

# Digital Storytelling and Multimodal Literacy in Education

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**ABSTRACT:** This article argues in favour of using digital storytelling to encourage a critical socio-educational focus in education and include multimodal explicit teaching in the curriculum. The analysis of fifty digital stories indicates that the students developed a certain awareness of the issue chosen for their story (e.g. violence, racism, war) since the final product transmits a critical perspective on the topic itself. Further work, however, needs to be invested in the development of the digital story content itself and on the issue of multimodal learning, with especial emphasis on the interface between multimodal elements and more traditional modes of transmitting ideas.

**Keywords:** Digital storytelling, Multimodality, Critical thinking, ICT.

## El relato digital y el alfabetismo multimodal en educación

**RESUMEN:** El estudio realizado confirma que el relato digital es una herramienta adecuada para favorecer un enfoque socio-educativo en la enseñanza, bien sea secundaria o a cualquier nivel, gracias a un amplio abanico de elementos multimedia (imágenes, música, videos, animaciones y su propia voz) que permiten expresar de forma multimodal el mensaje que se quiere transmitir. El análisis de cincuenta historias digitales indica que los estudiantes desarrollaron conciencia crítica. Sin embargo, fallan en la expresión multimodal: la mayoría de los relatos denotan una falta de coherencia entre los elementos multimodales y modos tradicionales de transmisión de ideas.

**Palabras clave:** narrativa digital, multimodalidad, el pensamiento crítico, las TIC

## 1. INTRODUCTION

Digital storytelling emerged in the United States in the 1990s, promoted by the *Centre for Digital Storytelling* (Lambert, 2010). Since then, its uses and applications have expanded rapidly (McWilliam, 2009), particularly in the field of education (cf. McWilliam, 2009; Robin, 2010). This non-profit organisation encourages development and research of digital tools that allow young people and adults to tell stories about significant experiences in their lives. These stories are shared to promote learning and education, but also play a key role in the dissemination of aspects related to health, the social services, historic and cultural preservation, as well as in community development, human rights and issues relating to environmental justice, among others.

There are many types of digital stories (Couldry, 2008) which have thrived due to the increase in digital resources allowing for self-publication (blogs, social networks, *Youtube*,

etc.). Here, the focus is on Educational Digital Storytelling (EDS from here onwards), a type produced by students under the supervision of their teachers (Robin, 2012). In this case, digital stories is a part of the student workload and assessed as one of his/her academic activities.

A brief and concise definition of digital storytelling (DS) might be the following (Barrett, 2004a; Lambert, 2010; Robin, 2011): a short story (between 2-5 minutes) that combines traditional modes of story narration with a wide variety of multimedia tools, such as graphs, audio, video, animation and online publication. One of its most noteworthy characteristics is that the author narrates the story with his own voice.

This article explores the potential of the EDS (cf. Gregori-Signes, 2008a) by analyzing the advantages and benefits that DS can provide in relation to the basic skills included in the Spanish Secondary Education Curriculum. In particular, it explores the possibilities that DS may have as a tool to encourage a critical socio-educational focus in education, by analyzing actual examples produced by students. The results indicate the need to solve certain inconsistencies in the curriculum regarding the instruction and practical implementation of multimodal discourse in the actual educational panorama.

The article includes first a review of the most relevant literature on the elements in DS, followed by a section which justifies the use of DS in the context dictated by the Spanish Organic Law on Secondary Education (*LOE-Currículo Educación Secundaria Orden ECI/2220/2007 de 12 de julio, BOE nº 174 de 21 de julio de 2007*) Annex I. The law describes the skills that secondary education students are expected to develop throughout their studies. The nature of the practice of DS seems to point it as an interactive (Watkins & Russo, 2009) and participative activity which may help fulfill those aspects which are most directly linked with basic skills (B.O.E. num. 174: 31682).

The analysis of fifty samples of digital stories produced by students in secondary school proves that DS allows students to include and use ICT effectively, and that the students develop full awareness of the issue chosen for their story (e.g. violence, racism, war). Moreover, DS can help promote critical thinking and self-and group-reflection by bringing school and society together and making students cast a critical view on the world they live in. The main problem however lies in the students difficulty to produce a coherent multimodal digital story. Multimodality is understood here as the combination of several modes of communication in one single message.

## **2. ELEMENTS IN DIGITAL STORYTELLING**

### **2.1. The Center for Digital Storytelling**

The novelty of digital storytelling in comparison with more traditional narrative forms is its capacity to entwine the personal and individual dimension with mass digital dissemination, as well as the possibility to use it productively as an educational tool in a variety of different subjects (Gregori-Signes, 2008b). Among the descriptions of the elements of digital storytelling, several works are worth pointing out: Lambert (2010), the compilation of articles both in Lundby (2008) and Hartley and McWilliam (2009) and more recently Gregori-Signes & Alcantud-Díaz 2013; Alcantud-Díaz & Gregori-Signes, 2013.

Although the aforementioned characteristics can be applied to the majority of digital narratives, on which EDS certainly draws, it is the original model of digital storytelling, promoted by John Lambert, Dana Atchley and Nina Mullen via the Center for Digital Storytelling, which has been adapted and has had the most impact in the educational field. This model has been extensively discussed in the publications of John Lambert (2010), who initially elaborated a list of seven basic elements for digital stories: 1. Point of view, 2. Complication, 3. Dramatic tension, 4. Gift of one's voice, 5. Power of soundtrack, 6. Economy of detail, 7. Pacing. The process of story creation is interactive (cf. Watkins & Russo, 2009), even though the final product is individual (McWilliam, 2009: 145). Lambert (2010: 20ff) speaks of seven steps to complete a storycircle: 1. Owning your insights, 2. Owning your emotions, 3. Finding the moment, 4. Seeing your story, 5. Hearing your story, 6. Assembling your story 7. Sharing your story.

Educational storytelling however, is far more complex than what it may seem when looking at these lists of elements for two main reasons: a) when used, EDS becomes part of the curriculum and should therefore be evaluated; b) students are learners and they may not only need instruction (cf. Wikan et al., 2010) on the technology of DS, but also on each and every one of the elements of digital stories. As Paul & Fiebich (2005) explain, communication takes place in a multimodal environment, which is distinct and unique when compared to previous media. Moreover, within a socio-educational approach, the students will be forced to work out a way to combine them all in order to create a critical narrative on a conflictive social issue.

## 2.2. Educational Digital Storytelling (EDS)

EDS is the result of the blending of the proposals by the Center of Digital Storytelling and the principles and needs of each one of the educational contexts in which it is implemented (Robin 2006, 2010) and Barrett (2006). Robin (2006) extended the seven elements identified by the Centre for Digital Storytelling to ten and included more precise instructions on how to develop a good story, emphasising the importance of good quality in voice and images and a meaningful soundtrack, as well as the need to pay attention to good grammar and language use.

With regard to the process that educators use to instruct students most of the methods are a variation of what is nowadays known as the CDS Workshop (cf. Rodríguez-Illera & Londoño-Monroy, 2009). The most recent proposal from Robin (2012) pays attention on the one hand to the process of elaborating the story: students should pay attention to whom their story is addressed, what they want their audience to know, the importance of including a personal point of view; and, on the other hand, to educational aspects whereby students should provide supportive feedback and be aware of copyright issues and educational fair use, among others. Both the process of elaborating the story and the story itself are important when using digital storytelling in the classroom.

In a strictly educational field, with applications adapted to students' needs, EDS has been used in different contexts and with different subjects, at primary (Behmer, 2005), secondary (Lowenthal, 2009; Bjorgen, 2010), university level (Barrett, 2004b; Zaragoza-Ninet & Brígido-Corachán, 2009; Alcantud-Díaz, 2010) and in teacher preparation (Blocher, 2008; Dogan & Robin 2008). McWilliam (2009: 39-53) lists more than 123 institutions that run

courses on DS. They all coincide in their emphasis on two possible uses of digital stories: i) as a tool that encourages self-expression and personal point of view and, ii) as a tool that can be used to implement new technologies in the curriculum for both teachers and students. Benick (2012: 148) argues that digital storytelling is a powerful teaching and learning tool with three main benefits:

increased learner engagement through valuing and validating the life experiences of students; expanded opportunities for skill building with an emphasis on the 21<sup>st</sup> century requirement of digital, media, visual, and informational literacies; and the addition of new channels for the development of voice through multimedia authoring, an option lacking in standard essay assignments (Benick, 2011; Clarke & Adam, 2011; Oppermann, 2008).

### 2.3. Basic competences and digital storytelling

In the official publication of the Organic Law on Secondary Education (*LOE-Currículo Educación Secundaria Orden ECI/2220/2007 de 12 de julio, BOE nº 174 de 21 de julio de 2007*), Annex I describes the skills that secondary education students are expected to develop: a) linguistic communication skills; b) mathematical skills; c) skills relating to knowledge and interaction with the physical world; d) information management and digital skills; e) social and citizenship skills; f) cultural and artistic skills; and, g) learning, autonomic and personal initiative-related skills. Additionally, it is explicitly stated that the teaching methodology will be fundamentally communicative, active and participative and aimed at the fulfillment of objectives, especially of those aspects which are most directly linked with those basic skills. (B.O.E. num. 174: 31682).

The digital story contributes firstly towards the development of linguistic communication skills, as well as information management, digital skills and learning skills; at the same time that encourages autonomy and personal initiative. Cultural, artistic, social and citizenship skills are also put into practice in a socio-educational approach that uses multimodal genres, as is the case in the project described here.

The development of digital skills originates from the application of easy-to-use and intuitive software (e.g. *Photo Story*, Windows Moviemaker, iMovie and iPhoto, Photo Story 3, Windows MovieMaker, Audacity) but always keeping in mind that a good grasp of the software is not enough to guarantee a good final story, since it is the story and not the technology involved that “makes” a good digital story (Potter, 2005). Moreover, the process of writing is essential (cf. Xu, Park & Baek, 2011) and contributes towards the improvement of *linguistic competence*.

Within the process of oral composition and narrative, storytelling encourages a pragmatic focus, because it considers the context, as well as the shared knowledge between the author and audience, as essential in any creation process. Participants are greatly influenced when asked whom their story is aimed at (Lambert, 2010) or if it will be made public or not. The “new” and “given”, or shared knowledge, determines its content. Once the story has been decided on, students adapt it to the digital medium. The combination of language with multimedia elements requires a clear distribution of stylistic resources in order to avoid repetitiveness or redundancy, thus developing *digital competency*. Artistic skills are

developed when making decisions about possible combinations of multimedia elements in order to transmit a message: the student undoubtedly *learns to learn*. DS is an activity that rewards creativity and point of view thus increasing the student's motivation (cf. Gregori-Signes & Alcantud-Díaz, 2013).

On the other hand, the digital story can be conceived as a socially positioned cognitive process (Gregori-Signes & Pennock-Speck, 2012). The story incentivises a socio-cognitive method of teaching (Castelló, 2002), in which the author must consider the reality that surrounds him or her before, during and after the elaboration of the story. These factors definitely favour an *acquisition of knowledge-based skills and interaction with the physical world; social and citizen skills, and cultural skills*. The digital story only makes sense if it is conceived within a socio-cultural environment (Castelló, 2002), which the teacher will mark out according to his/her objectives. In turn, the digital story is a cooperative and interactive process during its creation and at the end of it, since it is not just the teacher assessing the story (Barrett, 2004b), but the whole class. One of the essential components of this genre is sharing the experience and allowing all of the participants to watch every story. In addition, the general public will have access to the stories if they are published online

The digital story is, therefore one of the few examples that really enhance strategic teaching, as defined by Castelló (2002), in which there is an interaction between the teacher's own external control and students' internal control (cf. Pérez-Cañado, 2010). In this sense, the teacher becomes the guide who monitors and assists in the distribution and proper use of both the story content and the relevant organisation. Thus EDS is a guided practice that requires cooperation between both students and teacher.

As for the type of subjects which EDS can be applied to, the four typologies presented by DeSimone, Scott and Lambrides (2006) are sufficient to design a wide range of activities in any field: narratives, informative or descriptive texts, biographies, persuasive speech; and cause-effect stories. (e.g., personal opinions, retelling of myths, short stories, reports (functional and informative), or descriptive stories can be used in the cases of book reviews, short advertisements conclusions; and comparisons between one or more projects or ideas to mention but some).

### 3. MULTIMODAL LEARNING

The Metiri Group (2008: 11) summarises the 2001 Publication from the National Academy of Sciences, *How People Learn*, 29 which “outlines important principles upon which schools should consider redesigning learning”. Digital storytelling fits the type of activity suggested by the study because: a) it optimises learning, since students “can see where new concepts build on prior knowledge”; b) students develop expertise, since they “learn more when the concepts are personally meaningful to them”; c) it promotes a kind of learning that is relevant to their experiences outside the classroom.

Metiri Group argues that multimodal learning is more effective and they justify it by describing the set of principles which support this idea and are widely accepted nowadays. The seven principles are fulfilled by DS: i) retention is improved in DS by mixing words with pictures rather than words alone (Multimedia Principle); ii) DS helps promote the spatial and temporal contiguity principles by combining words and pictures; iii-iv) DS brings

together words and sounds and combines animation with narration, and even on-screen text (coherence and modality principles). Furthermore, the redundancy principle (v) is also favoured since information is presented in more than one modality (pictures, sound, words, voice) and the students have to decide how to put together all the raw materials (vi) direct manipulation principle). Finally, the individual differences principle is one of the characteristics that is certainly present in DS, since it allows high-spatial learners to learn in a more convenient way for them. Although most of the subjects taught in secondary school undoubtedly rely on multimodal learning (e.g., blogs, wikis, chats), this is not dealt with explicitly in the curriculum.

The relevance of including DS as one way to enhance the production of multimodal discourse has been pointed out by several authors (Hull & Nelson, 2005; Nilsson, 2010; Pennock-Speck & del Saz-Rubio, 2013; Erstad & Silseth, 2008) who coincide in that language-based pedagogy (Gauntlett, 2008: 255) is no longer sufficient for literacy practices and that students need 'multiple literacy practices' or 'multiliteracies' (Walsh, 2011). Although, as argued by Luntby (2008) multimodality or composing across modes is nothing new (Kress et al., 2006). Moreover, Walsh (2011) points out the need not only to include multimodal texts in the classroom but of analysing them, since there is still a lack of in-depth analyses of multimodal texts produced in a classroom environment This is what the present article intends to do.

#### 4. DIGITAL STORYTELLING WITH A (CRITICAL) SOCIO-EDUCATIONAL APPROACH TO LEARNING

The socio-educational perspective emphasises the relationship between the *school* and its *social context*. The social environment is seen as an educational tool in which, and from which, the student learns. Therefore the relationship between the context and the student, which has often been overlooked, becomes a key element in the production of digital stories.

The socio-educational perspective promotes a critical *use of new technologies*: ICT becomes a tool for transformative education and cultural action. As Ibañez-Herran (2011) argues ICT should be used with the intention of: a) promoting cooperative learning and creation; b) promoting socio-educational product development (of products with social utility); c) promoting creation/transformation of life and cultural contexts; d) generating culture-critical action.

DS is based on the principle that each tale is a personal story that includes not only the personal views of the author but also his own voice. In EDS, both teacher and student become socially involved in the production of stories and are forced to give their own perspective (Taub-Pervizpour, 2009) during the creation phase and at the end, after completing the story.

The socio-educational movement mobilises people, groups and organisations, so that they can articulate their strengths, from common goals and interests, in favour of *collective welfare*. DS can be used in education to address social issues such as social class, race, power, culture, marginal youths or communities to achieve understanding among its members, making different perspectives available to the public (Taub-Pervizpour, 2009).

Within this context DS can help raise awareness of the social reality around the school forcing the students and their audience to interpret the reality from a critical perspective. The final product, the digital story, is their own testimony, their personal opinion as an individual who is both a witness and member of a social reality.

## 5. METHODOLOGY AND CORPUS DESCRIPTION

### 5.1. Creating the social story

One important issue at this point is to clarify the role of the analyst in this research as an external-neutral observer, whose intention is to analyse the digital stories as a product more than a process without any preconceived ideas about them. In this sense, the approach differs from most of the available literature on DS, in which the analyst is also a participant in the process. I believe that external interpretations are necessary in order to understand the full potential that digital stories publicly available on the Internet may have on an alien audience. Digital storytelling is one type of computer mediated communication which may be publicly accessible on the Internet, and, as many other types of discourse (blogs, online discussions, TV interviews) (cf. García-Gómez, 2010; Hukaffer & Calvert, 2005), may be interpreted differently by different audiences. This is necessary in order to be objective and suggest strategies for improvement.

The analyst however does not claim a totally naïve knowledge of the circumstances that surrounded the production of the stories, since the analyst interviewed, briefly, one of the two teachers about the process of elaboration, paying attention only to the general details such as year, age, the nature of the subject and the general description of the task. The information obtained is reproduced below:

- What subject were the digital stories produced for? The stories were the result of an activity proposed for the subject *Information and Communication Technologies I* (during the academic years 2007-2011). The students were asked to choose a conflictive social issue and express their point of view through a digital story. They are available from Youtube.
- Did the students receive instruction on multimodal discourse? The discursive and narrative aspects of multimodal storytelling as well as issues dealing with multimodal coherence were neither dealt with in class nor covered by any other subjects, at least directly (classes in language and literature however would deal with aspects of storytelling and writing exercises etc.). The students were asked to provide their own point of view on a social issue and express it using a digital story which involved written language inserted on the screen, music, sound, and any other multimedia elements they wished to include.
- Did they receive explicit instructions on conflictive social issues? Conceptual instruction on socially relevant issues was dealt with in other subjects, and is part of the school schedule. The school promotes a socio-educational practice whereby partnership between home, church, society and school is reinforced. Consequently, students have a minimum of an hour per week in which they discuss socially relevant issues. This explains the choice of the activity itself since a socio-educational



perspective promotes a critical use of new technologies whereby ICT becomes a tool for transformative education and cultural action.

- Regarding instruction on the elaboration of the digital stories, the interview only pursued objective information. The teacher dedicated a total of 4-5 sessions in which students were instructed on the technical part of DS and were showed examples. The students were asked to develop a story-board and create a digital story that included six of the seven elements described by Lambert (2010)- narrating using their own voice was not required. The images were taken from the Internet and students were asked to convert them into a story that would denounce the issue at hand.

## 6. METHOD OF EVALUATION AND ANALYSIS

The interview revealed that students had been evaluated following to the rubrics proposed by Robin (2005) according to: point of view and purpose (dramatic question), pacing, audio (music), images, economy and good use of grammar and language. The general aim of the task (encouraging the students' socio-critical attitude) was to produce a critical story; however, the emphasis was more on technology than on the story itself, due to the nature of the subject. This evaluation was done by the teacher and the analyst has no access to the final marks.

As a media product available on the Internet, the analyst proposes an analysis in terms of multimodal coherence. That is, a good story is one that reveals a cohesive use of words (written), pictures, sounds/ music, allowing a full comprehension of the intended message. This entailed analyzing:

- The combination of pictures in the same shot. What aspect/s of the topic are they illustrating? How do they combine the different sub-topics? Does the final slide represent an arbitrary mixture of related pictures, how coherent is the final montage?
- The written text. Is the text coherent with the content in the pictures? Does it explain, reinforce, clarify what may be inferred by the pictures? Is it coherent with the music and with any other multimodal element included in the same slide?
- The music. Is it adequate, does it have any lyrics, are the lyrics coherent with the images and on-screen written text?

## 7. RESULTS

A total of 50 social digital stories produced by students of the subjects Information and Communication Technologies I from Colegio María Auxiliadora in Valencia were analysed (cf. Palomo-Martín, 2007-2010)<sup>1</sup> They are available to the public on Youtube. The students chose the following topics: lack of water (1), anorexia (1), climate change (2), the disabled

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<sup>1</sup> Most of the stories are available from [http://www.youtube.com/user/auxiliadoratic?ob=0&feature=results\\_main](http://www.youtube.com/user/auxiliadoratic?ob=0&feature=results_main).



(2), drugs, child exploitation (5), war (4), immigration (1), poverty (5), gender violence (8), animal abuse (2), child abuse (3), third-world countries (1), Christmas: unequal distribution of wealth (5), money (1), hunger (1), violence: different forms (3), marriage (1), the N.G.O. *Vides* (1), environmental contamination (1), “dirty” money (1) and AIDS (1).

When watching the digital stories, the first impression is that the majority of students were able to complete the task with almost flying colours: they seem to have a mastery of the software and they created what, at least initially is a socio-critical digital story. Especially noteworthy is the harshness of the images chosen for each topic, which demonstrates the students’ intention to condemn situations of inequality in society. The combination of music, images and written text, along with symbols and other multimedia elements such as animations, is powerful and manages to reach the audience, even in the cases in which the stories lack the desired coherence. There are, however, certain aspects that need to be commented upon in detail.

*The story line or plot.* Since the voice of the narrator was not included in the digital stories, the message relied on a combination of music, written inserts and other multimodal elements. None of the stories opted for a traditional narration, but instead relied on image sequencing, and short written messages which denounced, described or condemned the situation (e.g. *No to violence, Don’t stay silent, Let your voice be heard, Don’t let them make you suffer*). Some also suggested possible solutions to improve it, alternating between different structures: a) some stories denounced or rejected the actual situation and then put forward solutions; b) some others intertwined or alternated between the two types of statements (e.g. Child abuse/ Maltrato Infantil by Raquel and M. José).

Image 1. Gender violence	Image 2. Child exploitation	Image 3. Climate change
		

*Image 1.* Bandín-Pizcueta, Almonacil [min. 0:25] In example 1, the song lyrics are the following: ... solo sabe de golpes y desolación (punches and grief are all she knows).

*Image 2.* Child abuse. Pisón-Sáez. [min. 0:35] Here, the written text identifies two different types of child exploitation.

*Image 3.* Pollution. No author. The text is superimposed on the images, with the aim of combining both in one frame.

*The written text* functioned as a link between the multimodal elements and the message itself. It either preceded or followed the image; or was superimposed on the images. In both cases, the text helps the author guide the audience in their interpretation of the images.

*Music.* The combination of images (often more than one image on each slide) and music is done so that it leaves interpretation rather open for the audience. The stories alternated open and closed relations with their audience (Paul & Fiebich, 2005), thus making the audience alternate between a passive and an active interpretation of the content. The digital stories are constructed so as to a) make the song lyrics coincide with the message illustrated by the images; b) make the lyrics coincide with the images and with inserts of written text. The insertion of written texts is a cohesive device in this case, helping us to focus our attention on the aspect being highlighted and avoiding the dispersion that a combination of so many stimuli can create.

Nevertheless, the choice of soundtrack (songs) has proved to be one of the most difficult for students. On the one hand, copyright laws (Robin, 2012) were not respected and students often chose well-known songs with lyrics which somehow linked with the topic (e.g. many students chose the same song to represent gender violence), or which they like and which suit the rhythm or emotion that they wish to transmit.

One of the challenges brought about was when students chose songs in English. There was a large difference regarding coherence between the stories which included music in English and those whose songs were in the students' mother tongue: these were often related with the topic and even quite well-suited to the images and other multimodal elements. It was undoubtedly the melody and rhythm what very often determined the students' choice of a particular song rather than the lyrics themselves which proved in most cases to be irrelevant to the topic at hand. This shows that one of the difficulties encountered by the students was the selection of soundtrack. It is worth noting that, if and when synchronisation is achieved between the lyrics of the song, images and text of the story, the digital story is considerably enriched and becomes more powerful (War and terrorism/ *Guerra y Terrorismo*, by Vicente y Mayte). On the contrary, when synchronisation is not achieved it has a negative effect on the coherence of the story.

In general, most of the digital stories analysed reflect the impossibility of synchronising images and music. Students found it difficult to obtain coherent stories and express a coherent point of view when the song had lyrics as opposed to just a melody, since the song often tells a "story" that does not match entirely with theirs. An example is the use of a very popular song on gender violence which was chosen by some of the students. The song, *Y en tu ventana/And at your window* by Andy and Lucas, repeats the following lyrics in the chorus: *...en tu cocina, tan prisionera de tu alma en la cocina* (...in your kitchen, such a prisoner of your soul in the kitchen). A striking coincidence between the stories that used it was that none included an image of a woman imprisoned in her kitchen. This seems to leave the audience wondering why they chose not to illustrate that scene in particular. The most plausible reason is, probably, because they did not find a picture which reflected domestic violence in the kitchen.

On the whole, the stories analysed coincide in that the selection of images and the sequence in which they were presented undoubtedly favoured the development of the students' visual competence and information management skills, although they did not necessarily reflect a coherent organisation of the story: students grouped together and selected different images related to the topic at hand (e.g., children of different races armed or at war), but some of the final stories were perceived as a quasirandom assortment of images rather than the result of a conscious reflection on how each image contributed to the intended critical message.

At the same time, as explained above, it was observed that some stories, especially those based on the same topic, used the same images and soundtrack (e.g. gender violence). The coincidence is plausible since they were all looking for images using Google, Yahoo etc., and part of it was done during class-time. Some also coincided in their decision to include references to popular culture (e.g. the choice of certain photographs of actresses or comics and cartoons coincided in some stories) in their digital stories. This fulfils Taub-Pervizpour's (2009) assertion that stories include cultural symbols and popular knowledge, whose function, I believe is make their story recognisable to the audience as a common nowadays problem nowadays. This recognition places the author and audience at the same discursive level, thus inciting the audience to recognise and accept what is proposed by the story.

## 8. CONCLUSIONS

This article has argued in favour of using digital storytelling as a tool to encourage a critical socio-educational focus in secondary school education and as the perfect tool to include multimodal explicit teaching in the curriculum. On the one hand, the result obtained from the analyses of 50 digital stories by secondary school students proves that the digital story is a genre that allows students to work both individually and in groups to produce a critical opinion about a conflicting social issue. The valuation of the tool is therefore positive since it allows the use of the social environment as an educational medium in and from which the students learn. Consequently, the relationship between the context and the student, often ignored, is confirmed as a fundamental element in the production of a digital story, thus using multimedia technology to encourage the critical character of students. In sum, multimodal digital story telling fosters a socio-cognitive method of teaching (Castelló, 2002) and learning, in which students evaluate the reality that surrounds them and produce their own interpretation of it. This certainly contributes to the acquisition of knowledge-based skills and interaction with the physical world; social and citizen skills, and cultural skills (cf. BOE nº 174 de 21 de julio de 2007).

With regard to multimodality, the results seem to indicate that students did not work enough on the storyboard, did not pay attention to the sequencing of words and pictures and did not create a plot or storyline that expressed their point of view sequentially. This may derive from their ignorance on how to deal with multimodal discourse and on the lack of instruction on multimodality. Further work, therefore, needs to be invested in the development of the digital story content itself and on the issue of multimodal learning; with especial emphasis on the interface between multimodal elements and more traditional modes of transmitting ideas.

Digital stories and other multimodal activities would certainly improve if the students were instructed on specific visual cohesive devices that would help them make their story more coherent. The fact is that although we live in a multimodal era, not enough emphasis is being placed on the explicit teaching of multimodal devices and how to handle the interface between them and more traditional storytelling tools. Multimodality should receive the same attention that we give to reading and writing. It is strongly advisable to include multimodality in the students' curriculum.

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