One day, a Hindu teacher showed his pupils a piece of paper with a black dot in the middle.
«What can you see?» he asked. And they replied: «A black dot!»
«What?» said the teacher, disappointed. «None of you could see the great white space all around it?»

THE APP YOUR SCHOOL PROJECT

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ABSTRACT

This chapter introduces the project **APP YOUR SCHOOL**, the philosophy behind it and its main axes: how to insert technology in the curricula, how to link with Media Education and civic engagement, built connections with Art, Multimedia and Pedagogical Innovation, value extracurricular skills and student's motivation/dispositions (especiallyin the case of students at risk of Early School Leaving).

KEYWORDS

TECHNOLOGY

CURRICULUM

MEDIA EDUCATION CIVIC ENGAGEMENT

ART

MULTIMEDIA AND PEDAGOGICAL INNOVATION

EXTRACURRICULAR SKILLS

EARLY SCHOOL LEAVING

SYNTHESIS STARTING FROM THE APPLICATION

The project **APP YOUR SCHOOL**, funded by the European Commission within the Erasmus Plus Programme, aims to support new ways to think and design digital competences in schools, by testing and implementing innovative practices in the field. The partnership of the project, consisting of 8 consortia of media education organizations with secondary schools in Italy, Portugal, Greece, Poland, Czech Republic, Lithuania, Finland and Turkey, made possible that schools of 8 European countries work together on a such important subject.

   We tried to create complex didactical situations that challenge teachers and students alike, **in line with their individual needs and expectations**, and that value the media literacy competences on both sides. Channelling the technological skills of the students and their "Media-Cultures" (cfr. Genevieve Jacquinot), to imagine new public services for citizens and new ways of creating knowledge and culture, for instance designing projects to transform reality and new developments of their local communities . Thereby concentrating on the ability "to use skills and technologies in the daily life: **digital literacy involves being able to carry out successful digital actions embedded within life situations**"[1]. The project aims to implement new transversal methodologies that open a dialogue among students, schools and societies, promoting a development of the school as place to imagine, think and "test the future". The active methodologies of Alberto Manzi[2] and Bruno Munari[3], implemented in the project and spread in Europe are both very appreciated in Italy for their educational attainment. Alberto Manzi, was a teacher and pedagogue with great experience in using television and media to promote literacy, in working with young detainees at the Aristide Gabelli in Rome or with disadvantaged students around Italy. Bruno Munari, a designer who invented a new approach as the children's atelier. Both approaches together are able to **transform school teaching models offering new ways to work both for students and for teachers**, which are more linked to the current technological opportunities and closer to the school success of more disadvantaged students. These new methodologies **facilitate the valorization of the capacities of the single student**, its creative potential that often stays out of the school, seeking to involve also those students most at risk of school drop out and to support schools to tackle Early School Leaving, in line with the objectives of the Europe 2020 Strategy.
   Our initial idea was that there were extracurricular skills of

1
Mapping digital Competence: towards a Conceptual Understanding; Kirsti Ala-Mutka, European Commission Joint Research Centre, Institute for Prospective Technological Studies, pp. 29

2
Alberto Manzi Biography: see pag. 166
3
Bruno Munari Biography: see pag. 168

students which remained unexplored in the school setting: these are **skills related to a passion for technology, mostly developed in teenagers' free time**. The school could enhance them by bringing them to the surface and using them creatively, fostering each student's success and working towards a common collective goal. We gave the space and time in which this occurs the name "Digital Atelier": two great teachers – Alberto Manzi and Bruno Munari – led the concept and design of the Digital Ateliers described in this toolkit/manual.

   "We are preparing individuals for a completely unpredictable future, we do not know what science and technology will devise in twenty or thirty years' time; we do not know how the increasingly sophisticated information media will succeed in spreading knowledge, in involving people. **We know nothing: we only know that our students will have to face a world that is unknown to us**, and for which we can not prepare them just by passing on knowledge. We will prepare them to face the unpredictable, that is to know how to 'think', to know how to face a problem, 'any' problem, to know how to understand it, analyse it, get to grips with it, solve it. This is 'creativity'. We must learn to tolerate uncertainty, to think critically in the face of the unexpected, to exploit all the ideas and opportunities that these same ideas offer us; to make and undo, that is to create experiences and formulate hypotheses from them that can then be 'transformed' by subsequent experiences; to discover correlations and interdependencies. Or simply: to think and think and think".

   In this wonderful passage by the teacher Alberto Manzi about *Education … but what is it?* **we find the idea of a Digital Atelier that challenges situations and technologies to become tools**, materials and settings in which to "make and undo" problems, triggered by teenagers' curiosity for technology or connected to their daily life at school and at home.

   Eight consortia of schools and centres in different European countries have worked with this shared idea/definition of "Digital Atelier". The European teachers involved met in Bologna, at the Alberto Manzi Centre, for two one-week courses in two different school years: 2016/2017 and 2017/2018, exploring together in this collective training what a Digital Atelier could be and led the 44 experimentations with the students in the school year 2017/2018.

MAIN AXES OF THE PROJECT

THE APPROACHES OF ALBERTO MANZI AND BRUNO MUNARI

These two active methodologies born in Italy thanks to 2 different experiences, were both applied in our experimentation to digital technologies. Alberto Manzi has built in his teaching technology as a powerful tool for creating meaningful experiences for students, always connecting the real presence (and objects) with more virtual and abstract aspects. Bruno Munari, with the typical curiosity of the designer, had already begun to design workshops that would propose new uses for technology. The most famous example is the use of the copier to create "originals" and not to make "reproductions" of documents. His artistic practice explored technology as an unusual instrument of expression.

More in detail:

ALBERTO MANZI was an important Italian pedagogue and teacher known for his innovative use of technology to face and solve illiteracy. His method has different steps: creating a cognitive tension (with real questions that open a passionate research, with the aim to deepen, affecting the daily life of the student and not far from their experience), to know what students know, to understand their knowledge on the topic, their experiences and point of views, which "words" they use do speak and define the topic, which misunderstandings or wrong knowledge, designing concrete experiences that allow children to do and "undo", to predict, to collect data, compare and argue, to share and clarify information and point of view. To conclude with a new question which restarts the research and puts students in the arrangement to desire, to know more, and to understand better.

BRUNO MUNARI was a designer and artist, collaborator of the Children's Castle of Tokyo and "inventor" of workshops for children. He proposed a method from his experience as a designer and his expertise at industrial level: children work in an environment where they could experience materials, techniques and tools. At the beginning, they discover the limits and potential of materials, tools and techniques in a phase named "exploratory". In a second part, students have the possibility to classify their research's elements, their data and their analysis. After they start to design and project some more specific ideas using materials, tools or techniques, by coming to terms with the constraints and technical possibilities.

The "Digital Atelier" we tested in the **APP YOUR SCHOOL** project is a new educational format that is a combination of these two approaches with ICT. The strength of the "Digital Atelier" consists in combining concrete and tangible aspects with virtual and technological aspects, permitting the analogical and the digital to meet and go deeper on the educational experience, promoting a creative and artistic approach. The link between real objects and virtual experiences and vice versa (the link between virtual objects and real experiences) could generate new approaches for learning linked to social change and innovation. The interaction between technologies and our life enables media education and media literacy (as a goal) to enter deeper into the creative contexts capable of social and educational challenges.

INSERTING TECHNOLOGY IN THE CURRICULA

One of the aims of this project is to create complex learning situations that allow students and teachers to really feel challenged to solve problems through digital creativity. Our proposal of the Digital Atelier, moving from the DIGCOMP framework for Developing and Understanding Digital Competence in Europe, supports skills on the area of problem solving and development of creativity and imagination:

- **TO SOLVE PROBLEMS:** identifying potential problems and solve them with the help of digital tools
- **TO IDENTIFY NEEDS AND TECHNOLOGICAL RESPONSES:** identify needs in terms of resources, tools and skills development; identify possible solutions to meet the identified needs; to adapt the tools to the personal needs; critically evaluate the possible solutions and digital tools.
- **TO INNOVATE AND CREATE USING TECHNOLOGY:** actively participate in the digital and multimedia collaborative productions, express themselves creatively through digital media and technologies, producing knowledge and solve conceptual problems with the help of digital tools.
- **TO IDENTIFY DIGITAL COMPETENCE GAPS:** understand where their skills can be improved or increased and support others in developing their digital skills; maintain a constant updating.

The Digital Atelier proposal focuses on discovering and questioning reality and life, working with strategies and tools that permit creation and transformation. A further specific objective of the project was to develop the competences of the teachers through the establishment and promotion of complex didactical situations that challenge teachers and students alike, in line with their individual needs and expectations, and that value media literacy competences on both sides. The role of the teacher is one of a key element in the transition of school extern solitary consumer relation with digital knowledge into collaborative productive processes, in supporting a divergent approach to technology, in promote active participation through digital tools. The training of the teacher in innovative methodologies was therefore crucial because it supported teachers to manage technologies and digital experiences in a new way, closer to their interests and abilities, increased motivation and satisfaction in their daily work. Now, new materials for the work and the training of "animatori digitali" (teacher expert in ICT) and teachers can be spread thanks to the experimentation of the Digital Ateliers around Europe.

MEDIA EDUCATION

National and European agendas often concentrate on the dangers of the digital, like cyberbullying, hate speech or privacy violation. The time dedicated to the experimentation of the creative potential of digital knowledge seems rather short, as well as the guiding of these potentials into public engagement and active citizenship. It is also often the insecurity of the teacher in changing didactical models and leaving his/ her comfort zone that makes a transition of such competences difficult.

There has been a big concentration of the National and European agendas on the dangers of the digital, concentrating on the risks and safety of children in the use of ICT, with projects that have codified didactical models and debates on media education. Researches like EU Kids Online highlight for example video gaming mostly as a solitary activity: one screen, one active child. This solitary use of games and ICT is indicative of infant solitude in the exploration of the digital world (studio Happy Onlife - Commissione Europea, Centro Comune di Ricerca, Ispra (VA), pp 47). Until now there isn't a diffusion of codified didactical models that allow an exploration of the digital, dialoguing with aspects of the real, connecting the dimension of the single with the community and valorizing a creative approach instead of a "Prevention of the risks and dangers" approach. Our experimentation aims to propose new materials and ideas to support an approach based on the valorization of students skills and experiences, on creativity and imagination to design new schools projects. The Digital Atelier focuses on the creative use of the new media and apps, on the promotion of a creative and innovative attitude to use and interact with media, to carry out successful digital actions embedded within life situations. Each Digital Atelier stands alone and has 6 hours duration and objectives, so that teachers, trainers or educators could use various ateliers by combining them in different ways according to their curriculum objectives.

CIVIC ENGAGEMENT

Our main objective was to value media literacy of students, their competences developed out of schools, through the development of Digital Ateliers that can support skills and ideas to promote their engagement in active citizenship and to promote young creativity.

We faced 3 difficulties:
1. **THE SENSE OF AGENCY OF YOUNGSTERS:**
   Often young people do not imagine that they can activate changes in their local community, that they can start new paths, new projects. Do not even think, too often, to involve adults in their ideas and their ideals. Teachers and students, by working together in digital projects, in an open and welcoming dialogue, can allow to build projects that help adolescents (and adults) to take part of the community life;

2. **TAKING THE FLOOR IN PUBLIC SPACE IS ALWAYS COMPLEX:**
   In the Digital Ateliers, collective cultural production and small public events have been stimulated and open to other non-participating groups, to support and reinforce the abilities of adolescents, in the expression of a point of view in the life of their community.

3. **CREATING INCLUSIVE SITUATIONS IN WHICH ALL STUDENTS COULD FEEL APPRECIATED AND USEFUL:**
   At the basis of participation there is the trust in one's own possibilities and the ability to know how to build positive and constructive relationships. In Digital Ateliers, the students' digital abilities (true or simply declared) were a good start to build a welcoming and purposeful atmosphere. The project sought to identify paths and strategies, resources, facilities and support to promote teenagers participation.

ART, MULTIMEDIA AND PEDAGOGICAL INNOVATION

Our project tried to design and experiment Digital Ateliers that took inspirations from digital art. An example of reference is Christiane Paul, curator of New Media Arts at the Whitney Museum of American Art in New York. We were inspired by how digital art questions reality by proposing questions and new collective projects. Digital Art also opens up to the theme of participation, involvement and interactivity. Investigates the divergent use of tools, as Bruno Munari did with the photocopier. New ideas for teaching have come from the work of contemporary artists, photographers, documentaries... The approach of Bruno Munari, contemporary art and digital research have made it possible to link contemporary subjects, topics and issues with the daily use of media and ICT, in a creative way, implementing the "Digital Atelier" as new format and new pedagogical model. Contemporary art and installations, ICT, cultural services and common work materials were mixed in students' and teachers' hands. The media content is a new space of "signification" and becomes the material of labour of the student who interacts in a divergent way.

FROM EXTRACURRICULAR SKILLS TO COMPETENCES

A specific objective was furthermore to integrate extra school competences of the students into the school curricula: in the time spent outside the school students acquire knowledge and competences that often remain out of the school sphere, wasting a big creativity and knowledge potential that could be integrated into educational processes.

Students were challenged to use their extracurricular skills to solve problems in new ways. The idea is to promote an attitude that is one of the "researcher" who is both autonomous and involved in the group.

STUDENT MOTIVATION / DISPOSITIONS

(Especially students at risk of Early School Leaving)

When we face students risking early school leaving we need to work with them supporting their curiosity, finding new words to tell their stories in an positive way, new ways to question reality and life, to understand the world around them and to inspire new social actions. With our proposals of Digital Ateliers we had in mind to reinforce the recognition of their skills, support a positive, welcoming and valued work atmosphere that would allow, where necessary, to improve self-esteem, develop a greater capacity of linking everyday digital experiences with school contents, increase the level of digital competences and improve the ability to reflect on issues concerning technology in everyday life.

To do this we plan to design new "Digital Atelier" as a "good place" to motivate students to use ICT for personal and community benefits, while developing their creative potential. The "Digital Atelier" is a "laboratorio" in which the teacher proposes ICT activities using the Alberto Manzi and Bruno Munari methodologies. The teacher will be able to design an educational experience that starts from an ICT content (for example an app) to develop then a manual task, with tools and materials, in order to start a personal and collective research with the students.