Fighting fake news and propaganda through digital storytelling (Pixton) in Primary Education

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Abstract

In this study, primary school students worked on a project on fake news and propaganda. Through this intervention, students were exposed to many different European stories and myths, whose main core was the power and impact of lies. Young learners, reflected on the misleading power of fake news and created their own comics in order to inform the student community about ways to avoid becoming a victim of propaganda. The implementation of the project concerned the use of Pixton, as a vehicle to raise awareness about the dangers of propaganda and how can young children sharpen their critical thinking skills and avoid victimization. Learners throughout the project, developed and exercised 21st century skills and literacies. They were encouraged to think critically, interact effectively and act democratically.

Keywords: Pixton, ICT, fake news, learner generated comics

Introduction

Literacy and the ability to recognize fake news from an early school age is the new skill, students are required to master, in order to protect themselves from the spread of false news and their possible victimization by control systems (https://saferinternet4kids.gr/hot-topics-ef/digital-literacy/, n.d.). The twenty-first century, finds English language teaching at a pivotal point in re-evaluating curricula and revising the teaching agenda. Language, text and communication norms are expanding rapidly to meet the needs and conditions created by new media and global networks. The language that defines the major part of this intercultural congestion of information networks is English, which is the dominant language of digital communication, unquestionably acquiring a dimension of cyber colonization. In our era, under the present circumstances, students should be encouraged to be involved in civil life by receiving the proper information, by expressing and communicating their experiences, beliefs and emotions about truth, lies and the mechanisms of misinformation. Over the last years, media education and digital literacy have become domains of major interest worldwide. Educational experts have stressed the need to enrich the school curricula by incorporating media education as a core subject in the educational setting. In our intervention, we informed students about all the hidden dangers of misinformation and we used digital storytelling as a dynamic classroom practice, “as a pedagogical tool that brings the creator/student and the reviewer together in a dialogue around nature based on representation, meaning and authority embedded in imagery and narrative’’(Fletcher and Cambre 2009). Pixton, a popular online comic strip creator was imaginatively used by students and teachers, to promote student engagement and learning about the values of truth and democracy and to foster visual literacy (Utomo & Ahsanah, 2020). Students worked on a real-world, team-based problem, where they needed to develop skills of communication and cooperation in order to inform the educational community about the dangers hidden behind misinformation.

Exploring the Pixton application

Pixton is a web tool that facilitates the creation of comics in a fast and simple way that can be easily saved and shared. It offers the possibility to use a wide range of scenarios, characters and objects. It provides a user-friendly interface and it is free for individual accounts. One important feature is that it allows users to add text and voice to characters. Users can easily

create their own comics and share them with the community. Pixton allows the editing of the shape and position of each comic panel. It is an innovative didactic tool that fosters creativity and participation in class. It is a student-centered tool that can also empower differentiated learning. It is accessible from computers, tablets and smartphones. There are three different categories of user accounts, Pixton for School, Pixton for Fun and Pixton for Business. Pixton for school, gives the opportunity to teachers to create classroom and individual accounts, in order to further involve students in the learning process.

Pixton and 21st century skills

The development of 21st century skills can be supported by using technology in various subjects in the school context. Pixton, as a powerful storytelling tool, engages students in narrating stories of interest and bridges efficiently pedagogy and academic content. It can be aligned with curriculum standards and teach content knowledge and 21st century skills. Digital storytelling contributes to the development of digital, global, technological, visual and knowledge literacy (Çetin, 2021), critical thinking and problem-solving skills (McLellan, 2006). It enhances research and integration skills and helps students reach high metacognitive skills. Robin (2005) reports that digital storytelling offers many benefits for students. As Robin explains, digital storytelling permits students to learn to use the Internet to research rich, deep content while analyzing and synthesizing a wide range of content. Learners also develop communication skills by learning to ask questions, express opinions, construct narratives, and write for an audience (Meyers, 2014). They also improve their computer skills by using software that combines a variety of multimedia including: text, still images, audio, video, and Web publishing.

During the implementation of all stages of the project, students came closer to the formation of a multidimensional identity of a critical thinker and an active civilian. They adopted a more active role in embedding and reusing cognitive schemes and enriching their socio-cultural background.

Pixton and digital literacy: from consuming content to creating content

Pedagogy and education have undergone significant changes during the last years since they were affected by the shift in entertainment and information channels. The educational community, globally showed interest on the need to prepare students for moving around the visual world and also the advantages of using images to teach and learn (Burwitz-Melzer, 2013).

The EFL classroom has successfully adopted the use of innovative technological tools, like Pixton, in order to engage students to learn how the medium works and how it constructs meaning. Students reach a high level of meta-cognitive maturity while using visual software like Pixton, collaboratively, because they have to overcome the interpretational openness of the multimodal text and compromise on one representation (Alter, 2018). Garrety and Schmidt (2008) claim that as "technologies have evolved, storytelling has changed and morphed with the times to include digital technologies, images and audio that enable a new generation to tell its story"

Educational experts (Anstey & Bull, 2004), have given a new meaning to the concept of text so as to include digitally based, multi-modal elements combined with traditional print-based texts. Pixton, by providing images, text and sound prepares students as navigators in research and discussions concerning hypertext and online resources (Schrader, 2008).

Learning in today's world means interacting from an early age with texts that entail multimodal elements like videos, music, graphic designs and hypertext. Paul Duncum (Duncum, 2004) states, ''… there is no avoiding the multimodal nature of dominant and emerging cultural sites''. Students in Primary Education benefit significantly, while working with Pixton, since they adopt a more active role, that of a prosumer (Ivashkevich, 2015) and

not passively accepting the role of a consumer of digital products. It has been stated that young people often do not have enough "conceptual tools" to analyze and interpret existing media texts and their own mash-up creations (Jenkins, 2018); they also lack the artistic and technical skills to exercise their full power as prosumers. Pixton challenges young learners to move beyond media production as simply as a fun and engaging activity and exercise a critical prosumer agency (Buckingham, 2009).

Digital storytelling with comics

Digital storytelling is defined as "all types of applications which use digital media either to support, to enable the creation or to generate stories" (Schafer, 2004). The interest that researchers show towards digital storytelling is motivated by the potential advantages brought by this medium. (Azman et al., 2015). Comic authoring tools, such as Pixton, trigger the learner's interest since they are free to use and user friendly. A massive number of educators proposes the integration of visual representation tools, like the aforementioned- as part of a frequent classroom practice. Learner generated comics within the classroom practice, assign a ''mirroring'' of the prosumer's ethic and they place a major value on ''what people do rather than what they own''. Henry Jenkins (Jenkins, 2018), describes contemporary young people as digital prosumers who use new technologies to appropriate, resample, remix and rework existing artifacts, images and messages and hold high potential for productive citizenship and creative activism. In the case of this class project, students had to ''read between the lines'' of these fairy stories, reveal the deliberate lies hidden in these popular stories, overcome stereotypes and rework the dominant narrative. Writing the script for the comic, editing the sense, adding music and special effects and getting feedback about the final outcome based on peer feedback enhance student self-activity and place the student in a designer and creator role.

The profile of the participants

The project was conducted in the fifth class of the 6th Primary School of Ilion, Athens. The number of students who participated in the project were 26; 15 boys and 11 girls. The major part of the student population was digitally competent, familiar with the use of a big variety of audiovisual software and the creation of multimodal texts. The students were accustomed to working in teams in a variety of many alternative approaches and the project was carried out with interest and enthusiasm, traits that helped young learners overcome any problems that may have appeared. The students worked in mixed ability groups, both as far as their English language level and the ICT skills are concerned . The project was employed both in class and at home, using a form of blended learning. The school was equipped with computers and the students had the opportunity to work in teams in the computer lab, using laptops. The duration of the project was approximately two months. The school subjects that were involved were: English, ICT, Art, Social and Political Education and Language.

Materials and Resources

The materials that were used were: projector, computer and internet connection. Our resources were fairy stories, like ''Puss in Boots'', ''The Emperor's New Clothes'', ''Cinderella'', ''The boy who cried wolf''.

Use of language

The pedagogical intervention in all steps and phases was conducted in English. Students were given instructions in L2 and were encouraged to enhance their knowledge in English, to collaborate and communicate in a language that wasn't their mother tongue, without feeling stressed or hesitant when making mistakes. Following the principles of Constructivism, mistakes were confronted as a useful means to realise students' weaknesses and make the

necessary interventions in order to strengthen their language skills and boost their confidence in L2. The whole community of learners embraced the same methodology concerning mistakes: when the teacher or a member of a team pointed out that a student made a mistake, the teacher wrote discreetly the mistake on the board and all the students had to write it down in their portfolios. All corrected mistakes were written to the spaced repetition database and all the erroneous language misinterpretations were overwritten with the correct ones. This strategy paid off since learners eliminated linguistic mistakes and communication in English was unobstructed.

Aims of the project

The aims of our project were:

√ To raise awareness in students about information criteria for the trustworthiness of a source

√ To enable young learners to recognize disinformation and the dissemination of fake news and gradually acquire a mature and responsible identity of a future citizen

√ To familiarize students with the use of Pixton and enable learners to take a stand against misinformation through the use of comics

√ To improve their digital dexterity with digital comic creation

√ To develop their presentation skills in an alternative way, through comics

What are the students' opinions about Pixton? Methodology and implementation of the project

Young students tend to be more curious and motivated to learn (Spencer & Walker, 2015). In all stages of the implementation of the project, the teacher adopted the Inquiry Based Model to promote learners' cognitive skills and knowledge. The 5E learning cycle has led students through five phases: engage, explore, explain, elaborate and evaluate. In all parts of the project, students were provided with a common base of hands-on activities. The use of the Inquiry Based Methodology assisted learners to apply a new understanding of concepts, share information and ideas and apply their newly acquired knowledge to other disciplines. Following the principles of IBL, learners rather than memorizing information from printed materials, they were encouraged to conduct research about media literacy and fake news, broaden their knowledge bank and develop their skills and mental frames. There was a strong sense of commitment from all members from the very beginning of the project till the very end, aiming at ameliorating ideas and knowledge. The Inquiry Based Learning, proved to be motivating and stimulating for pupils' construction of meaning, active engagement and cultivation of research skills. The IBL model, guides the teacher towards a student-centered approach and the teacher is expected to act not as a sole authority figure but as a mentor, offering support and motivation to students working on the project. Validity in the integration of ICT in an EFL class was given by tempting students to use different strategies, come in contact with different learning styles and orientate themselves towards a form of exploratory and autonomous learning in the field of Media Literacy, instead of simple memorization. The whole process entailed the following steps:

•Orientation: A coherent and engaging presentation of the identity and the key elements of digital literacy and fake news. Monitoring students' perceptions and pre-existent knowledge on the topic.

• Investigation: Students play the role of the researcher and collect information about a thematic area entitled Media Literacy and Fake News. Learners develop questions that they are eager to answer, like: '' How can we raise awareness about avoiding extremism and propaganda from the media?'', ''How can we prevent ourselves from falling victims of fake news, bullying, hate speech, discrimination and indoctrination?'' and also ''What's the role of formal and non-formal education in raising public awareness about media literacy?''

•Conclusion: Learners conduct research on Media Literacy and present the results of the project. Dissemination of information and exchange of data between the members of all teams, helps the knowledge transfer and the emergence of new knowledge about the aforementioned issue.

• Discussion: At the final stage, learners assess the whole project with regard to the skills and knowledge gathered from this learning experience. The teacher invites the students to reflect on what worked about the process and what didn't.

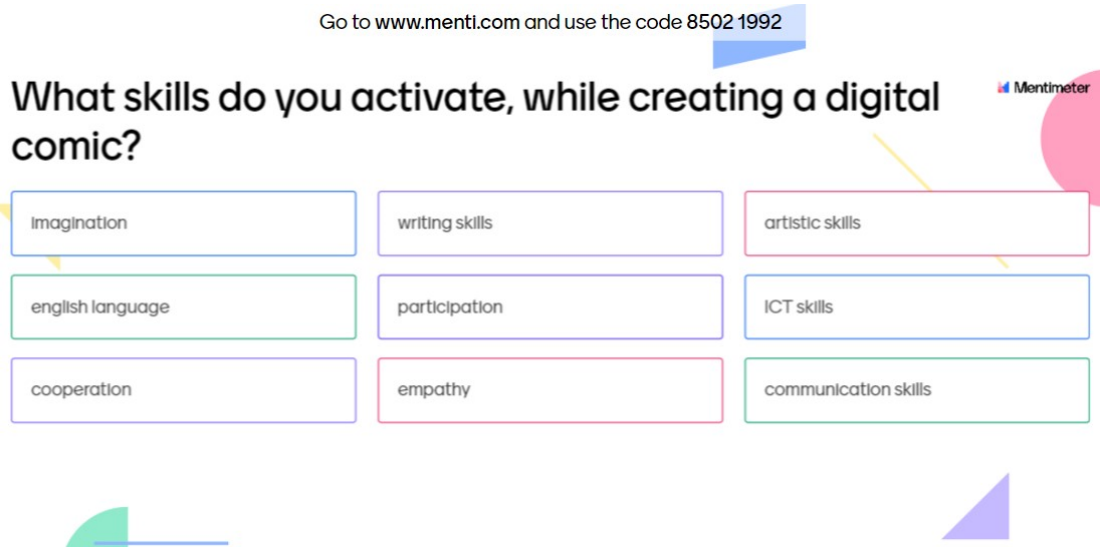
The teacher played the role of a mediator and a guide rather than a sole authority figure. The teacher motivated and challenged the students to work on their Pixton projects by taking an active and participatory role in their own learning. The teacher had created a class in Pixton Edu and students created their own avatars, conducted research, interacted with each other and uploaded their projects within the Pixton class.

Picture 1. Our Pixton Class

Teaching sessions

First phase

During the first phase of the project, (which lasted four teaching hours), students read books and watched videos of some very popular and well-known European fairy tales and stories, related to lies and propaganda (''Puss in Boots'', ''The Emperor's New Clothes'', ''Cinderella'', ''The boy who cried wolf''). They exchanged interesting viewpoints about how people interpret lying. Can people easily accept white lies? What really happened in the aforementioned stories? Is it politically correct to accept lies, simply because the end justifies the means? While being in class, children were asked to relate the fairy stories with today's reality and think how they could reconstruct the real meaning of these stories and present a new mini story in the form of a comic related to fake news and misinformation. Then they were invited to participate in a poll. The online poll used, was Mentimeter and the students answered the question ''What skills do you activate while creating a digital comic?''. The answers are presented in the following picture.

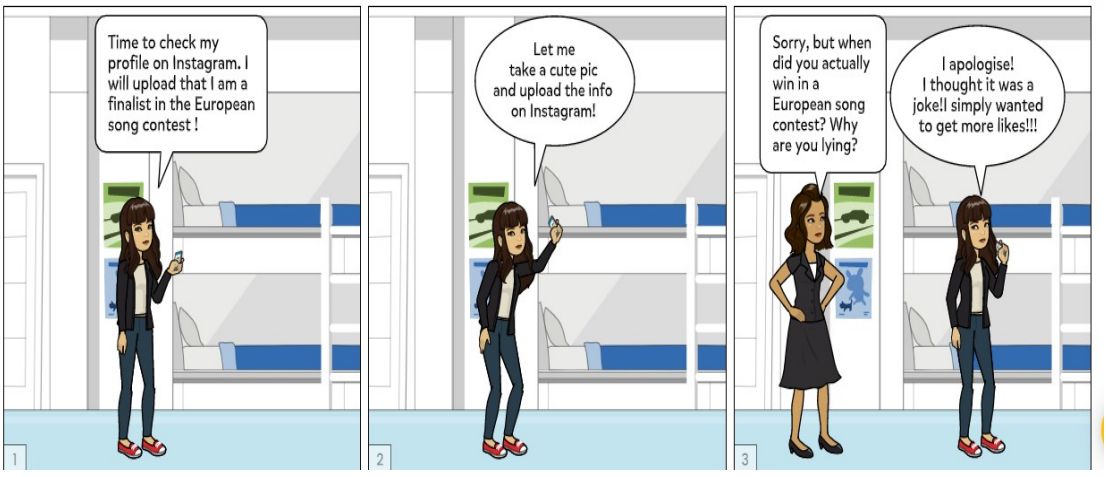


Picture 2. Mentimeter

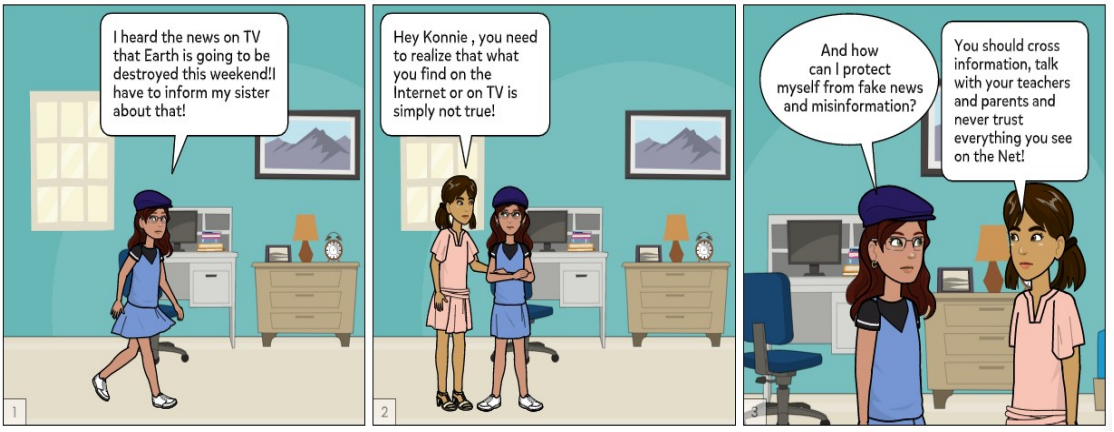
Students were encouraged to think and work in teams about a story that they would like to present in the form of a comic. Teams continued collaboration asynchronously in the digital environment of eclass.

Second phase

In the second phase, (which lasted three teaching hours), the teacher presented Pixton and explained how this visual representation software works. All the explanations and the instructions were given with the use of the native language. The strategy of using translanguaging as a tool, aiming to strengthen the communicative approach in the second language acquisition, is functional because both literacy and second language learning are promoted. After giving all the necessary guidance about the topic of fake news and misinformation, students were informed about the number of storyboards they had to present by the end of the project. The second phase took place in the computer lab and all the teams were of mixed ability. The teacher appreciated the easiness of Pixton and the fact that the students did not need extensive training to understand how to use the tool. After the first brief training, participants did not need any further guidance. Students were asked to work in teams, both in class and at home, in a blended form of learning, and present their comics concerning fake news and media literacy as a final product.



Picture 3. Pixton comic



Picture 4. Pixton comic

Third phase (45 minutes)

In the third and final phase, the participants were given a questionnaire, as an assessment tool, to monitor the students' viewpoints concerning the use of the aforementioned online tool. The questionnaires were analyzed on SPSS and the answers evidently show that a vast majority of students finds English language learning more interesting with the use of Pixton. Additionally, comic creation through the use of digital means seems to be easier for English language learners than the traditional, conventional form of comics and finally the majority of students found Pixton, a really easy tool for comic creation. Participant views and observations during the project evidently show that students use a large number of skills in the process of preparing scenarios and creating comics. Almost all participants talked about meaningful learning and deep exploration strategies. Participants also mentioned that in the process of writing their scenarios on the topic given, they investigated the topic in detail, learned in depth and for this reason their learning would be permanent. The answers of the questionnaire are presented in the tables that follow.

Table 1 . Questionnaire

Do you believe that Pixton makes English language learning more interesting?					
		Frequency	**Percent**	**Valid Percent**	**Cumulative Percent**
Valid	Yes	25	96.2	96.2	96.2
	No	1	3.8	3.8	100.0
	Total	**26**	**100.0**	**100.0**	

Table 2 . Questionnaire

What kind of comic creation is easier for you? The digital (like Pixton) or the conventional?					
		Frequency	**Percent**	**Valid Percent**	**Cumulative Percent**
Valid	The digital comic	24	92.3	92.3	92.3
	The conventional comic	2	7.7	7.7	100.0
	Total	26	100.0	100.0	

Table 3 . Questionnaire

Do you believe that Pixton is easy to use?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	19	73.1	73.1	73.1
	No	7	26.9	26.9	100.0
	Total	26	100.0	100.0	

Furthermore, the learners provided their viewpoints on Pixton and the project in a discussion form in class.

Positive comments

√ The comic software was a lot of fun and we really enjoyed the process.

√ The teacher told us that Pixton was a form of alternative assessment but for us, it was a joyful activity in class with our friends.

√ This ''different'' kind of activity, was an escape from the class routine.

√ The topic of the project was taken from our everyday life and it was discussed in class during the lesson of Social and Political Life.

√ Collaboration in teams made the Pixton project more interesting and engaging for us.

Negative comments

√ Some students had to overcome a dominant feeling of technophobia and try to meet the demands of the project.

√ Due to technical issues, sometimes it was hard for the teams to reach on time the final product in Pixton.

√ Shy and introvert learners found some difficulties in collaborative work.

√ Sharing one computer with other group members is sometimes inconvenient and creates tension among class members.

Conclusion

In this study, the integration of comic strip creation software was positively welcomed by both teacher and students. The creation of digital comics had a positive impact in English language learning (Thacker, 2007) and enriched the methodological approach, changed the attitude towards standard assessment forms and increased motivation (Kilickaya & Krajka, 2021) . Throughout the production of digital comics, students collaborated effectively and exercised their democratic skills. In the final stage, students mentioned that participating in this project was a great advantage for them, since through the use of Pixton, they developed their learning and innovation skills, information, media and technology skills. Concluding, students stated that they felt emotionally comfortable, happy, and experienced an educational process without stress and having fun. All of them expressed the hope to repeat this fruitful educational experience with Pixton in the future.

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