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MODERN APPROACH FOR EMPOWERING LITERACY IN ADOLESCENTS THROUGH CREATIVE ENGAGEMENT WITH COMICS

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Abstract

This paper presents results of COMMIX Erasmus+ project (Cooperation for Innovation and the Exchange of Good Practices project in the field of School Education) on how to use innovative ICT-based educational practices and resources in enhancing youngsters' reading attitudes, reading engagement and reading skills. It emphasizes how the use of comics and interactive technologies can: empower learners to become creators of stories (and not passive consumers), support the development of critical media literacy skills, enhance and extend the enjoyment of digital storytelling. The paper shows how teachers' training in this field can be efficiently achieved through the implementation of the COMMIX Teacher Professional Development Curriculum, a curriculum for blended learning built on face-to-face and online instruction. The COMMIX Curriculum is intended for teachers from diverse levels and settings in order to support them in using comics in education. Its modules have been designed to be available on-line, for distance-learning application. Last but not least, the paper describes the content and the modes of use for the COMMIX Toolkit for teachers a modern tool designed by the COMMIX project consortium. The COMMIX Toolkit contains, among other, sample activities and units serving specific learning outcomes for using Comics in literacies development.

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Keywords: Reading skills, comics, interactive technologies, curriculum.



1. Introduction

Comics are being acknowledged as important media in promoting literacy and used in education. Numerous EU funded projects have demonstrated that comics can have a very positive impact in education. Even the European Commission used comics and visual stories in some of its initiatives on combating racism, because of the strong message that images can communicate. This paper presents some of the research results obtained in Romania by the University of Piteşti within the Erasmus+ project "Empowering Literacy in Adolescents through Creative Engagement with Comics" [COMMIX] (project reference number: 2016-1-BG01-KA201-023657). The project was implemented by a consortium composed of 8 partners from 7 EU countries (Bulgaria, Cyprus, Greece, Ireland, Romania, Croatia and Poland), that argues that collaboration through the use of interactive comics in education can have a positive impact and can substantially enhance the acquisition of skills in literacies, science and other subjects especially for students aged 11 to 16-year-old and at-risk students. The paper also shows how teachers' training in this field can be efficiently achieved through the implementation of the COMMIX Teacher Professional Development Curriculum, a curriculum for blended learning built on face-to-face and online instruction.

2. Problem Statement

International studies showed that EU students do not perform well in science, math and literacy skills (PISA 2015; Mullis, & Martin, 2014; Mullis & Martin, 2016). One of the specific priorities of the school education program is to address the low achievement in basic skills through more effective teaching methods and in particular through projects that foster interdisciplinary approaches and the integration of teaching basic skills such as math, science and literacies by using innovative technology enhanced environments.

3. Research Questions

The following overarching research questions have been guiding us in our demarche (they have been furthermore detailed, per envisaged thematic category, according to research types and tools that we applied): (1) Are comics integrated and/or promoted within the national curricula? (2) How do comics as a genre rate in the reading preferences of young people? (3) What benefits can be observed in terms of students' motivation and school performance with respect to the use of comics in education? (4) What strategies can help young people and teachers to use more comics?

4. Purpose of the Study

Our research group believed that the use of comics and interactive technologies can: empower learners to become creators of stories (and not passive consumers), support the development of critical media literacy skills, enhance and extend the enjoyment of digital storytelling. Thus, the study envisaged (1) to provide an account of the state-of-the-art, meaning what currently exists in Romania, with respect to the use of comics in education; (2) to identify the training needs of teachers from diverse levels and settings and design a customized curriculum for them, in order to support them on how to use innovative ICT-based educational practices and resources in education, for enhancing youngsters' reading attitudes, reading engagement and reading skills.

5. Research Methods

We performed *desk-based* and *field-based* research. The following thematic categories have been covered through the research conducted in Romania: comics in the national curricula; reading habits and interests of youth with respect to comics; benefits and challenges involved in the use of comics in education; best practices to promote the use of comics in education (national and international).

For the purpose of data collection for the *desk-based* research, a variety of formal and informal methods have been used depending on the nature of each thematic category and corresponding questions, as well as the available sources in Romania, as the data collected related to the local and national context. These methods were:

- Review of relevant key policies and governmental documents
- · Review of existing studies and reports on issues related to the thematic categories mentioned above
- National, European, and international statistics (e.g. EU reports, country reports, stakeholder data, International assessment surveys, etc.)
- Review of available printed or electronic data (e.g. websites, publications, advertisements, press releases, etc.) on issues related to the thematic categories
- Review of published academic/scientific data in journal articles, edited volumes, books, policy papers, etc.
- Review of best practices (local and EU level) related to successful initiatives undertaken to promote/improve/enhance the use of comics in education
 - · Review of Romanian curricula
 - · Review of research published on Romanian curricula
- Review of previously developed resources (e.g. EU projects with Romanian a coordinator or partner)

The *field-based* research in Romania was achieved through Focus Groups and structured interviews. We implemented such Focus Groups and interviews with 21 students aged 11 to 16 years (average age of the involved students: 13 years; grades: 5th to 10th) and 14 teachers (with an average of 16.5 years of experience in teaching), in 5 different Romanian schools. Written consents from parents of the students, on having their children involved and photographed (photos with no facial recognition) for the purposes of the project, have been obtained prior to each Focus Group.

6. Findings

6.1. Are comics integrated and/or promoted within the national curricula?

Our *desk research* regarding the state-of-the art of comics in the Romanian curricula has revealed that generally there are no recommendations to use comics as educational materials within the classes, however sometimes although the word *comics* is not mentioned, some of the recommended activities can be easily associated with a subliminal reference to comics (*). The objectives illustrated in the national curricula focus on the young readers' creativity in creating comics, the ability to understand a message based on images and texts and to identify similarities and differences. Searching in the curricular plans (2006-2016) of various subject and levels of education we can provide the information rendered in Table 01 below (which is not exhaustive).

Table 01. Comics in the Romanian curricula

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Subject	Level	Age group	Heading in the syllabus	Specific provision
Romanian language and literature	Primary school 3rd grade	6-10	1.4. Showing interest for various messages in familiary contexts	- assigning the task of making drawings/ comics/ sketches to illustrate what [the student] understood of the basic informative or literary texts.
Romanian language and literature	Primary school 4th grade	6-10	2.2. Delivering an imaginary story with the help of supportive questions	- delivering some events based on comics .
Romanian language and literature	Primary 4th grade	6-10	2.3. A presentation of a logical chronological sequence of a curricular or extra-curricular project/ activity	- presentation in a logical chronological sequence of images that correspond to a certain event (*)
Romanian language and literature	Primary 4th grade	6-10	4.4. A short presentation of story moment/ a footage cut/ a cartoon/ an activity/ pdf a certain event experienced or imagined	- making a strip , combining the drawing with the written messages (individually/ in pairs/ in group)
Communication in Romanian language	prep-school	6-7	3.2. Identifying the significance of some images representing happenings, phenomena, family events	- reading after one or more pictures/ comics
Communication in Romanian language	primary school 1st grade	7-8	3.4 Expressing the interest for reading some basic texts supported by images	- observing and establishing differences and similarities between varied types of reading materials (colouring book, story book, textbook, electronic book etc.) (*)
Communication in Romanian language	primary school 2nd grade	8-9	3.4 Expressing the interest for reading some basic texts supported by images	- making a <i>Collection of stories</i> individually or in common (an album with the drawings that the students made them after reading/hearing the texts, accompanied by short presentations written by hand or on computer) (*)
Romanian language and literature	second-dary school 5th grade	11-14	4.4. Manifesting interest for drafting a text	- writing in various contexts and for various purposes, exercises for imaginative writing (*)
Visual arts and skills	primary school 1 st grade 2 nd grade	7-9	2.2. Expressing personal ideas and emotions through the usage of the line, the point, the colour and the shape	- realising a comics focusing on a story about an event one experienced
Visual arts and skills	primary school 4 th grade	8-10	2.3. Making unique personalised products to be used as a result of crafting activities	- writing scenarios and developing them through drawings or photography
Counselling and school orientation	second-dary school 5 th grade		1.2. Providing examples of pre- teen specific characteristics	- comics, patchworks on the topic: <i>I-child</i> , <i>I now</i> .
Counselling and school orientation	second-dary 5 th grade		2.2. Exercising cooperation group behaviour	- discussions that demonstrate respect and concern for the others with the help of comics, literary texts, film fragments, pictures etc.
Communication in a foreign language (optional)	prep school	6-7	3.2. Understanding the global significance of a simple story book with pictures with the help of the teacher	- following a comics and guessing the topic with the help of the teacher. Example: the teacher asks an alternative question: "Is it about children or animals?" "Is it about flowers or animals?"
Communication in a foreign language (optional)	primary school 1 st grade	7-8	3.2. Understanding the global significance of a simple story book with pictures or comics book	- following a comics and guessing the topic with the help of the teacher. Example: the teacher asks an alternative question: "Is it about crocodiles or ogres?" "Is it about fish or birds?"
Foreign languages	primary 3 rd , 4 th grades	8-10	Methodological suggestions	We recommend the usage of a wide variety of texts including iconic elements: poster, diagrams, displays, comics , big books, folders with images etc.
Foreign languages	secondary school 5 th -8 th grades	11-15	3. Reception of the written messages/ Production of the oral messages	Texts with images (*)

Although Romanian educational system does not use handbooks that have a comics component on a regular basis they can be found as supporting materials recommended by the Ministry of Education for certain subjects or grades. At the same time, a more neutral recommendation on behalf of the educational authorities such as: "books with images", "collection of stories with drawings" or "other types of texts" may induce the idea that there is a freedom of choice in using any type of printed or electronic material that would suit the purpose of education, including comics.

6.2. How do comics as a genre rate in the reading preferences of young people?

Young people in Romania are generally positive toward reading in general and value it as a lifelong skill. Their reading preferences are generous and, among them, comics rank rather high because, as the old maxim goes, "one picture is worth a thousand words". Comics do possess intense visuals and focus on plot and characters, thus they can be much more engaging than other literary media, such as novels or short stories. By challenging the visual sense more intensely than a printed text can do and, in addition, the scenes presented sequentially facilitate rapid assimilation of the story line. All of this typically gives comics a more compelling format, especially in comparison to unillustrated books, which tend to be the norm, and ensure a safe position of comic books in the reading preference of Romanian young people. Human eyesight is one of the most powerful sensory systems and if, then even the cartoon panels of a comic book are going to furnish a lot more immediate visual gratification than text alone can hope to convey. Comic books may also help people develop the reading skills required to comprehend texts with higher levels of difficulty. When people read comic books, they learn how to process information differently.

6.3. How often do young people read comics?

Young Romanian people read comics rather frequently and this fact is definitely proved by the way in which the comics industry has evolved in the last few years; if in 2010 there was no recurring comic magazine in Romania and the readership of foreign publications of this kind reached about 1,000 people in 2012, currently on the local market there are 7 such publications, the audience is 15 times higher and new initiatives are becoming more numerous.

6.4. Where do young people prefer to read comics? (school, home, library, etc.)

The place where young people prefer to read depends on what they prefer to read. However, there are some preferences regarding the place youngsters prefer for reading comic strips, and one of these is school. "School should educate and guide students to adopt a critical attitude towards these products, to understand their suggestion power. Still, school can't forbid this way of spending leisure time, with so many various possibilities. A thorough research highlights both the educational effects of studying comics in school (as a communication technique) and the 'pedagogical profitability' of using them as a teaching resource in teaching certain subjects" (Palicica, 2006). Another place preferred is the library. An example could be the project Galateca, available at http://www.galateca.ro/. This multidisciplinary art and design gallery is situated inside the University Central Library in the centre of Bucharest and the first exhibition was "Stories in images", a story of the comics throughout 9 decades. The exhibitions involve also delivering workshops and other interactive happenings, which are attractive to youngsters.

6.5. What topics/themes covered by/presented in comics interest young people?

The topics that attract the interest of young Romanian readers of comics can be basically classified in two major classes: (1) the need to escape reality and find refuge in an imaginary world, populated by fascinating superheroes that get involved in fantasy-type storylines; (2topics dealing with familiar issues taken from the ordinary teens' and kids' lives, simple and delicately illustrated experiences of going to school or talking to one's friends inspired by real-life situations.

A subcategory of comic strips that became more and more popular is *manga*, which originates in Japan, but has spread out all over the world. Few years ago Japanese comics conquered also Romania and the first character who became very popular was Naruto (Retrieved from: http://www.101jucarii.ro/blog/manga-anime-%E2%80%93-%E2%80%9Cagresiunea%E2%80%9D-japoneza/)

6.6. Are there any gender differences with respect to young people's comics reading habits and frequency?

The preference for reading comics has a higher representation among young boys, who tend to be more attracted to the topics approached (superheroes, science-fiction etc.). "The readers of comic-strips are to be differentiated according to their age, sex, education level and their wealth. The conclusion of the researchers is that the reader of comic-strips is from the urban environment, is young, responsive and educated. The comic-strips, as any other mass-media means, influence, more or less, the morality of the reader. The studies carried out by the sociologists and psychologists have identified that all these means, including the comic-strips, strengthen the already existing attitudes and this is possible because the reader depends on the social and family milieu he lives in" (Tudor, 2007).

6.7. What benefits can be observed in terms of students' academic performance with respect to the use of comics in education?

The benefits of using comics in Romania in the classroom irrespective of subjects are certainly great, both in increasing literacy and in addressing the educational needs of differentiated learners. As schools struggle to maintain enrolment and ensure that students are not left behind in the learning process, teachers must adapt their classroom to the developing needs of their students. This means using different teaching methods and tools. The use of comics and graphic novels can provide students with greater opportunities for success.

6.8. What benefits can be observed in terms of students' motivation or other cognitive factors?

Comics motivate reluctant Romanian readers. They engage students in a literary format which is their own. Comics speak to students in a way they understand and identify with. Even after students learn to be strong readers, comics give students the opportunity to read material which combines images with text to express satire, symbolism, point of view, drama, puns and humour in ways not possible with text alone.

The benefits of graphic novels and comics in the classroom are substantial. They can: engage readers who learn visually; increase vocabulary; encourage readers to explore different genres and develop an

appreciation for different literary and artistic styles; teach positive messages, open a reader's mind to new ways of storytelling, increase their imagination.

6.9. What strategies can help young people to read more comics?

There are several possible strategies which can help young people to read / to read more comics:

- Reading challenges: reading competitions come in many shapes and sizes, with the aim of spicing up literature and giving children an incentive to open a book.
- Escapism: while reading challenges can give a sense of purpose, escaping the challenges of school is a crucial part of encouraging reading for pleasure. Promoting reading as a form of escapism from the general pressures of school and their social lives encouraged the class to see reading as a form of self-indulgent relaxation, instead of another intelligence test.
- Teacher involvement: the idea of showing students that teachers of all subjects read books is really important. Thus, teachers can bring in two or three of their favourite books and at the beginning of every lesson, the teacher would read to the class for ten minutes from their favourite book.
- Reading to the class: encouraging children to read for pleasure is about more than getting them to pick up a book; it's equally important for children to appreciate a good story.

6.10. What strategies can help teachers to use comics in their teaching?

Once comics are selected for classroom use, teachers need to know how to teach their content. Comics present content through a complex interplay of text, images and design. Therefore, teaching methods for these works cannot be the same as teaching a prose chapter book.

Teachers should familiarize with terms that describe how a comic is formatted. Just as it's important to know the definitions for paragraph, protagonist, and plot in order to have a conversation about a text, it's important to know the vocabulary about how a comic is set up. Teachers should be comfortable using terms such as panel, gutter and dialogue bubble. Teachers should discuss the images and their contribution to the content of the text. In illustrated texts, the illustrations generally summarize the text; in graphic novels, by contrast, illustrations and text tell different, equally important aspects of a story. Classroom analysis must include discussion about the facial expressions of characters, the page and panel designs, and the images' perspective. While characters need not say anything in a panel, artists must show the emotional response.

Teachers should discuss the images and texts that aren't shown and their contribution to the content of the text. Comics aren't films; instead of seeing thousands of images that seamlessly blend together to show movement, the reader jumps from panel to panel and must infer what happens in between.

Teachers should discuss colour use and texture. Different colours, shades and textures make us feel different emotions. Such choices change and influence the way we understand and emotionally respond to these texts. The major aspects revealed by the *field research*, performed with students and teachers, are presented in the lines below. They are highly convergent with the ones of the desk research.

The majority of students like comics, understand and appreciate interactive media tutorials (only few have never seen or used such materials). Generally speaking, students consider the way they learn at school mostly as being very good and efficient, but sometimes it can be improved (sometimes is 'rather boring', 'unattractive'; there are students – although only a few – that prefer the more conceptual lessons).

Most students usually use additional resources (including drawings, pictures, comic books) to prepare their lessons or homework. When it is about students' favourite subjects, less than 25% of the students prefer Romanian Language, while the rest enjoy Mathematics, Physical education, Physics, English language, History of Psychology. The subject students like less are mainly Technological Education, followed by Music, Arts, Physics, History, Biology, English and paradoxically, Mathematics.

According to students' statement, it seems that teachers use comics or interactive resources in classes often enough. Students consider comics quite useful, appreciating their application in class. More than half of the interviewed students used at least once comics or other kind of drawings to explain something to a friend or mate. Students consider that almost 72% of their fellows use interactive media tools or comics while learning new material in school.

Most of the interviewed teachers use comics in their classes (some often, some rarely): during demonstrative or evaluative lessons, when teaching new ideas or techniques or when the students are fed up with theoretical information; during reinforcement, music, practical or recreative activities, comics are also useful for students to exercise painting skills and develop their space vision. A good moment to use comics is the end of a certain learning activity, in order to assure the retention.

Teachers affirmed their students accept the utilization of comics within the teaching-learning process, and have observed that they are receptive, opened, quite interested, perceptive, enthusiastic, definitely attracted.

It is important to highlight that all the teachers that took part in our survey not just use interactive materials, but most of them do this very often by means of a great variety of resources. Among the materials they use, we may identify: PPTs, movies, animations, MIMIO System, interactive whiteboard, English interactive lessons, games, Pinterest, Youtube, CDs, magazines, schemes, drawings, worksheets, tole play, chain stories, artistic movies, documentaries, advertisements, posters, shows, interactive websites (with a frequency from 'at least once in case of each unit' to 'twice a month').

The teachers highlighted that they feel 'very well',' rewarded', 'provoked', 'relaxed', 'engaged', 'satisfied' when using or designing such interactive materials and activities. Moreover, their students seem to be 'attentive', 'happy', 'receptive', 'engaged', 'enthusiastic', 'attracted', 'connected', 'creative', 'motivated', 'curious', 'rewarded'. When asked to share some advice regarding the use of interactive materials, teachers admitted that they should be simple, dynamic, clear and they should follow the syllabus. Using practical tutorials in order to find out more about comics and get advices on how they to engage students in reading by means of images and strips, was another recommendation of the interviewed teachers. Another useful tip was using games and strips for games to involve students.

Based on these research results, we designed the COMMIX Teacher Professional Development Curriculum, a customized curriculum to help teachers use the products of the COMMIX project following a specific rationale. The Curriculum aims at capacitating teachers to use comics and interactive technologies in education to empower learners to become creators of stories (and not passive consumers), support the development of critical media literacy skills, enhance and extend the enjoyment of digital storytelling, thus increasing the school performance of students. It also provides the necessary material for teachers training that allow teachers to use effectively the tools and resources included in it. The teacher training is designed based on three Workshop Modules, of three hours each. COMMIX is a curriculum for blended learning, built on face-to-face and online instruction and comprises seven parts: Introduction (Part 1), where trainers

can find the aim of the Curriculum, its structure, as well as its rationale; Part 2 where there is presented the purpose and objectives of the COMMIX teachers' training. The list of Learning Outcomes that are envisaged to be achieved through training is given in Part 3. Parts 4, 5 and 6 describe the content, sequencing and pacing of the teachers' training, while Part 7 shows how the evaluation of acquisition of new knowledge from the Workshop Modules will be done. In the Appendix one can find the outline of each of the three Workshop Modules. The Workshop Modules are also available on-line via the COMMIX elearning platform, for distance-learning application (at www.commix-project.eu).

The **Workshop Module 1** "Presentation of the COMMIX Project and familiarization with the COMMIX intellectual outputs" was designed for face-to-face training. In this module teachers get an introduction to the COMMIX project and learn about the COMMIX intellectual outputs.

The online **Workshop Module 2** "The Fundamentals of Comics in Education" concentrates on providing professionals from the education sector (especially teachers and instructors, school principals, educational policy makers) a thorough presentation of the COMMIX educational resources (Toolkit). Trainees are offered a pool of ideas of interactive technology media (such as digital tools, comics, digital storytelling, film, multimedia, and Web 2.0 technologies). Moreover, guidelines and ideas for designing learning activities are presented. This online module has the following sections:

Comics as a genre and review of significant texts: in this section teachers are expected to actually access different comic genres and start experimenting with them. It introduces learners to the different comic genres, as well as to acclaimed international and European comic authors and their work. It provides engaging comic texts for adolescents along with a bibliographic information, a 300-word summary, and a list of ideas for sharing the comic story with adolescents aged 11-16.

Pool of ideas of interactive technology media: in this section teachers can find a complete list of different digital literacy tools regarding the use of mobile devices, Web 2.0 tools, comics, digital storytelling and social media. The online tools provide new ways of interacting with students and offer them the opportunity of completing tasks online, new ways and many more.

Guidelines and Ideas for using comics in literacies development: in this section teachers are expected to have an overview of the most effective teaching approaches in relation to use of comics in education. Guidelines are clearly indicated within the relevant context and thorough explanations along with relevant examples and additional resources are outlined.

Sample Activities and Units for using Comics in literacies development: this section aims to support teachers to engage in the creation of their own teaching unit. The first step in order to create a unit is to explore and experiment with the sample lesson plans which are presented in this section and then to try creating own teaching unit.

The online **Workshop Module 3** "Integrating Comics in Teaching" aims to provide learners from the education sector (especially teachers, instructors, school principals, and education policy makers) with innovative pedagogical methods, best practice guidelines and implementation strategies towards scalable, systemic and sustainable use of ICT and comics for student engagement. Module 3 will involve teachers' engagement in hands-on activities: teachers will be involved in the creation of digital comics, will be provided with all the necessary support material (e.g. templates, tutorials) and tools for online communication and collaboration to be used among them during the workshop (e.g. discussion forum, digital tools). The training will be implemented along three main steps, namely: designing a story, designing

the storyboard, creating your digital comic. Detailed instructions and support materials are also given online.

7. Conclusion

In Romania there is a series of graphic novels and comics, mostly translated from foreign languages. They appeared from the desire of publishers to print best sellers but also from the modern need and interest to be used in the curriculum design, coming thus as a support in Romanian education, even if they are not very well developed. Students perceive the use of comics in the educational process as a factor making certain subjects more attractive, facilitating understanding, reducing boredom in class, enhancing attitudes and improving reading skills. Despite the reduced flexibility of the educational plans and the relative lack of integration of comics within the national curricula, teachers already use them and other interactive resources to increase learning efficiency and improve students' school performance. One can notice a positive trend in the Romanian school environment regarding the valorisation of the comics and ICT-based resources.

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