Pilot Study #4 (POLIMI)

Educational Use of Digital Comics in a class at Primary School (Italy)

Abstract
This case study aims at exploring the educational use of digital comics by students aged 8-9 at a public primary School in Italy, as a learning activity aiming at improving children’s narrative and communication capability, and developing elementary ICT skills. The students, organized in small groups, designed a set of fantasy comics— including text and images - and implemented them initially using Powerpoint and then Web Comic Creator.

Subject: Fantasy storytelling
Age group: 7-8
Level: elementary school (third-fourth grade)
Number of students involved: 23
Duration: 17 didactic hours
ICT Tools: PowerPoint, ComicLab

Pedagogical Objectives
• Improvement of narrative skills in an playful, engaging way for children, with a special focus on
• Defining the temporal structure of a story (before, during, after scenes)
• integrating multiple media: text in different semantic formats (i.e., balloon-like dialogues, comments) and images
• Development of collaboration capabilities
• Development of elementary technology skills
• Enhancing student’s motivation for and interest in storytelling

Process
As a premise to the students’ activity, the 2 teachers of the class received a preliminary training on digital comics and storytelling (see WP2) attending a seminar organized for them at school and studying the material produced by the project.

The activity was then organized into 2 main phases:

Phase 1: working on paper and powerpoint
• definition of the pedagogical goals and design of the learning experience (by the teachers).
Teachers designed a narrative meta-structure for comics to be proposed to children as a conceptual plot frame that children would filled with comics contents. The agreed subject was a fantasy tale. Inspired by Propp’s theory on morphology of folk tales – Propp 1968), teachers defined a simple comics structure composed of a sequence of narrative “moments”: START; THEN...; AT SOME POINT...; AFTER A WHILE...; FINALLY... POLIMI team then implemented this meta-plot in Powerpoint, creating a set of ppt “forms”, one for each narrative “moment”
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- *children’s familiarization with multimedia storytelling*, using (non comics) interactive narratives in the school computer lab as well as simple web comics selected by POLIMI
- *conceiving the story on paper*
  - Children, organized in small groups of 2-3 persons conceived and created their comics on paper, as a classroom activity. POLIMI team provided them with prints of the powerpoint forms and of scene elements and characters. Children instantiated the meta plot as a comics, gluing images for characters and scene elements, drawing balloons for characters dialogues, and hand-writing text inside.
- *From Paper to Digital (in ppt)*
  In the computer lab, children transferred the paper comics into a digital interactive multimedia format, using the Powepoint tool, under the supervision of teachers and the POLIMI team. Students implemented each moment according to their paper based design, inserting the proper images from the repository (digital characters and screen elements), creating and editing the ppt dialogue balloons.
- Validation and revision (by teachers)

**Phase 2: working on Web Comic Creator**
- Short tutorial to children on Web Comic Creator
- Production of version 2 of the story – using Web Comic Creator “customized” (and in Italian) by including all images and backgrounds used by children in their .ppt stories - a small repository of human and animal “characters and scene elements that children could reuse and integrate with comics textual elements

At the end, every student got a CD with the set of all stories (in the 2 versions – ppt and Web Comic Creator) created by the class.

**Evaluation**
The authoring production process was constantly monitored by the Polimi Team, observing students’ experiences at school and reporting observations on a structured evaluation form designed for the project.
Key elements mainly reported considered the usability of the ICT tools, students’ cooperation behaviour, and, at the affective level, engagement and interest.
Learning and instructional objectives were evaluated by means of
- *Group discussion with children*: Children and teachers discussed the resulting “products” comics and the overall experience
- *Questionnaires* submitted to students
- *Focus Group with teachers*: Polimi team discussed the experience with the group of teachers, focusing on both organizational and pedagogical aspects, and identifying some lessons learned for a wider scale adoption of web comics at school.

The main results can be summarized as follows:
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• complexity of Wec Comic Creator technology (Higher than ppt): even if children used a simplified version of the tool, the support of adults was needed in many situations due to the limited usability of some functionality
• The children’s outcome has a weak “comic flavor” (Limited dialogue, limited number of balloons)
• Children’s opinion:
  – Very positive feedbacks emerged from children’s questionnaires (86% highly satisfied; 68% want to do it again)
  – a constant enthusiasm was perceived during the activities, in spite of the difficulty in the use of the Wec Comic Creator tool
Teacher’s opinion:
• Good satisfaction; Noticed (but formally not “measured”) an improved level of narrative skills and collaborative attitude, more fluency in computer use
• Fundamental role of
  • Non digital classroom activities - story design and paper based creation
  • Narrative meta-structure – an approach smoothly integrated in the curriculum for our target age (“structured” storytelling, in some case applying Propp’s theory)

Follow up
• Practice in collaborative writing of stories
• Further use of digital comic tools for the development of reading and understanding strategies and skills of writing narrative/storytelling.
• Every pupil gets a CD with all comics created during the pilot study

LINKS
Digital tools
• ComicLab by ItIsArt Ltd, (http://www.itisart.com.gr)

Teaching resources
EDUCOMICS Resources for teachers available on EDUCOMIC project web site
http://www.educomics.org/

Programs of comics integration in schools abroad
• The Comic Book Project, Center for Educational Pathways, http://www.comicbookproject.org/
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Suggestions – lesson plans:
- ReadWriteThink of NCTE INTERNATIONAL READING ASSOCIATIONS, http://www.readwritethink.org/
- How to write a comic book
  - http://www.wikihow.com/Write-a-Comic-Book
  - http://www.wikihow.com/Make-a-Comic