, the language and communication used by teachers in PE lessons can also have an impact on the reproduction of gender stereotypes (Pacheco et al., 2012). Teachers often use sexist and exclusionary language when directing and evaluating physical activities. For example, phrases such as "you're a boy, play like a man" or "girls are no good at sports" are used. These expressions reinforce the idea that men are superior to women in sports and perpetuate gender discrimination in PE lessons (Alvariñas-Villaverde & Pazos-González, 2018).

To address sexism in PE Lessons, it is essential that teachers promote an education based on gender equality and respect for all people, regardless of gender or physical abilities. Some strategies that can be implemented include:

- Encouraging the active participation of all students, regardless of gender, physical skills or sports preferences. Teachers should avoid assigning roles based on gender stereotypes and ensure that all activities are inclusive and accessible to all students.
- Using inclusive and non-sexist language when communicating with students. Teachers should avoid using phrases or expressions that reinforce gender stereotypes or exclude certain students.
- Sensitising students about gender equality and the importance of respecting and valuing the skills and abilities of all peers, regardless of gender.
- Implementing zero tolerance policies against harassment and gender discrimination in PE lessons. Teaching staff must be attentive to any situation of harassment or discrimination and act quickly and effectively to stop it.
- Providing role models of athletes of both genders, who break gender stereotypes and promote diversity in sport.

## 1.2. THE INCLUSION OF INFORMATION AND COMMUNICATION TECHNOLOGIES IN PE LESSONS

The inclusion of Information and Communication Technologies (ICT) in Physical Education lessons is a relevant topic today because the use

of technology can have a significant impact on the way PE lessons are planned and developed, as well as on student participation and learning. In this regard, several studies have addressed this issue, providing a theoretical and empirical foundation on the benefits and challenges of incorporating ICT in the context of Physical Education (Silva-Monsalve and Montañez-Sánchez, 2019; Brito-Mancheno, 2022).

The use of ICT in Physical Education can provide a number of benefits for students. For example, ICT can be used as a tool for planning and designing physical activities, allowing for greater variety and customisation of classes. In addition, the use of technological applications and devices can motivate students and increase their participation in physical activities, especially among those who may have less interest in PE lessons (Moreno-Guerrero and Rodríguez-Jiménez, 2020). It has also been shown that the use of ICT can improve the ability of students to analyse and reflect on their own performance and physical skills (Sánchez-Camacho, 2019), which contributes to greater self-knowledge and self-evaluation.

However, the inclusion of ICT in PE lessons poses a challenge (Díaz-Barahona, 2020). One of the main challenges is to ensure that the use of technology is inclusive and accessible to all students, including those with disabilities or physical limitations. In addition, it is important to ensure that the use of ICT does not replace or diminish participation in real world physical activities, but rather complements and enriches learning experiences. The training of teachers in the use of ICT should also be considered, to ensure an adequate and effective use of technology in PE lessons.

The proper integration of ICT in Physical Education can enhance the teaching-learning process and contribute to a more inclusive, motivating and enriching Physical Education for all students.

#### 1.2.1. Examples of active platforms or applications used in PE lessons

As a result of lockdowns due to COVID-19, PE teachers were forced to innovate and use ICT so that the teaching of this subject was not forgotten. Consequently, after a review of teaching pages, such as blogs, social

media, etc., through which PE teachers shared their material, different platforms and active applications used to combat sedentary behaviour during lockdown have been explored (Fernández-Quintana, 2021) and these have continued to be used in the classroom.

They include:

- Coach’s Eye: this app is useful for recording an exercise, which can then be re-viewed more slowly to evaluate techniques and movements in games/sports.
- Stretching routine: this app is useful to create and follow stretching routines.
- BodBot Personal Trainer: this is an extension that can be installed on the Google Chrome browser. This helps users plan day-to-day training. The exercises are intended to gain muscle mass and lose fat.
- Workout and Fitness Coach: these apps can also be used to plan complete workouts. In this app, the exercises are presented step by step through videos.
- Munzee: in this app, users must take photographs of objects found in real life, levelling up according to the number of photographs taken. This also includes photos of other people.
- SworKit: this app also allows you to customise training plans. However, these depend on the user’s initial physical condition and include mainly strength activities, yoga or stretching.
- Video Delay Instant Replay: this app allows users to improve their technique in any sport. It allows them to record different movements, offering repetitions as feedback to improve.

### 1.2.2. Advantages and disadvantages of using ICT in PE lessons

Based on experiences using ICT in PE lessons, the following advantages and disadvantages can be established (Díaz, 2012). These may differ depending on the teacher implementing ICT.

### Advantages:

- Motivation and participation: the use of mobile apps and video games in PE lessons can increase student motivation and participation in classes.
- Customised learning: digital platforms allow learning to be adapted to the individual needs and interests of students, promoting a more inclusive and personalised education.
- Access to resources and information: ICT provides access to a wide range of resources and multimedia content related to physical education, enriching the teaching-learning process.
- Digital skills development: the use of ICT in Physical Education contributes to the development of digital skills in students, such as digital competence and technical problem-solving.

### Disadvantages:

- Technological barriers: the lack of technological infrastructure, devices or connectivity can limit the implementation of ICT in some schools, generating inequalities in terms of access and use.
- Technology dependency: the excessive use of ICT can generate technology dependency among students, affecting their ability to participate in physical activities without the help of electronic devices.
- Security and privacy risks: the use of ICT in schools can present security and privacy risks, such as exposure to inappropriate content or vulnerability to cyberattacks.
- Social disconnection: excessive use of ICT can affect social interaction between students and educators, reducing face-to-face communication and group cohesion in classes.

### 1.3. OBJECTIVE

The main objective of this study is to develop a teaching proposal with the use of the TikTok app to foster motivation towards Physical Education from a feminist perspective.

## 3. DEVELOPMENT

### 3. 1. TIKTOK

In general, as García-Perez (2021) describes, TikTok is a social media channel used to create short videos. Its mission focuses on inspiring creativity through video creation. This digital platform promotes interaction between its user community, creating a sociable bond between each of the subjects, involving the use of audiovisual content lasting between 15 and 60 seconds. The users are of varying ages but most of them are between 16 and 24 years old.

#### 3.1.1. Features of TikTok

- Video creation: users can create videos up to 60 seconds long, and can use a wide variety of editing tools, such as filters, special effects, transitions, and speed settings.
- Music library: TikTok has an extensive licensed music library, which users can use to add music to their videos. Users can also record their own voice or sounds and use them in their videos.
- Challenges and trends: TikTok is known for its viral challenges and trends, where users can participate in popular challenges, copy dances, or create their own version of existing trends and challenges.
- Social interaction: users can follow other users, "like", comment and share videos. They can also interact through direct messages and participate in duets, where they join another user in a split-screen video.

- Recommendation algorithm: TikTok uses an artificial intelligence-based recommendation algorithm that shows users personalised content on their home page, based on their display preferences and in-app behaviour.
- Special effects and editing tools: TikTok offers a wide range of special effects and editing tools, such as filters, augmented reality effects, cutting and cropping tools, and playback speed options, which allow users to customise their videos and make them more creative.
- Global community: TikTok is a global platform that allows users to connect with people from all over the world, enabling cultural diversity and exposure to different types of content.
- Security and privacy mode: TikTok offers a number of security and privacy tools, such as the option to make the account private, manage comments and filter out inappropriate content.

### 3.1.2. Use of TikTok in the pre-teen population

The use of TikTok by the pre-teen population is a topic of interest and concern for many parents, educators and child development experts. While TikTok is a popular and widely used social media platform, it is important to consider the possible positive and negative effects of its use on the pre-teen population.

Some studies and research have examined the use of TikTok in the pre-teen population and identified certain relevant aspects. For example, a study conducted by the organisation Common Sense Media in 2020 on the use of digital media among US children aged 8 to 12 found that around 15% of children this age used TikTok regularly (Common Sense Media, 2020).

It has also been pointed out that the use of TikTok in the pre-teen population can have implications in terms of privacy and security. Since TikTok is a public social media platform, boys and girls may be exposed to inappropriate content or interact with strangers online. Concerns related to data privacy and the collection of personal information from users,

including children, have also been reported (The New York Times, 2020).

However, it has also been recognised that TikTok can have positive aspects for the pre-teen population, such as the opportunity to develop creative skills, express themselves artistically and connect with other users related to their interests. As discussed above, TikTok can foster creativity and self-expression in children, and that many use the platform as a form of entertainment and distraction.

It is important to note that the use of TikTok in the pre-teen population may vary depending on age, maturity and parental supervision. Parents and educators play a crucial role in guiding and monitoring the use of TikTok among children, setting appropriate boundaries, talking about online privacy and promoting responsible use of social media.

### 3.1.3. Advantages and disadvantages of using TikTok from a feminist perspective

From a feminist perspective, the use of TikTok can have both advantages and disadvantages. These include:

Advantages:

- Female empowerment: TikTok has been used by many women and girls as a platform to express themselves, share their voices and promote gender equality. Many feminist content creators on TikTok address issues such as feminism, gender equality, gender violence and women's representation in the media, which can contribute to awareness and sensitisation around these issues.
- Community and solidarity: TikTok has created a global community where women can connect, share experiences and find mutual support on issues related to feminism. This can help create a sense of solidarity and belonging, as well as build networks of support among women from different cultures and regions.

- Creativity and expression: TikTok offers a platform for women and girls to express themselves creatively, whether through dances, songs, comedy videos or inspiring messages. This can help break gender stereotypes and promote a more diverse and positive image of women in the media.

#### Disadvantages:

- Stereotypes and objectification: some content on TikTok can perpetuate gender stereotypes and promote the objectification of women. For example, the platform has been criticised for promoting beauty challenges and "ideal" bodies that can foster social pressure and low self-esteem in women and girls.
- Gender-based violence and harassment: TikTok, like other social media platforms, can be used for gender-based violence and online harassment, including sexual harassment, offensive comments and posting intimate images without consent. This can have a negative impact on the safety and well-being of women and girls on the platform.
- Gender gap in representation and monetisation: some studies have indicated that there is a gender gap in representation and monetisation on TikTok, with fewer opportunities and economic benefits for female content creators compared to male creators. This can perpetuate gender inequalities in the digital sphere.

It is important to note that the experience on TikTok may vary for different people and that not all users will experience the same advantages or disadvantages. It is essential to explore the use of TikTok critically and reflectively from a feminist standpoint, and to promote a conscious and respectful use of the platform.

### 3.2. DEVELOPMENT OF A TEACHING SEQUENCE USING TIKTOK FOR PRE-TEEN STUDENTS

- Teaching sequence

1. Introduction to gender representation on TikTok
  2. Education about consent on TikTok
  3. Empowerment and self-expression through TikTok
  4. Challenging gender roles through TikTok
  5. Awareness of the hypersexualisation of women through TikTok
  6. Final gala using TikTok
- Development of session number 6
    - Setting: school pavilion
    - Groups: whole class group (24 students) or small mixed groups (4 small groups).
    - Timing: 1.5 hours
    - Resources: tablet, speakers and body language material.
    - Description of the session
      - Warm-up
        - Groups: whole class group (24 students)
        - Timing: 20 minutes
      - Main part
        - Groups: small groups (4 mixed groups of 6 participants)
        - Timing: 60 minutes
      - Cool down
        - Groups: whole class group (24 students)
        - Timing: 10 minutes
    - Exercises
      - Warm-up
 

Pupils will work as a whole class group. They will be in a circle. Each of the participants will come up with a phrase about what they have learned to promote feminism. They must create a dance step that they perform while saying the phrase. The teacher will record a TikTok video in a single shot. To do this, all pupils must have learned their phrase and their dance step, which they will perform when the camera focuses on them. This way, all students must

remain attentive, respecting turn-taking, and perform when it is their turn. The shot will be repeated every time a student does not perform it correctly. In this way, the work will not only be individual but also cooperative since they must help each other so that the video can be completed correctly.

- Main part

Pupils will work in small groups, 4 mixed groups of 6 participants. Each group will stand in a corner of the pavilion and can move toward the areas of each of the corners. Each of the groups will have to perform a TikTok dance creating lyrics to a rap with everything they have learned during the previous sessions. The theme will be: TikTok is feminist. All TikTok videos must include the hashtag #EduTok.

Once the students have created the rap and the dance, they will have time to react by liking, commenting on or sharing their classmates' TikTok videos. The results will be announced at the end of class. The teaching staff will have prepared the prizes beforehand: the group with the most liked video, the group with the most motivating comment posted on their classmates' video, group with the best rap, group with the best dance, and 3 individual awards to those who have worked best during the whole teaching sequence.

- Evaluation

The teaching sequence will be assessed through two types of evaluation: self-evaluation and other-evaluation.

- Self-evaluation

- Each participant will self-evaluate each session through the following closed-ended questions, with a Yes/No answer.

- Did I attend the class?

- Did I come dressed properly? (tracksuit)
- Did I participate in class?
- Did I make proper use of the material and respect my classmates?
- Did I learn anything new?
- Did I volunteer?
- Did I like the class?
- Other-evaluation

Other-evaluation will be conducted in relation to the sessions carried out in small groups, through the following open-ended questions.

- What did you like most about this class?
- What did you like least about this class?
- Have there been any incidents? What were they? How were they resolved?
- What have you learned?
- Score the class from 1 to 10

#### 4. DISCUSSION AND CONCLUSION

Sexism is still present in our classrooms today, and the work of feminism becomes the most powerful tool to combat it.

Fortunately, teachers within this area at different stages of the education system are increasingly concerned to teach their classes without differentiating between genders and sexes through the creation of new strategies, in order to end sexism in sport and, chiefly, bring down barriers to women in this world. Most research conducted with adults and, in this case, also with children, shows that girls play less sport than boys (González and Rivas, 2018). Even during lockdown, they were one of the most affected populations in this regard, which directly influenced psychological factors such as self-esteem and anxiety (Villodres et al., 2021).

ICT has been included in the classroom and, specifically, in Physical Education as a tool to innovate and support the teaching-learning process. They mostly allow international connections to be made via the Internet, through apps, platforms, etc., with their use becoming

increasingly frequent both inside and outside the classroom. However, online apps and platforms are still sexist, and this is affecting children particularly during early adolescence. In this regard, because girls are usually less motivated by sports activities or by after-school sports classes, which are more frequented by boys, girls tend to use their mobile phones more. According to Vall-Roque et al. (2021), this is often associated with Instagram, where they claim to follow accounts focused on appearance, indirectly promoting behaviours of eating disorders, body dissatisfaction, and negatively impacting their self-esteem.

Taking advantage of this situation, some teachers are bringing social media channels including TikTok into their students' learning. TikTok created the TikTok for Good initiative, which highlights the app as a space for learning and teaching through hashtags such as #EduTok. It is very easy to use, offering a dynamic interface where the user is able to navigate and learn to interact with its various features, creating a healthy entertainment channel. As a secondary result, it supports the development of new knowledge and skills through the stimulation generated by users' own videos or those posted by content creators. However, the hypersexualisation of women is present in videos related to dance. This should be considered an opportunity to work on this issue in a cross-cutting way through education and, whilst students are working on dance in their Physical Education lessons, videos can also be shown in the classroom highlighting this hypersexualisation and encouraging debate in class to raise awareness about this issue.

Studies show that ICT has not been adequately exploited in classrooms (Moreno et al., 2016), highlighting the need for interventions designed with the social interest of pre-teens in mind and from a perspective of increasing awareness. For example, this design should be based on apps that require the use of a mobile phone and related to a social media channel in which "likes", "friending", "sharing" are exchanged as a reward system, giving rise to a combination of characteristics that would be of interest to the pre-teen population in general (Lee et al., 2019), taking advantage of the attraction and interest generated to motivate work on the use of social media together with curricular elements and feminist awareness.

In conclusion, specifically the TikTok application could offer an ideal combination for the promotion of physical activity from a feminist perspective.

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# THE USE OF VIRTUAL REALITY AS AN INTERVENTION TOOL TO REDUCE SEXISM IN VIDEO GAMING: REVIEW AND PROPOSALS

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MARIELA BUSTOS ORTEGA  
*Universidad de Granada*

MARÍA DEL MAR RODRÍGUEZ SÁEZ  
*Universidad de Granada*

GRACIA CRISTINA VILLODRES  
*Universidad de Granada*

## 1. INTRODUCTION

### 1.1. CONTEXTUALISING THE FIELD OF VIDEO GAMING

In recent years, video games have become one of the biggest entertainment options in our society (Entertainment Software Association [ESA], 2022; Europe’s Video Games Industry [ISFE], 2021). Globally, the sale of video games exceeded 50 billion euros in 2021, an indicator that reinforces their consolidation in contrast to the decline of established sectors such as music or cinema (ESA, 2022). According to the Spanish Association of Video Games (AEVI), this medium has also grown exponentially in our country, becoming the leading option in terms of audiovisual leisure and one of the biggest sectors in job generation, which places Spain in the top 10 of international markets. Dubbed the “first mass media of the electronic age” (Lafrance, 2003), its current social and psychological impact goes beyond mere entertainment. In particular, one of the most relevant social phenomena has been the development of communities of players and followers who share a series of habits and features around gamer culture (Gómez, 2007). One of the features of this new culture when it comes to relating to others comes in the forms of interaction generated in recent years thanks to Internet access, compared

to the solitary consumption afforded by traditional games. According to the Entertainment Software Association (2022), 60% of people who play video games usually prefer to play with others (for example, online games in multiplayer mode).

The development of a greater number of online video games and the proliferation of multiplayer mode have modified both the way in which they are played and the social behaviours of the players, resulting in complex social groups and structures where the relationships between the participants are fundamental (Carrillo, 2015). In addition, given the globalisation brought about by the use of the Internet in video games, in which people from all over the world compete and play with each other, the network of social interactions starts to become much more complex. For these reasons, it is a fairly new context whose characteristics have not yet been fully analysed and which we consider to have an extraordinary impact on Psychology.

Although video games have traditionally been linked to men (e.g., Kaye & Pennington, 2016; Kuznekoff & Rose, 2013), currently a high percentage of players are women (46% worldwide), which translates into one billion players (Newzoo, 2021). In Spain, a high percentage of gamers are also women, reaching 48% in 2021 with a total of 8.6 million players. However, despite wanting to feel integrated in this environment, they encounter rejection from a community dominated by gender stereotypes, which continues to perceive them as “strange” and gives them a secondary and dispensable role (Ruvalcaba et al., 2018). For example, sexist behaviours are rife in this area (Tang et al., 2020). Matthew (2012) found that 63% of the female players interviewed reported having suffered harassment at some time while playing, and 35.8% of them have even temporarily quit playing video games due to such sexist incidents. Meanwhile, Fox and Tang (2014) interviewed 293 female players in order to analyse their experiences of harassment while playing online video games, finding that 10% of the incidents identified were clearly hostile manifestations (i.e., “get back in the kitchen”), including sexual harassment (i.e., “show me your tits”). In this vein, a recent study conducted by the company Reach3 Insights (2021) with 900 players from the United States, Germany and China revealed that 65% of them have

endured sexist attitudes and comments underestimating them and claiming that they were “lesser gamers” because they were women. Due to these factors, up to 59% of women players have come to regularly hide their status as women when playing online to avoid this type of sexist discrimination.

From a psychosocial perspective, video games play a very important role in the transmission of values, and can act, among other things, as a platform for perpetuating gender stereotypes (Gómez, 2018). Video games tell us about the collective imagination of a society, since, within the processes of interaction established, they encourage players to adopt specific roles (Torre and Gil, 2009). There can be no doubt, therefore, that video games are extremely influential in our society today. However, it is important to consider that this has traditionally been a mainly masculinised environment in which women did not have an active role, either as a player or as a professional in the industry (Trivi, 2018). Therefore, there have been numerous cases of harassment and hostility by male players in response to the presence of women, especially in online contexts, and it is necessary to analyse the role of women in this field and explore the studies that have addressed this problem, which are still scarce in our country.

## 1.2. THE ROLE OF WOMEN IN VIDEO GAMING

Beyond the specificities that characterise the online environment, the attitudes and dynamics reproduced through the Internet largely depend on those that exist in the real world (Marin–Bennet & Thornton, 2012). Little research has applied a gender perspective to the virtual context, although the approaches made in this field confirm that the presence of men prevailed over that of women in the online environment during its early years (Van Zoonen, 2002). However, the growing presence of women in the virtual world, as well as the progressive participation as women video gamers and workers in this industry, has led to talk of the “feminisation of the Internet” (Abraham et al., 2012). As a result, contrary to popular belief, a large percentage of players in Spain are currently women, reaching 44% compared to 56% of male players, according to data from the annual report on the Video Game Industry published

by the Spanish Video Game Association (AEVI) in 2017. However, at a professional level, only 5% of industry professionals are women, according to the study conducted by developer SimBin Studio in the UK in 2017. The drive to increase the visibility of women in this context is reflected in events such as the Women's Game Conference, international competitions such as the Electronic Sports World Cup (ESWC) and the Women in Games association, which works to promote the inclusion of women in the field and in the video game industry (Bertomeu, 2008). In this regard, there is no doubt that women are also interested in video games and want to feel integrated in this area, but they encounter a community composed mostly of a male audience, with a strong presence of gender stereotypes and evident rejection of women.

A study by Fox and Potocki (2016) analysed the relationship between video game consumption, interpersonal aggression, hostile sexism, and rape myths (RMA). To register the frequency and use of video games, they used Riddle's Lifetime Television Exposure Scale (2010) adapted to video game consumption, in which participants considered three periods of their lives: childhood, adolescence and adulthood, answering four questions about their weekly use. To assess sexism, they used the hostile sexism subscale of the Ambivalent Sexism Inventory (ASI; Glick & Fiske, 1996), and to evaluate RMA they adapted 14 items from the Rape Myth Acceptance Scale by Burt (1980), Ward (1988), and Field (1978). The findings show, among other things, that the general consumption of video games in which sexist content prevails would be related to negative and hostile attitudes on the part of men towards women.

Another study by Stermer & Burkley (2012) analysed the association between playing sexist video games and sexist attitudes between men and women. In this case, the perceived sexism in a video game was evaluated, and participants were asked to name the three games they played the most and to indicate the extent to which the game contained sexist content, using a seven-point Likert scale (where 1 = little sexist content and 7 = extremely sexist content). To assess the participant's level of sexism, the Ambivalent Sexism Inventory was administered (ASI; Glick & Fiske, 1996). Men who play video games perceived by themselves to be sexist obtained higher scores in benevolent sexism than men who

played video games with a low content in perceived sexism. According to these authors, when it comes to predicting sexist attitudes, the type of video game influences more than the amount of time played.

Therefore, sexism is starting to be recognised as a frequent problem in video gaming. However, most research in this field does not consider current theoretical approaches, as well as other important variables related to sexist attitudes, such as the acceptance of myths about intimate partner violence or sexual assaults (Bohner, 2011). Despite this relative scarcity of studies on this issue, there is growing evidence on how abusive, sexist, sarcastic and violent language found in online video game environments is disproportionately targeted at women compared to men (Bartlett et al., 2014). In a study on video games and sexism in 2012, 79.3% of respondents reported that sexism is common among people who normally play video games. More than half (63.6%) of women surveyed about their experiences as players reported experiencing sexism within video gaming (Brehm, 2013). Following these data, in a study by Matthews (2015), 63.3% of women reported being harassed while playing video games and 35.8% decided to temporarily stop playing due to experiences of sexism while playing.

In an experimental study of gender harassment in online games, Kuznekoff and Rose (2012) assessed how men and women are treated when interacting while playing a shooter video game. The researchers previously recorded statements with a female or male voice, each of which represents a different experimental condition. In the control condition, participants played in silence. Pre-recorded phrases were selected to be neutral and included general greetings to other players, congratulations to other players, or comments about them. For each of the 163 actions in which comments were made, any comments addressed to researchers were coded as positive, negative or neutral. The female voice received three times more negative comments than the male voice or control condition. Many of the negative comments aimed at women focused on their gender; for example, a woman's comment of "Hello everyone" provoked the answer "shut up, bitch" (Kuznekoff and Rose, 2012).

The consequences of this online aggression against women have led to multiple debates on the adverse effects of video game content and on the

possible hostile environment in which women are harassed (Anderson et al., 2004; Kühn et al., 2018). After creating a campaign to promote and make visible the prejudices suffered by women in video games, Anita Sarkeesian was attacked by people who believed she was unfairly critical, receiving thousands of death and rape threats. But also other women in the video game industry have received similarly negative treatment over time (Wu et al., 2014). Along these lines, the study by Burke et al. (2015) showed that more than one-third of women who had been harassed while playing online experienced anxiety and signs of depression, and nearly 20% showed changes in eating habits and sleep. This hostile environment can negatively influence the daily well-being and identity of women players (Burke et al., 2015). Women may feel uncomfortable and often choose to play other genres or styles of play to avoid harassment. In fact, the literature that has examined how women face sexism in online video games suggests that a common strategy is to avoid playing in any of its forms, either individually or in groups (Cote, 2017). However, many women persevere and continue to participate in this environment, which is often hostile to them, as is the case of communities of players who are fighting to make this situation visible.

The presentation of various studies developed in this field and the results obtained have highlighted the relevance of this problem and the need to take action to counter its increasing normalisation. For example, attention has been paid to how sexism could manifest in the context of video games (Croix et al., 2018) and how video game players who are constantly exposed to sexist representations can develop negative behaviours when interacting with women (Mulac et al., 2002). In addition, several studies analyse how sexist attitudes can predict the frequency of use and preference for certain types of video games, especially sexist video games (Fox & Potocki, 2016; Braun et al., 2016; Decamp, 2017; ten, 2014). Similarly, attention has been paid to the way in which sexism could manifest itself in the context and development of video games (Breuer et al., 2016; Croix et al., 2018).

Along these lines, through interviews with players in discussion groups on video games, Díez (2005) found that men did not consider video games to be sexist, rationalising that situations of harassment and sexism

were only part of the game or harmless fun, instead of rejecting the hostile attitudes manifested towards women (Fox & Tang, 2014). In this regard, Gray (2012) analysed the vision of women in the video game community using ethnographic methods and discovered that most women players declared that when playing online with male players they endured sexist actions, being subject to harassment, sexist jokes and feeling humiliated and abused in the context of online video gaming. For their part, the men declared that they would accept women in the community if they actually played a helping role, so there seems to be an inherent desire for women to be submissive and inferior. That is, we can conclude thanks to these investigations that women are considered strange in the context of video games, and men view their participation as a transgression of the normative behaviour they expect of women, especially if they do not fulfil the role that men assign to them within the video game (Taylor, 2006).

## 2. OBJECTIVE

Taking all this into account, and given the recent incorporation of women in the world of video games together with the rejection they receive from this community, the main objective of this study is to design an intervention programme to reduce sexism against female gamers through new technological tools: using virtual reality as a psychosocial tool.

## 3. THE USE OF VIRTUAL REALITY

### 3.1. FEATURES OF VIRTUAL REALITY

Virtual reality (VR) technology offers a unique opportunity to simulate online video game environments and analyse player behaviours in a controlled environment, but with the difference of being potentially more realistic and immersive than traditional research media. This technology would enable real-time data collection, a factor that would also facilitate the monitoring and evaluation of player behaviour, and offer greater implications in terms of training. Thus, it would be possible to simulate

interactions, scenarios and situations that usually occur in online video games that could be implausible or impossible to reproduce in the real world, such as cyberbullying or discriminatory behaviour against women. Although empirical studies using this technology are still scarce, the use of virtual reality devices has begun to revolutionise the way in which people regularly play and interact in online environments.

### 3.2. ADVANTAGES AND DISADVANTAGES OF USING VIRTUAL REALITY AS A PSYCHOSOCIAL TOOL

#### Advantages:

- Virtual reality can provide a safe and controlled environment to expose participants to situations they find uncomfortable or intimidating in the real world.
- Virtual reality enables the creation of situations that are difficult or impossible to reproduce in real life.
- Virtual reality offers flexibility when designing the intervention and allows participants to learn individually and at their own pace.

#### Disadvantages:

- Virtual reality can be too artificial and not adequately represent the real experience of players in the gaming world.
- The cost of VR devices can be prohibitive depending on resources and access to high-quality technology.
- Virtual reality can be emotionally draining for some people, which can make it difficult to learn and retain information.

## 4. METHODOLOGY

Both in the field of intervention and in the field of research, virtual reality would allow researchers to identify more accurately the situations of sexism endured by women players and would help to analyse the behaviour of players in a more precise and realistic way. Furthermore, in

practice, the use of these technological innovations would also allow us to examine the individual experience of the participant as other effects in the social context, to gain extensive knowledge of the technological tools available in the laboratory, as well as carry out interdisciplinary research projects (in support of social psychology, neuroscience or communication). To meet these objectives, the following methodology will be used during the sessions:

- Gender equality education: information would be provided on sexist discrimination and how it commonly affects female players.
- Awareness of sexist attitudes and behaviours: specific examples and various testimonies of female players would be used in which they relate experiences endured while playing and their possible consequences, in order to help participants identify and understand these types of attitudes and behaviours.
- Immersive virtual reality experiences: virtual reality experiences would be used in order to expose participants to real situations, simulating being victims of sexist discrimination in an online video game environment. To do this, various examples of widely known video games would be designed in which situations would be recreated within an online game:
  - Role-playing game (i.e., MMORPG): players will be able to choose between playing different characters, including victims and perpetrators of sexist behaviours and attitudes, learning to recognise and interact in these situations in an appropriate and assertive way.
  - Simulation of a chat during a multiplayer video game (i.e., MMO): this design will allow players to experience how women players feel when being discriminated against or when discriminating against other women for reasons based on their gender. Players will be able to choose how to react to the situations presented and, depending on their choices, will be informed about the

most frequent sexist interactions and will be provided with tools to handle these types of situations.

- Interactive drama/graphic action video game: this design would simulate a game in which players will have to make decisions about how to treat another player based on their gender. This way, players will be able to experience the consequences of their decisions and become aware of the gender inequality frequently normalised in this area.
- Educational video game: this design would aim to promote gender equality and empathy during a game in which you can interact with other players. In addition, the use of rules and resources that protect players when they are victims of discrimination will be promoted, as well as learning to intervene and report sexist attitudes and behaviours in that environment.
- Monitoring and evaluation of the intervention programme: the impact of the programme will be evaluated through interviews and questionnaires to measure changes in sexist attitudes among participants, in addition to other variables of interest such as psychological well-being or empathy toward victims of this type of discrimination.
- Space for discussion and reflection: a safe space will be provided for participants to discuss their experiences, reflect on how they have felt and how they could act in similar situations in the non-virtual world.

As for the target population for this intervention programme, it would be aimed at teenagers aged 14 to 18 who are more likely to be exposed to sexist behaviours and more frequent users of the online environment. In a second stage, this intervention could also include young adults, even professionals interested in the creation of video games and in the video game industry in order to make this problem visible within the environment itself and who could also help by promoting dialogue and space for reflection with teenage players.

## 4. DISCUSSION AND CONCLUSION

Sexism is still present in our society, and the work of feminism is crucial in order to eradicate this problem. Video games, like other media, have a significant impact on society and popular culture. In addition, video games are a very popular form of entertainment among young people, including children and teenagers.

Unfortunately, just like real life, video games continue to perpetuate gender stereotypes and discrimination against women. Women are often subject to harassment and discrimination within the video game community and are represented inappropriately or even violently in some of them. This problem is particularly worrying because women represent an increasingly large part of the audience and the video game industry. As a result of sexism in video games, women may experience a lack of self-esteem and confidence, and might limit their participation in the gaming community. In addition, discrimination and sexism in video games can influence the perception of gender relations and equal opportunities in everyday life.

Therefore, a coordinated, evidence-based approach is needed to address sexism in video games. As highlighted here, an intervention programme focused on virtual reality could be an effective tool to achieve this goal. Virtual reality is capable of creating situations in which participants can experience and refute their own sexist prejudices and behaviours. In addition, this type of intervention has the potential to improve women's self-esteem and self-image in the video game community and reduce harassment and discrimination against them. As for practical implications within the video game industry itself, it can certainly also help video game companies and developers to understand and minimise gender stereotypes in their games. That is why, for such an intervention programme to be effective, it is important to involve all stakeholders in the gaming community, including players, developers, video game experts and researchers.

Importantly, eradicating sexism in video games not only benefits women players, but also the gaming community as a whole. Reducing gender stereotypes and discrimination can improve the gaming

experience for all players and foster a more inclusive and healthy gaming community.

In conclusion, it is vital to study and address the sexism present in video games to promote a more inclusive video game community and to end discrimination and harassment against women players.

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PREDICTORS OF DIGITAL READING  
RECOMMENDATIONS FOR SEXUAL AND GENDER  
DIVERSITY EDUCATION

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DELFIN ORTEGA-SÁNCHEZ  
*University of Burgos*

1. LITERARY EDUCATION, DIGITAL LITERARY  
EDUCATION AND THE PROMOTION OF GENDER AND  
AFFECTIVE-SEXUAL DIVERSITY

Social interaction is fundamental to the holistic development of children and adolescents. As part of this social process, storytelling, especially in its contemporary digital form, is one of the main ways of making and sharing meaning, and of understanding and adapting to the world (Bruner, 2008). In this respect, many studies argue that literature is an agent of socio-cultural change and, as such, a first-rate educational resource (Jaramillo, 2012; Tamayo & León, 2017). The constant elements in the narrative structure of a literary text stimulate comprehension, imagination and interpretation. Its role in the cognitive development of children and young people is based on a logical sequence of incidents and events (Aguirre, 2012) which can be a valuable resource for science education (Bruner, 2003), thus facilitating didactic transposition. It is also conducive to the development of emotional intelligence (Ibarrola, 2014) in a number of ways (Cruz, 2014): it helps us to identify and understand our own and other people's feelings, invites us to put ourselves in the characters' shoes, encourages empathy, provides alternative strategies for resolving plot conflicts and relieves frustrations and anxieties.

There is no doubt that children's and young people's literature makes a specific contribution to the development of narrative skills from an early reading age and plays a key role in the teaching and learning process in any subject area. In the development and didactic treatment of these

skills, it is necessary to analyse the curricular approach that governs the design of teaching materials and practices, with a view to promoting genuine education *on* and *for* equality (Ortega-Sánchez & Pagès, 2018).

Spain has a relatively broad track record of research into the presence or absence of female characters in both children's and young people's literature and curricular materials (Ortega-Sánchez & Juez, 2021; San Martín Zapatero & Ortega-Sánchez, 2022). This type of literature can be a vehicle for gender equality education (Selfa, 2015), understood in the broadest sense of the term. The research nevertheless confirms that children's and young people's literature plays an instrumental role in the reproduction of gender identities (Arranz, 2015). These forms of narrative expression, according to Shahnaz, Fatima and Qadir (2020), contain strong ideological and often hidden narratives in which gender bias looms large.

The spatial locations, the types of tasks performed, and the social roles assigned to men and women in children's stories contribute to the psychological and social characterisation of the characters and storylines. Despite the imaginative and creative skills encouraged by children's and young people's literature, and the scientific advances that have been made, the concept of gender nevertheless remains dichotomous, antagonistic and hierarchical (Verdú & Briones, 2016).

Given the interdependence between environment and identity, and the operative role of the environment in creating identities, we proceed on the premise that the literature recommended for children and young people at different stages of educational development conditions their subjectivity and self-concept by appropriating certain socio-cultural meanings and the social representations conveyed in the stories. In this sense, it goes without saying that such literature has the capacity to help construct socio-cultural meanings associated with gender, and with students' personal and social identities.

Children's and young people's literature is, in fact, one of the most appropriate means of approaching learning and taking ownership of social and cultural realities. Literary expression, sometimes combined with textual, iconographic or multimodal storytelling, sparks motivation and enhances the ability to understand often abstract or complex phenomena

in the context of other spatio-temporal frameworks or references. Similarly, children's and young people's literature contributes to the acquisition of a critical social perspective and can be used to explore issues of power, tyranny and justice in the classroom (Delgado et al., 2016). It has also been shown how younger age groups use narrative construction to make sense of gender categorisations (Earles, 2017), of what underpins their personal and social identities (Shahnaz et al., 2020), and of how to justify certain naturally occurring archetypes.

In this context, the promotion of gender and affective-sexual diversity is one of the central pillars of education for social justice. Literary education is presented here as an ideal curricular framework for understanding education for social justice, for developing empathetic skills aimed at challenging gender stereotypes and prejudices (Ortega-Sánchez & Juez, 2021) and for education on and for full equality (Ortega-Sánchez & Juez, 2021). In this area, the digital age has led to the consolidation of multimodal information, the accessibility of which has raised the profile of individuals and groups, and increased awareness of their realities and experiences in relation to gender diversity and gender identities.

The didactic and critical approach to digital literary texts should aim to demonstrate literature's capacity to deconstruct discriminatory attitudes and behaviours rooted in diversity and gender identity; to communicate values of equality through the pluralism of perspectives, experiences, voices and themes; to provide a diverse range of role models, including non-binary people; to activate mechanisms by which the reader identifies with the literary text so as to develop social empathy; and to normalise diversity in naturally pluralistic and inclusive democratic contexts. Reading of this kind should also facilitate a critical and literary analysis of the socially and culturally constructed, and therefore continually evolving, representations of gender in the literature classroom.

## 2. RESEARCH QUESTIONS AND OBJECTIVES

This study explores the frequency with which in-service secondary school teachers are likely to include digital educational and literary content on affective-sexual and gender diversity in their teaching

recommendations, and the predictive factors that determine this inclusion. The objectives are as follows:

- To determine the prevalence of differential gender construction/socialisation in the digital reading texts recommended by in-service Spanish teachers in Compulsory Secondary Education, on the basis of their socio-demographic, training and didactic profile.
- To identify the specific influence of teachers’ socio-demographic and educational factors on their decision to recommend reading texts that can contribute to the construction and understanding of diverse gender and affective-sexual identities.

### 3. METHOD

#### 3.1. PARTICIPANTS

Based on a non-probabilistic convenience sample, a total of 436 Spanish secondary school teachers agreed to participate. Their socio-demographic characteristics were as follows (Table 1):

**TABLE 1.** *Socio-Demographic Characteristics*

	Gender		fi (pi)
	Binary	Non-Binary	
	fi (pi)	fi (pi)	fi (pi)
Age 45 or under	121 (27.8)	54 (12.4)	175 (40.1)
Age 46 or over	166 (38.1)	95 (21.8)	261 (59.9)
Total	287 (65.8)	149 (34.2)	436 (100)

#### 3.2. INSTRUMENT

An *ad hoc* instrument, “Digital literary education and the construction of gender identities” (ELDIG), was designed for use in this research. This instrument is essentially a single statement on the curricular relevance of recommending digital literary texts as a way of addressing gender and affective-sexual diversity in Secondary Education. This item is accompanied by four socio-demographic variables (age [ $\leq 45$  years -  $\geq 46$  years], level of education [undergraduate - postgraduate], gender

[binary - non-binary] and the existence or otherwise of initial and/or ongoing training in co-education and equality), plus a variable linked to the presence or absence of specific and identifiable didactic positions on controversial issues in teaching syllabuses. The six variables are nominally dichotomous (dummy variables).

### 3.3. DESIGN AND PROCEDURE

A non-experimental, cross-sectional design was used for the study, at the relational, explanatory and predictive levels of enquiry, as it seeks to determine the socio-demographic, educational and didactic causes of the phenomenon or event of interest, and the extent to which it occurs.

The questionnaire was administered by email and hosted on the free Google Forms application. Teachers received the questionnaire via their institutional email, and were informed of the purpose of the research study and assured of the confidentiality of their responses. They were also asked to agree to their responses being used in the study. The questionnaire was administered in July 2022. However, the forms remained open until December 2022.

All procedures applied were in accordance with the ethical standards of the institutional and/or national research committee and the 1964 Declaration of Helsinki and its subsequent amendments or comparable ethical standards, as well as the research ethics standards of the University of Burgos. The research project was approved by the Bioethics Commission of this institution, which guarantees the ethical and philosophical commitment to and unwavering respect for human dignity, privacy and physical and moral integrity, as well as the protection of personal data in the research and processing of the data obtained.

### 3.4. DATA ANALYSIS

The relationship between the study variables was tested using the  $\chi^2$  test of independence. The effect sizes of the relationships identified were estimated using the  $\phi_c$  statistic.

Binary logistic regression analysis was used to determine predictive relationships between the independent variables (age, educational level,

gender, previous training and teachers' didactic positioning in relation to controversial topics) and the curricular relevance of recommending digital literary texts as a way of approaching gender and affective-sexual diversity in Secondary Education. After checking those the logistic regression assumptions (non-linearity, independence of error and absence of multicollinearity between the variables) had been met, we sought to determine the predictive ability of the socio-demographic predictor variables and the teachers' didactic positioning on the variable of interest (contribution to the understanding and promotion of gender and affective-sexual diversity by recommending digital literary texts).

## 4. RESULTS

### 4.1. DESCRIPTIVE AND RELATIONAL RESULTS

The descriptive results report absolute and relative frequencies with a majority of teachers being aged 46 years or older, having an under-graduate degree, and agreeing with the curricular relevance of recommending digital literary texts as a way of addressing gender and affective-sexual diversity in Secondary Education. However, these findings do not provide empirical evidence of a relationship between the age ( $\chi^2_{(1, n=436)} = 0.047, p = .828$ ) and level of education ( $\chi^2_{(1, n=436)} = 0.155, p = .693$ ) variables and the curricular relevance variable (Table 2).

**TABLE 2.** Table Cross-Referencing Age, Level of Education and Curricular Relevance

	PCn	PCa	Total
	fi (pi)	fi (pi)	fi (pi)
Age 45 or under	85 (19.5)	90 (20.6)	175 (40.1)
Age 46 or over	124 (28.4)	137 (31.4)	261 (59.9)
NFg	154 (35.3)	171 (39.2)	325 (74.5)
NFp	55 (12.6)	56 (12.8)	111 (25.5)
Total	209 (47.9)	227 (52.1)	436 (100)

Note. PCn: Rejection of the curricular relevance of recommending digital literary texts as a way of addressing gender and affective-sexual diversity in Secondary Education. PCa: Affirmation of the curricular relevance of recommending digital literary texts as a way of addressing gender and affective-sexual diversity in Secondary Education. NFg: Under-graduate level. NFp: Post-graduate level.

To complete the profile of those teachers who are in favour of recommending digital texts of this kind we can add that they belong to non-binary gender groups, have previous training in co-education and equality, and have explicitly adopted didactic positions on controversial issues as part of their syllabuses. These findings confirm that there are bivariate associations between the gender ( $\chi^2_{(1, n = 436)} = 20.821, p = <.001$ ), previous initial and/or ongoing training ( $\chi^2_{(1, n = 436)} = 49.037, p = <.001$ ) and didactic positioning on contemporary controversial issues ( $\chi^2_{(1, n = 436)} = 38.644, p = <.001$ ) variables and the curricular relevance variable. These relationships have low to medium effect sizes (Table 3).

**TABLE 3.** Table Cross-Referencing Gender, Previous Training and Didactic Positioning

	PCn	PCa	Total	$\chi^2$	p	$\phi_c$
	fi (pi)	fi (pi)	fi (pi)			
Binary	94 (21.6)	55 (12.6)	149 (34.2)	20.821	<.001	0.219
Non-binary	115 (26.4)	172 (39.4)	287 (65.8)			
FPA	95 (21.8)	177 (40.6)	272 (62.4)	49.037	<.001	0.335
FPb	114 (26.1)	50 (11.5)	164 (37.6)			
PDA	74 (17.0)	148 (33.9)	222 (50.9)	38.644	<.001	0.298
PDb	135 (31.0)	79 (18.1)	214 (49.1)			
Total	209 (47.9)	227 (52.1)	436 (100)			

Note. FPA: Initial and/or ongoing training in co-education and equality. FPb: Lack of previous training in co-education and equality. PDA: Didactic positioning on controversial issues as a part of teaching syllabuses. PDb: Absence of didactic positioning on controversial issues as a part of teaching syllabuses.

#### 4.2. EXPLANATORY AND PREDICTIVE RESULTS

The omnibus test yields a Chi-square significance of less than .05 ( $\chi^2_{(5, n = 436)} = 143.718, p = <.001$ ), which is evidence that the constructed model can explain the relevance of recommended digital texts on gender and affective-sexual diversity. The usefulness of the model is evidenced by the Cox and Snell and Nagelkerke  $R^2$  indices, at 0.281 (28.1%) and 0.375 (37.5%), respectively, which indicate the extent to which the socio-demographic and didactic positioning variables predict this propensity. The  $R^2$  coefficients of determination are close to that given by Cohen's Kappa index, which is derived from the relationship between the

actual response values (dependent variables) and the corresponding predicted values = .30 ( $p < .001$ ) (30%). The evaluation of the model's usefulness was completed by measuring its predictive ability, for which the following values were obtained: accuracy = 64.9%, error = 35.1%. In fact, the percentage of the number of cases that the model is able to predict correctly or the overall percentage correctly classified exceeds 50% of the cases (64.9%), demonstrating the model's optimal explanatory power and therefore its acceptability.

The relationship between teachers' socio-demographic variables and the propensity to recommend digital reading texts on gender and affective-sexual diversity suggests that initial and/or ongoing specific training in co-education and equality, and didactic positioning in relation to controversial issues are two predictors of this relationship ( $0 \notin$  Wald statistic,  $p = <.001$ ). Teacher training is therefore one of the most significant factors behind the inclusion of digital texts with pro-diversity narratives and, by extension, the inclusion of specific curricular resources for education for democratic citizenship. At the multivariate level, age, gender and educational level are not predictors of such inclusion. These results are consistent with other diagnostic studies carried out by the DHISO (Didactics of History and Social Sciences) research group at the University of Burgos on the transversal and transdisciplinary integration of human rights education in secondary school curricula (Ortega-Sánchez, 2023), which also show that previous training and the didactic positioning of in-service teachers are two significant predictors of the variable of interest.

The relationship found is a positive one, i.e. training and teachers' didactic positioning make it more likely that such ideas will be given consideration in the literature studies classroom. For these variables, especially the previous training variable,  $\exp(\beta_i)$  is also far from 1, meaning that they provide adequate explanatory power for the event of interest (Table 4).

**TABLE 4.** Equation Variables, Regression Coefficients, Wald Statistic and OR value =  $Exp(\beta_i)$

	$\beta_i$	ET	Wald	gl	p	Exp( $\beta_i$ )	95% CI for Exp( $\beta_i$ )	
							Inferior	Superior
Age	.220	.231	.905	1	.341	1.246	.792	1.958
NF	.196	.247	.627	1	.429	1.216	.749	1.974
Gender	.020	.255	.006	1	.937	1.020	.619	1.683
FP	2.800	.346	65.649	1	.000	16.446	8.354	32.377
PD	-2.625	.345	57.810	1	.000	.072	.037	.142
Constant	-.520	.255	4.145	1	.042	.595		
Equation of the logistic regression model								
$y = \frac{1}{1 + e^{-(-.52 + .22Age + -.19NF + .02Gender + 2.80FP + -2.62PD)}}$ $f(x) = -.52 + .22Age + -.19NF + .02Gender + 2.80FP + -2.62PD$								

Note. ET: Standard error. NF: Level of education. FP: Previous training. PD: Didactic positioning.

#### 4. DISCUSSION AND CONCLUSIONS

Research by Aguirre et al. (2020) analysing secondary school teachers' perceptions of LGTBphobia, their experiences and training interventions, and the need for training and education in this area, shows that schools and their communities continue to be seen as hostile places for LGBT students. As such, their recommendation for further teacher training and careful reflection on education from a queer perspective is consistent with the findings of our research. This research highlights the notable absence of mainstream literary contributions to gender and affective-sexual diversity, at 47.9% and 52.1% respectively in this study. This underlines the urgent need to promote educational and curricular policies capable of focusing their objectives on the counter-socialisation of gender, far removed from identity standardisation, and geared towards education *on* and *for* equality.

The findings reveal the lack of a truly holistic and inclusive literary contribution to Sustainable Development Goal 5, the persistence of traditional gender attributions in the recommended digital texts, and the invisibility of LGTBI+ identities in the construction of students' literary knowledge. Predictive analysis, performed to ascertain the influence of

teachers' socio-demographic, training and didactic characteristics on the promotion of inclusive literary models, also underlines the importance of asking questions about recommendations for literary narratives, the type of social content produced and its role as a cultural commodity. It can be said that in instrumentalising this role, we continue to see "cultural patterns or models that, somehow, maintain and legitimise certain ways of behaving in society" (Yubero et al., 2014, p. 563). This happens when there is no specific training in co-education and equality, and no consideration of the potential impact on teachers' didactic positioning on controversial issues, as is the case here.

Furthermore, an earlier study by Garrido-Hernansaiz et al. (2017) showed that perceptions of schools' efforts to provide training on affective-sexual diversity were related to more favourable attitudes towards the issue. Recent research by Ullman et al. (2021) also shows that over 80% of Australian parents are in favour of including gender and sexuality diversity in public primary and secondary schools. Meanwhile, analysis by Francis (2012) identified the existence of avoidant attitudes and a lack of teacher training on sexual diversity in South Africa. In the same vein, the findings of Puttick et al. (2020) suggest that teacher training is crucial to understanding and dealing with holistic diversity. Finally, related research by Soler-Quílez et al. (2022) has already called for the introduction of texts on family diversity in language and literature classes in Spain. Using a quasi-experimental study design, it was shown that the students who worked with such texts were in fact more likely to be accepting of affective- sexual and gender diversity.

Symbolic representations of gender remain largely divorced from its inherent diversity and social discourses on inclusion. It follows that children's and young people's literature, in close harmony with leading scientific and disciplinary advances, should be mindful of the gender discourses prompted by the discussion and deconstruction of its meanings (Taber & Woloshyn, 2011) and become part of a new reflection on the purposes of literary education.

Ultimately, it is essential to create a genuinely inclusive educational culture through training initiatives with a focus on teaching practice and the resulting influence on teachers' didactic positioning. It is from this

standpoint that we agree with Emejulu and McGregor (2016) on the need for politically informed understandings of the digital, technology and citizenship, and for the concept of “radical digital citizenship” in which critical social relations with technology are made visible and emancipatory technological practices for social justice are developed.

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TRANSGENDER NARRATIVE IN VIDEO GAMES:  
ANALYSIS OF *A NORMAL LOST PHONE* AS  
AN EDUCATIONAL TOOL

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PAULA RODRÍGUEZ-RIVERA  
*Universidad de Vigo*

ANA MANZANO LEÓN  
*Universidad de Almería*

JOSÉ MIGUEL RODRÍGUEZ FERRER  
*Universidad de Jaén*

RUBÉN CAMACHO-SÁNCHEZ  
*Universidad de Lleida*

## 1. INTRODUCTION

Video gaming has become one of the most important industries on the planet, generating higher revenues than music and cinema, reaching more than 134 billion euros worldwide (de Videojuegos, 2021). In Spain, of the more than 3.100 million players in the sector, 26% are between the ages of 6 and 14, and practically all school children aged 14 to 18 years old (95.4%) claim to have played video games in the last twelve months (Frauca Benítez, 2021).

In this context, video games are a basic cultural phenomenon to understand the society around us. Although some video games, especially independent ones, are seeking to build new perspectives, there is still resistance to creating products that offer a certain social critique, especially of gender and sexuality (Vilasis-Pamos & Pires, 2022). And, despite the existence of independent or indie video games, they are not part of the multi-billion-dollar industry, only representing a tiny portion. The dominant narratives in mainstream games can cause harm if they are the only narrative experiences played (Dávila-Medina, 2021).

However, it is not surprising that throughout history, minorities have been underrepresented in mainstream narratives, both in film and television, with the trans\* collective being the worst affected (Thach, 2021). Trans\* is a multivalent concept that can include different gender expressions and identities, such as trans, transsexual, transgender, etc. The use of an asterisk introduces even more heterogeneity when conceiving the body, identity and experiences that go beyond the imposed binary social norms (Nagoshi et al., 2014).

In traditional media, trans\* people are only portrayed with confusion or suffering (Cavalcante, 2016). These media marginalise trans characters and stories\* (Capuzza and Spencer, 2017) or use trans\* people as the butt of jokes. For example, in *The Legend of Zelda: Breath of the Wild* (Nintendo), a man dressed in 'women's' clothing is treated as a joke, and traditional gender stereotypes are perpetuated. The joke comes when a gust of wind reveals the character to have a beard. Such mocking conveys the wrong kind of information to viewers, feeding into attitudes that reject these groups. Consequently, an unreal image of these people is presented, portraying them as nocturnal, depraved, lustful beings who live outside any social norms (De Souza Ferreira & Pereira, 2020).

Studies in film and television have found that transgender representation is underrepresented compared to other LGBTQ+ groups, something that is also seen in video games (Parker & Aldred, 2018; Shaw et al., 2019).

It is therefore understood that the trans\* collective, as well as being underrepresented in traditional and modern cultural elements such as video games, is usually represented in very stereotypical ways. One systematic review analysed 63 games released between 1988 and 2019 in which there was at least one trans\* character, revealing four stereotypical tendencies in how video games represent trans\* characters (i.e., physical dysphoria/transition, mentally ill killers, trans\* shock/revelation, and ambiguity) (Thach, 2021). Another previous systematic review that helps to contextualise the representation of the trans\* collective in video games shows that the LGTBQ+ collective is often represented as secondary characters and ignores the communities of which they are part (Shaw et al., 2019). The collective is also defined either as needing to "be like the rest", ignoring the uniqueness of each subject, or as a

dangerous, monstrous and villainous collective (Halberstam, 2018; Rodríguez Otero & Facal Fondo, 2019).

## 2. OBJECTIVES

Taking into account the previous antecedents and the need to have positive LGTBQ+ role models for pre-teen and teenage students (Newton, 2014; Vaccaro et al., 2012), the objectives of this research are:

2.1. ANALYSE THE IMAGE OF TRANS\* CHARACTERS IN THE VIDEO GAME *A NORMAL LOST PHONE*, TAKING INTO ACCOUNT THE GENDER STEREOTYPES WITH WHICH THEY ARE PRESENTED AND SITUATIONS OF DISCRIMINATION AND VIOLENCE IN WHICH THEY APPEAR

2.2. DEVELOP A RESEARCH-BASED DIDACTIC DESIGN TO USE *A NORMAL LOST PHONE* WITH HIGH SCHOOL STUDENTS

## 3. METHODOLOGY

### 3.1. DESCRIPTION OF *A NORMAL LOST PHONE*

*A Normal Lost Phone* is a puzzle game in which gameplay is presented as the interface of a mobile phone. The player has to navigate around the phone and find out what has happened to its owner. To do this, they will have to investigate that person's messages, emails or latest Internet searches. The game was created in 2017 and developed by Accidental Queens. That same year, a sequel entitled *Another Lost Phone: Laura's Story* was published.

Normal Lost Phone presents the story of Sam, a teenager who lives in the city of Melren. As the game progresses, players will discover several vital secrets, such as the attempted rape of Sam's friend, and the main character's birthday. Players also discover that Sam is a bisexual trans\* woman named Samira who has been hiding this from those closest to her.

Players will end up finding Sam's dating profiles, one describing themselves as male and one as female, and other LGTBQ+ support forums

where Sam accepts who they are. To make matters worse, Sam discovers that their parents and girlfriend Melissa are very intolerant of the LGBTQ+ community, which leads Sam to break up with Melissa.

Finally, Sam plucks up the courage to talk to a friend, Alice, who accepts Sam's gender identity.

As a last resort, after Sam's father gives them a motorcycle, they get rid of their mobile phone and move to a new city.

The only person they tell is Alice, who congratulates Samira on taking control of her own life and tells her that anyone who finds her mobile will erase all the information. According to Alice's message, the game ends when the player deletes the data from the phone.

### 3.2. METHOD AND DATA ANALYSIS

Based on the research goal, qualitative analysis has been conducted in which key images have been captured and analysed in depth.

A qualitative methodology has been used, analysing critical images from the video game, independently selected by two researchers, using an open coding process for this analysis (Williams & Moser, 2019). All the information obtained, both from the texts of the game itself, as well as from the images and the first codes of the researchers, was organised for analysis and processed using ATLAS.ti software (Version 9, ATLAS.ti Scientific Software Development GmbH, Berlin, Germany).

After a debate between the researchers, supported by a third researcher in case of disagreement, an in-depth analysis was conducted of the images selected and sequences were viewed individually. The transcribed material was also read and re-read, analysing the selected content to categorise the information of the visual or symbolic discourse.

The final categorisation was achieved through the triangulation of perspectives (Flick, 2004).

## 4. RESULTS

### 4.1. GRAPHIC AND NARRATIVE ANALYSIS OF *A NORMAL LOST PHONE*

Once the analysis of results was completed, four main categories were obtained based on the categorisation defined by Hantsbarger et al. (Hantsbarger et al., 2022): i) Trans woman\*, ii) Affective relationships, iii) Violence, iv) Support and acceptance: peer group. Also, within the primary categories, subcategories of a second and third level of concreteness were identified (see Table I).

**TABLE 1** *Categories of graphic and narrative analysis*

<b>General category</b>	<b>Subcategories</b>
Trans* woman	Reproduction of stereotypes Transgression of stereotypes
Affective relationships	Coming out, Transgenderism (acceptance and rejection) Affective-Sexual Relationships (Bisexuality, Sexual Relations and Dating Apps.)
Violence	Psychological and/or verbal violence LGBTQ+phobic violence
Peer group	Support and acceptance

Source: Authors' own.

#### 4.1.1. Trans\* woman

Within the main category, there are two secondary categories: (i) Reproduction of stereotypes; and (ii) Transgression of stereotypes. In this regard, Tach (2021) reviews 63 games in which one of the categories of analysis is the physical transitioning of trans characters\*. This category speaks of both the reproduction and transgression of physical stereotypes.

Regarding the category Reproduction of stereotypes, we see a reproduction of physical stereotypes at the moment when the protagonist does not want to have their hair cut but to keep it long (scene 1 of the video game):

From: Dad

Your mother has made an appointment at the hairdresser for you tomorrow at 10. Dad

29/01/2016 - 11:45

Why? I've told you a hundred times I don't want my hair cut.

29/01/2016 - 12:36 PM

Later, when the protagonist decides to present herself as a woman, she believes she needs to wear a wig, which she is wearing in the only photo of the protagonist shown in the video game (See Figure 1), thus interpreting gender norms.

**FIGURE 1.** Photo of Samira



Source: Videogame A Normal Lost Phone

Furthermore, when Samira looks for help in a forum on " How to interpret femininity?", the advice they give her is related to physical stereotypes, such as wearing a bra or make-up:

(...) If you want to go out and see if people see you as a girl, I have a tip for you:

- put on a well stuffed bra
- if you don't have long hair, wear a wig
- make-up is not enough, put on nail polish and some jewellery

(Scene 2 from the video game).

Regarding the transgression of stereotypes, a complex situation is seen in the life of a trans\* person: adaptation to the normative body. As you advance in the game, you see the protagonist realise that it is not necessary to achieve a normative body through hormones and operations to be a trans person\*:

There's a lot of information about operations and hormones, but do you really need to go through all that to be trans? It really freaks me out, and I'm not thinking of doing it (I don't even have any piercings...) (Scene 3 from the video game).

#### 4.1.2. Affective relationships

Within the main category, there are two secondary categories: (i) Coming out: Transgenderism; and ii) Affective-sexual relationships. Within the first secondary category, two tertiary categories were identified: acceptance and rejection. Along these same lines, Hantsbarger et al. (Hantsbarger et al., 2022) use a similar category, specifying that participants can empathise with the constant struggle by playing against the clock (i.e., against chrononormativity), combined with a sense of isolation (from the outside world), further emphasising the importance of horror in their experience as players, but also how this disconcerting feeling was resolved by: (1) accepting defeat against the clock; and (2) turning "failure" into an act of liberation by engaging in introspection and reflective inner dialogues.

As for the category of Acceptance, we see acceptance from cisgender women:

I am glad you plucked up the courage to turn your life around. Although from now on it will all be very different from where you are, you can still count on me if things get complicated. (Scene 4 from the video game).

As for Rejection, we see it within the protagonist's peer group, but also it extends to other spaces, such as the family:

I told them everything, big mistake! They've taken it badly. They called me a monster. They told me that they don't want to see me there anymore, or to play with them. (Scene 5 from the video game).

Yes, I thought so at first, but then I brought up the invitation and the conversation went:

Me: "You can... I saw the invitation to that cousin's wedding.

Parents: "The shame of it all, inviting us to a ceremony in a cult.

Me: "But it's a wedding. What's the problem?"

Parents: "No. It's not a wedding. A wedding is between a man and a woman. What he is doing is an abomination. A homosexual ceremony" (Scene 6 from the video game).

As for the main category of Affective Sexual Relations, it encompasses two secondary categories: (i) Bisexuality and sexual relations; and (ii) Dating apps. The anonymity attributed to online spaces increases because it is a safe space to develop affective-sexual experiences without fear of social rejection or physical violence (Taylor et al., 2017).

In relation to the category of bisexuality and sexual relations, we see the protagonist's sexual orientation and how it affects her way of relating.

From: Alicia board games

Nothing, just surprised that's all. I don't know why. I thought you liked guys.

13-12-2015-07:47 PM

I think I like both. I don't know... But don't tell anyone.

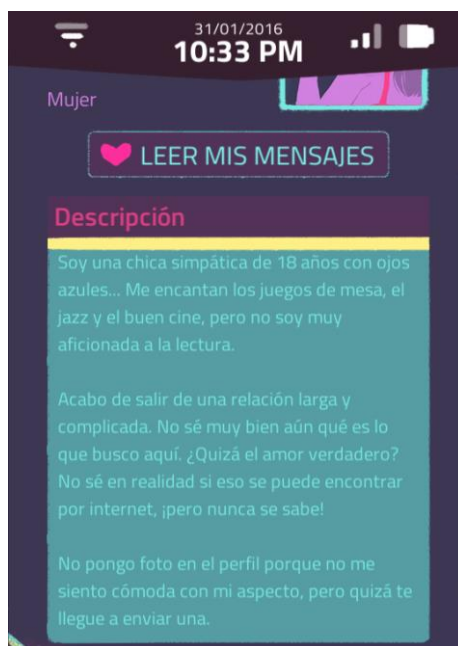
13/12/2015 - 07:48PM (Scene 7 from the video game).

Regarding the Dating Apps category, Samira finds an escape for her life. In the game we find two profiles, one for a guy called Sam looking for relationships with men and women, and another more hidden one for

Samira, who is also looking for men and women. It is the first time in the game that we find out Sam is a trans\* woman (See Figure 2).

On Samira's profile, she engages in an affective relationship with a guy, telling him about everything that is happening to her, and he gives her some advice.

**FIGURE 2.** Presentation of Samira in the dating app



Source: Videogame A Normal Lost Phone

### 4.1.3 Violence

Within the main category of Violence, two secondary categories are included, i) Psychological and/or verbal and ii) Vulnerable groups: LGBTQ+.

Violence against trans\* people is a reality. The narrative of conventional video games offers a transphobic representation of characters in video games but also points to the permanent invisibility of trans\* characters (Shaw et al, 2019). The violence suffered by trans\* characters in

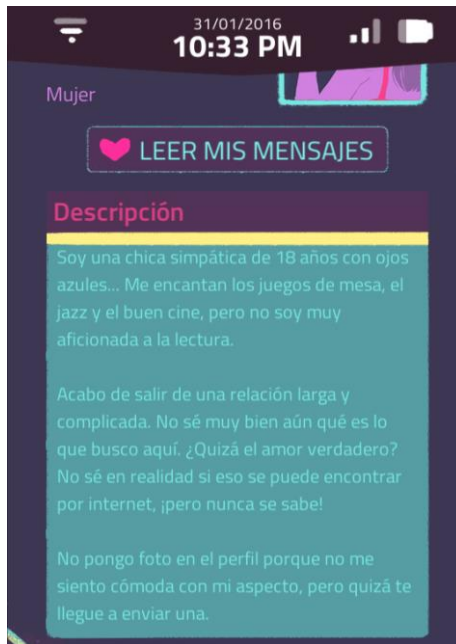
audiovisual representations ranges from psychological or verbal violence and physical violence to symbolic violence (Bermúdez de Castro, 2017).

Regarding the category of psychological and/or verbal violence, we see systematic violence related to the rejection of trans\* women on account of their bodies and linked to sexuality.

Great! I have a trans friend who is constantly asked on the street if she is a boy or a girl. Like, is that so important? I have another friend and when people go up to him who don't know him very well, the first thing they ask is: "so how do you climb into bed?" It's not the kind of question you would ask a stranger, but because they're trans... The basic rules of politeness don't apply! (Scene 7 from the video game).

Regarding violence against vulnerable groups: LGBTQ+, as the game progresses, a violent incident against the city's LGBTQ+ centre is discovered (see Figure 3).

**FIGURE 3.** LGBTQ+ violence

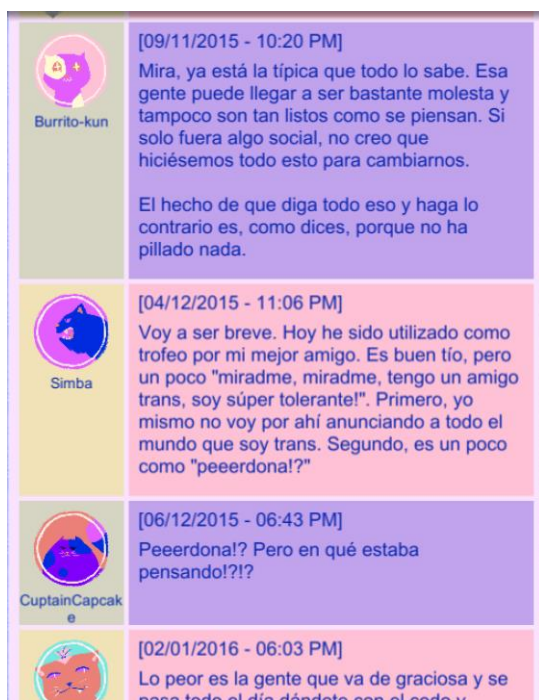


Source: Videogame A Normal Lost Phone

### 4.1.1. Peer group

In relation to this category, we see throughout the game that the protagonist feels alone, and her friends do not support her. However, when she discovers the LGBTQ+ forum, she feels safer and receives support from her peers. This support is a protective factor in preventing suicide in trans people\* (Kia et al., 2021) (see Figure 4).

**FIGURE 4.** Casual conversation



Source: Videogame *A Normal Lost Phone*

## 4.2. DIDACTIC PROPOSAL FOR THE VIDEO GAME *A NORMAL LOST PHONE*

Having analysed the video game, this next section develops the didactic proposal that corresponds to the second research goal.

This video game can be considered a limited time game because it can be completed in about an hour, where narrative and direct mechanics are combined to tell an introductory story to explore the rights of the LGBTQ+ collective.

As for the didactic proposal, the development of recreational activities must be approached rigorously since there is a risk of neutralising aspects that raise awareness (Rodríguez, 2006). In this sense, the intrinsic motivation of the game and its productive capacity must be balanced (Manzano-León et al., 2021). From this perspective, *A Normal Lost Phone* could be used effectively both in the latter stages of secondary education and in higher education since, as mentioned in previous studies, at that age students are permeable to sensitisation using gaming strategies (Rodríguez-Ferrer et al., 2022).

In this research, a teaching sequence has been designed for Spanish teenagers aged 16 to 18 for the subject of "Social Sciences". This teaching sequence can be completed in three one-hour sessions:

In the first session, the proposed activity is "preliminary ideas". The objective is to ascertain the students' previous ideas about the LGBTQ+ collective, as well as their prejudices and pre-conceived ideas about the collective. There are many possible dynamics in the classroom to carry out this step. We would recommend using some of those described in the Guide "Somos Diversidad" (We Are Diversity) (Pichardo Galán et al., 2020), such as the questionnaire on previous ideas (<https://bit.ly/3c6aRBr>), which asks about various issues related to sexual diversity, homophobic bullying in the classroom, corporeality and gender expressions, and family diversity. This activity aims to make students aware of their preconceived ideas and where they believe they have learned possible hate speech, analysing it in the classroom.

In the second session, the students play the video game *A Normal Lost Phone* cooperatively. In pairs or groups of three, they play the video game in the classroom. Previous instruction on the game must be provided, emphasising its educational importance and that it will be an evaluation activity within the curriculum for the subject. The teacher acts as a facilitator (Méndez & Lacasa, 2015), observing the students' behaviour when interacting with the video game and their involvement in the cooperative work. If the students have any questions, the teacher can act as "games master" and offer clues to advance in the game since the most important thing is the narrative and the content to achieve awareness, and not so much the development of the mechanics of the game

(Manzano-León et al., 2022). The clues that can be offered about the game are:

- The Wi-Fi password is the post code for Melren.
- The first password for the app account is Sam's birthday.
- The second password for the app is the date of the book event.
- To enter the VIP area, type in the password three times, and you will receive an email.

In the third session, the students should be given at least fifteen minutes in case any of the teams have not yet finished the game. Once all the teams have finished the game, the Phillips 66 method is used. This dynamic consists of dividing the entire group into subgroups of six people to discuss issues and reach general conclusions through dialogued questions. The objective of this dynamic is to effectively obtain proposals and ideas agreed by the teams and to develop the confidence and trust needed for participation (Pérez, 2004). The questions asked (although others can be designed depending on the students' level of understanding and the results obtained from the previous ideas step) are as follows:

- What did you think about Sam's story?
- Do you know any other stories like that of Sam or her brother?
- How do you think Sam must have felt when she could not freely express her gender and sexual identity?
- What role do LGBTQ+ associations and safe spaces play, such as the Be You forum?
- Have you ever played a game in which there is a trans\* character? Did you feel uncomfortable playing them? Why?
- Is it essential that these types of games exist?
- Has it helped you understand LGBTQ+ people more?
- If you had to write the moral of the game, what would it be?

As a conclusion to the didactic use of this game, the idea is for the students to get involved. In other words, to generate a commitment to the didactic resource. We work through three actions to achieve this commitment to social change and awareness of LGBTQ+ rights. The first is a necessary interaction with the game to advance the narrative. The second is the internalisation of social values through decision-making that constructs the narrative. Finally, the third is a reflective briefing session to explore the themes of the game.

## 5. DISCUSSION

*A Normal Lost Phone* is a video game with major possibilities in terms of education and awareness. This study presents an in-depth analysis of the game and a didactic proposal for secondary and higher education teachers to promote empathy and respect for the LGBTQ+ collective.

As previous studies show, video games could encourage ethical and compassionate players since recreational-narrative strategies allow students to put themselves in the place of others and this impacts their perception of social reality (López-Faican & Jaen, 2021; Navarro-Remesal & Zapata, 2019). In terms of co-education and dealing with affective-sexual diversity, serious games offer major potential with regard to raising awareness (Barrera Yañez et al., 2020; Calvo-Morata et al., 2020). The educational component of these kinds of video games is applied to the design of a social message that must be integrated with the narrative and structure of the game, thus fostering students' critical awareness, sensitivity to social problems and creativity.

However, the use of video games in formal education is far from widespread (Coleman & Money, 2020). There are four main reasons that explain this phenomenon. Firstly, the lack of technological and economic resources, mainly in state-funded schools (Sánchez et al., 2020). Secondly, the myths and false beliefs of teachers and families (Mylona et al., 2020). Thirdly, the lack of training on recreational learning strategies (Khalil et al., 2022). And finally, the lack of pedagogical knowledge about video game titles that may interest students (Plass et al., 2020). There are several free games available for smartphones that can be found

on different platforms, and which could be useful to reinforce content and skills or raise awareness, used with a Bring Your Own Device (BYOD) methodology (Song & Wen, 2018). But teachers are often unaware of the existence of these video games.

With *A Normal Lost Phone*, students can enter the life of a character whose gender and sexual orientation are different from their own, which will allow them to experience first-hand what it is like to live in a body and in a world that is not always understood or accepted by others. In addition, the game allows students to explore topics related to love and friendship in a more inclusive and diverse context, which will help them develop valuable real-life emotional and social skills. Furthermore, the trans\* community has faced many challenges throughout history, such as discrimination, rejection and violence. This video game can be an excellent opportunity to apply queer pedagogy in class. Video games are a very effective tool for exploring issues related to gender identity and sexual diversity, as they offer a playful and engaging platform for students to learn in a fun and empathetic way (Ramírez-Moreno, 2022).

It is necessary, therefore, to have a political vision of trans\* people, that is, to understand that gender identity is not binary and that sexual organs do not determine who a person is at birth. It implies recognising that trans\* people are as legitimate and valid as anyone else and have the right to live according to their true gender identity without being discriminated against or marginalised (Shaw et al., 2019). It also involves supporting and promoting measures that ensure equal rights and opportunities for trans\* people. This includes eliminating laws and policies that discriminate against trans\* people, providing access to adequate and affordable health and medical services, and creating safe spaces for trans\* people in different areas of life, such as work, education, and the community. In short, building a more political vision of trans\* people is urgently required in our society. It involves recognising and valuing gender diversity and actively working for equal rights and opportunities for trans\* people.

## 6. CONCLUSIONS

Trans\* people are often the subject of passive study. Therefore, making them active subjects and agents in their own lives is a fundamental issue in the fight for equal rights and the acceptance of gender diversity. Study and analysis of the video game *A Normal Lost Phone* shows that it is a fascinating resource to work on the gender perspective in the classroom. In addition, the game allows teens to experience first-hand the difficulties that trans\* people face daily, such as violence, rejection, or the complexity of personal relationships.

This can be a starting point for meaningful conversations and promoting a culture of respect and acceptance. In conclusion, *A Normal Lost Phone* is a valuable tool in education and the fight for the equal rights of trans people\*, as well as a cultural element that addresses, in a very realistic way, the problems currently facing trans\* teens, helping to make their experience visible and empathise with them.

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