



Digital, Responsible Citizenship in a Connected World

O2. Design Pedagogical Framework for the development of e-Toolkit on Digital Citizenship

Catalogue of best practices for developing digital skills

Version 3.0



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EXECUTIVE SUMMARY

Nowadays it is widely shared that information and communication technologies (ICTs) have penetrated into all aspects of modern life. In this context, the digital literacy has evolved into something much more than skills in handling a PC.

The European Framework for Digital Competences published by the European Commission has defined digital competence as “the ability to use such digital technologies in a critical, collaborative and creative way” (DigComp, 2015). “Digital competence involves the confident, critical and responsible use of, and engagement with, digital technologies for learning, at work, and for participation in society. It includes information and data literacy, communication and collaboration, digital content creation (including programming), safety (including digital well-being and competences related to cybersecurity), and problem solving” (EC, 2018).

The objective of the Digital Responsible Citizenship Project is to offer to the teachers a new approach and new tools to support them in developing a positive attitude towards digital citizenship, with the ambition to propose the foundation of a digital citizenship program for scholastic education that could represent the effective adoption and implementation in European countries of the DigComp Framework.

The project activities aim to reach the specific objectives of integrating digital literacy and citizenship as part of the school curricula, and promoting synergies and cross-fertilization throughout scholastic education.

As a matter of fact, the contemporary school must prepare the tomorrow's citizens of the knowledge society, in order to be able to face the challenges and to harness the opportunities of the new economy.

With the design of the present *Catalogue of best practices for developing digital skills* (and a List of tools for developing digital skills annexed) the partners want to design the intellectual output of a pedagogical framework, as the main reference for the development of an e-Toolkit on Digital Citizenship, that will be experimented and made available for primary school teachers (in the partners' countries first, then at the European level).

The best practices and tools here described constitute a simple but fundamental data, to suggest

how regularly to implement them in the classroom, and what impact these resources may have in developing the digital skills and competences of young learners.

They represent a follow-up of the results of the survey on the “state of the art” of digital skills among teachers, parents and young learners, and they can be considered a starting point (in terms of data and possible contents) for the preparation and identification of the objectives for the development of a first operational tool for teachers.

The overview on the best practices for digital skills in the school curricula of each partner country offers a collection of data, that will be incorporated into a Guide for Teachers, that will be put at disposal of the teachers in partner countries for experimentation, to implement new methodologies, approaches and ideas to train pupils and turn them into “critical” users and creators in the online environment, and helping them to make the right choices and avoid harmful consequences.

Each partner of the DRC project was asked to select ten past and present best practices, projects and other relevant experiences in their own country, that could be created and implemented on both national and European level, and to record such practices in a shared format. Tamat NGO was appointed to draft a cumulative catalogue of the selected experiences.

The format for the recorded information was divided in two distinct sections: the first one named “General Information”, includes the title, duration, lead partner or coordinator, composition of the partnership and the network, link to the website, any relevant document or output produced and their resources; the second one dedicated to the “Insights”, including a complete description of the practice, of the methodological criteria and of the resulting benefits and/or shortcomings emerged during the implementation, and addressing some elements for an in-depth analysis or concrete transferability of the outcomes achieved.

All the completed forms and the best practices selected were classified in 5 main topics, corresponding to the 5 areas of competence identified by DigComp 2.1 and confirmed by the European Commission (Carretero Gomez, Vuorikari, Punie, 2017; Redecker, 2017): *Information and data literacy, Communication and collaboration, Digital content creation, Safety and Problem solving.*

The catalogue is provided with an annex, that lists the tools for developing the digital skills collected by the partners in their “field” research. Each partner provided their own list of tools, using also in this case a shared recording format, describing, for each tool, the research and data behind its use, its affordances, and – where possible - links to examples.

The overview on the best national practices gave the possibility to each partner to give some recommendations and practical tips, aimed to overcome difficulties and lacks in the existing national activities for digital skills in teaching/ learning provided to children aged 6-12, evidenced at the national level in each partner country.

These elements offered us the opportunity to summarize some shared conclusions, giving practical recommendations to contribute to the design of a common pedagogical framework, that includes the elaboration and testing of new and innovative approaches in teaching/ learning activities, concretely supporting and improving teachers’ competencies to work on Digital Responsible Citizenship with younger students.

The deep re-thinking and re-designing of the Educational systems and methodologies represent, not only in Europe but also in the global dimension, a fundamental and unavoidable passage to face one of the crucial challenges of the present century: the transition to a digital economy and, in a wider vision, the transition towards a Digital Society, that will interest first of all the new generations. These generations will be prepared to confront the future only by receiving the right answers to their questions from parents, teachers and educators.

APPROACH TO MAIN EUROPEAN POLICIES AND RECOMMENDATIONS

The necessity for a European Framework regarding Digital Skills and Digital Technology in education

Starting from the results of the research *Learning and Skills for the Digital Era*, designed and managed by European Joint Research Center in 2005 (JRC, 2015), the European Commission and Member States begun to consider the role of digital technologies in the innovation of education, towards the new global needs for policies for employment, personal development and social inclusion.

In 2013, the document *A European Digital Competence Framework for Citizen* (DigComp, 2013) was published with the aim to provide a tool to improve citizens' digital competences, and to give direction for the strategic planning of initiatives regarding digitalization at both European and Member State level.

Various editions of the DigComp were published until 2017: the current version is labelled DigComp 2.1, and focuses on the expansion of the three initial proficiency levels, to eight more levels, and providing examples of their use.

Following DigComp 2.1, a common European Framework for the Digital Competence of Educators (DigCompEdu) was designed as the background framework not only to help national authorities to guide their policies to implement regional and national tools and training programs, but also to provide a common language and approach, favouring the dialogue and exchange of best practices across borders.

Each partner carried out their research for the catalogue of best practices for digital skills development, in execution of the Intellectual Output n. 2 of the Digital Responsible Citizenship (DRC) Project, referring to their national context, and bearing in mind the particular conditions and effective state of the art regarding digital skills and use of digital technologies in teaching/ learning activities for students aged 6-12.

Digital skills and technology in national curricula/programmes

The selection criteria adopted by researchers and the particular highlights on specific aspects of the

European DigComp was driven by the relevance given to the digital skills/ digital technologies in the national guidelines or national scholastic curricula in the partner countries.

Generally, ICT is not treated as a separate subject within the primary school curriculum, as it is in some experiences (i.e. France, UK and Norway), that directly included digital literacy or coding/programming as part of their core curriculum.

According to the experience of the partners, ICT is mostly used as a *dynamic tool* for the teaching/ learning processes. As in the case of Cyprus (MoEC, 2014) and Greece, ICT exists in the form of a cross-curricular instrument, that promotes “horizontal” skills that secure and strengthen the implementation of the school curriculum.

In some partner countries, school authorities and policy makers give a particular emphasis to the development of digital technologies and skills, through the elaboration and adoption of long term strategical plans, especially in Ireland, with the 2014 *Digital Strategy for Schools 2015-2020 Enhancing Teaching, Learning and Assessment*, and in Italy, with the 2015 National Plan for Digital School, that express the common objective of reforming the national school system to include Digital Responsible Citizenship in the national curricula.

Important milestones of this path are some important actions and specific programmes adopted, as, for example, the introduction of the “digital animator” in every school in Italy, or the Social, Personal and Health Education (SPHE) in Ireland, a curricular subject with the aim to teach children aged 8-12 how to be safe while online, and to aware of their online presence and digital footprint. Starting from a general overview of the experiences currently underway in partner countries, it can be highlighted that the current role of ICT is to pursue an improvement of the school curriculum and the development of 21st century digital skills, such as collaboration, communication, problem solving, critical thinking, decision making, and information handling.

For this reason, a great importance is projected on the strengthening of the basic skills/ abilities on the use of information and communication tools and sources, and information and communication instruments to find, analyse, assess and present information.

What emerged from the analyses of the different contexts, many of the practices and experiences are related to the development of Critical Thinking and Problem Solving, and to the introduction to coding, starting from primary school, considered as basic training for a future correct and efficient use in learning/teaching activities (as stated in the specific Action #17 of the Italian National Plan

for Digital School - Bring computational thinking to the primary school; in the specific dimension “Problem solving” in the Greek ICT curriculum; and in the recent action plan for STEM subjects in Cyprus).

Other aspects present in every context of analyses, are protection and safety online, which results an active practice in many of the sampled experiences, and considered by all the stakeholders in the educational system (such as policy makers, teachers, school managers and, especially, parents) as necessary pre-conditions for the growth of competent 21st century generations, and for the empowerment of young people in the definition of their identity, sociality and creativity through education.

From the analyses, it can be stated that the sensitivity around these two main areas of the DigComp Framework is considered a necessary condition for the sustainability of the general objective of Digital Literacy and the core content for a Digital Responsible Citizenship.

BEST PRACTICES FOR DEVELOPING DIGITAL SKILLS

Achievement of digital literacy in the first and second grade of primary school

 ΑΡΙΣΤΟΤΕΛΕΙΟ ΠΑΝΕΠΙΣΤΗΜΙΟ ΘΕΣΣΑΛΟΝΙΚΗΣ		
GENERAL INFORMATIONS		
TOPIC	Digital Literacy	
TITLE	Achievement of digital literacy in the first and second grade of primary school.	
DURATION	2010 – 2012	
LEAD PARTNER/COORDINATOR	Moustaka, S. Aristotle University of Thessaloniki Department of Primary Education	
PARTNERS/NETWORK	N/A	
WEB LINK	http://ikee.lib.auth.gr/record/131757	
RELEVANT DOCUMENTS or OUTPUTS	http://ikee.lib.auth.gr/record/131757	
INSIGHTS		
DESCRIPTION	<p>This research investigates (a) the attainment of digital literacy in the 1st and 2nd grades of the elementary school, and (b) the pedagogic exploitation of communication technologies in the same grades by the teachers of Informatics. The first part examines the evolution, the necessity and the possibilities of ICT integration in primary school, and describes ICT Curricula in primary education in Greece. The second part presents the research method of triangulation and articulates the way the researcher used this method in the present study. Finally, the researcher analyses and interprets the data obtained from the survey, and makes proposals that could affect the quality of teaching.</p>	

METHODOLOGY	<p>In this ethnographic research, the method of triangulation was used, in order to combine both qualitative and quantitative research approaches and enhance research validity and scientific credibility. Participatory, systematic observation in the laboratory of Informatics was used as data collection method, coupled with ethnographic interviews with students and teachers. Open ended interviews were used with "funnel" type questions: interviews started with a broad question or statement and then ended up in more specialized questions. A content analysis was applied to the data retrieved from the interviews.</p>
RESULTING BENEFITS	<p>The growing demand from society for "technological literacy", requires the integration of information technology in the educational process, starting from the elementary school. This research proposes to divide the students into heterogeneous groups of two, working with specially designed workbooks. These workbooks have to be adjusted according to pupil's grade level, structured around specific objectives and include theory and worksheets for each lesson. For 1st grade pupils, it is necessary that the informatics teacher collaborates with the classroom teacher.</p>
RISKS	<p>Pupils of younger age are susceptible of developing misunderstandings. When teachers explain basic concepts or pose questions, they should use simple vocabulary. Also, classroom management in a computer laboratory is particularly complex. Efficient communication and cooperation between students is a key factor for a smooth lesson implementation. Teachers should have clear objectives, and students should have at their disposal all the necessary supporting material.</p>
WORKABLE – TRANSFERABLE PRACTICES	<p>The ideal working group on a computer consists of two, pupils with mixed abilities (heterogeneous grouping). In this way, conflicts among the members of the group will be limited and the involvement of each student in the computer work will be maximized.</p>
NOTES	<p>The ethnographic research was held at the 10th municipal school of Kalamaria, during the school years 2010-2011 and 2011-2012. The research followed a participatory, systematic observation in the computer laboratory, with a sample of 49 children of 1st grade and with 50 children of 2nd grade. The observation in the field of research was conducted in two phases.</p>

AMANDA Project

	
GENERAL INFORMATIONS	
TOPIC	Anti-Bullying Safety
TITLE	AMANDA Project
DURATION	from: [date] to: 2018-02
LEADPARTNER/COORDINATOR	Aristotle University of Thessaloniki
PARTNERS/NETWORK	Microsoft
WEB LINK	https://www.facebook.com/amandamuseum/ https://imaginecup.microsoft.com/en-us/Team/Index/a8de0975-beac-47fb-8b49-0ad27ad6f592
RELEVANT DOCUMENTS or OUTPUTS	N/A
INSIGHTS	
DESCRIPTION	AMANDA utilizes gamified behavioural analysis to create a virtual environment, where children encounter interactive bullying-related materials, such as games and videos, which aim to increase the users' empathy and awareness around bullying.
METHODOLOGY	To illustrate the effects, the virtual experience allows users to experience bullying as a bystander, bully, or even a victim. Using computer-based technology (ICT) interventions, the app helps to identify and combat risks thanks to bullying detection. The behavioural model receives input in the form of biometrics from the real world and behavioural data from the virtual world.

RESULTING BENEFITS	A real-time simulation which helps schools and psychologists monitor the students' responses to bullying-related incidents, and provide personalized help to each child according to their specific characteristics.
RISKS	N/A
WORKABLE – TRANSFERABLE PRACTICES	AMANDA presents a novel ICT-based approach for bullying detection and intervention in children's everyday life, by introducing new ways of behaviour self-managing tools, set within a collaborative care context with psychology professionals. Specifically, the main aim of AMANDA is to create an ICT-based, gamified behavioural analysis approach for capturing bullying tendencies and to apply ICT-based interventions countering identified risks based on bullying detection, relating to low empathy, self-confidence and awareness.
NOTES	N/A

Be in Ctrl

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GENERAL INFORMATIONS	
TOPIC	Online Relationships and Communication; Internet Safety
TITLE	Be in Ctrl
DURATION	N/A
LEAD PARTNER/COORDINATOR	Webwise
PARTNERS/NETWORK	Webwise is the Irish Internet Safety Awareness Centre which is co-funded by the Department of Education and Skills and is co-financed by the European Union's Connecting Europe Facility.
WEB LINK	https://www.webwise.ie/trending/be-in-ctrl/
RELEVANT DOCUMENTS or OUTPUTS	The Be in Ctrl programme – developed by Web Wise has developed a set of lesson plans with activities for teachers to use in the classroom with pupils to raise awareness of the dangers of online communication with strangers, with a particular emphasis on online grooming. These interactive resources are supported by a short video which shows how young teenagers can be groomed online. While these resources were developed with young teenagers in mind, they can also be used with older primary school children (aged 11-13) to ensure that they are protected from online predators.
INSIGHTS	
DESCRIPTION	The Be in Ctrl programme was developed in partnership between Web Wise and <i>An Garda Siochana</i> (the National Police Force in Ireland) to raise awareness among young people of the risks of sexual coercion and extortion, often referred to as online grooming or 'webcam blackmail' – with the aim of encouraging young people to protect themselves, recognize the dangers associated with it, understand the methods used by predators and to report related instances to the police, should they arise.

METHODOLOGY

The video was developed as a tool to allow teachers and parents to broach the subject of online communication with pupils. The aim is that by using this video, and the accompanying resources, parents and teachers will be better able to discuss social media usage and online communication with children and pupils. The video can also be used by teachers to introduce pupils to the topic of sexual coercion and extortion online, before delivering the content in the Be in Ctrl lesson plans, designed to be used in the classroom. In total, this resource includes one simulation video, three lesson plans, awareness raising posters for the school and an information pack for school leaders.

As part of this programme, pupils are directly educated to take the following steps to protect themselves online:

- **Control** – No regrets – Keep control of what you share online and with whom. A person you only know online may not be what they claim to be. Anything you send to someone, post online or do over a webcam can be saved/recorded without your knowledge. These images can then be shared anywhere and with anyone.
- **#Trustworthy** – A friend of a friend? Don't accept friend requests from someone you don't know. If someone online says they are a friend of a friend, exercise caution – it is easy to post fake photos or stream a fake video, ask your friend if they have met them in person.
- **#Reality Check** – Be aware of your online presence – think about how your online profile makes you appear to others.
- **#Location** – Put your safety first – don't share your location or meet up with someone you have only met online. Keep your private stuff private – don't share private information such as your address, phone number or school, and use the maximum privacy settings on your social media accounts.

RESULTING BENEFITS

The benefits of using these resources with pupils is that it provide education and guidance to them on a very important topic related to Internet safety and online communication and raises awareness with pupils on one of the most prominent dangers they face in the digital environment. With the combination of the video and the lesson plans and resources, it also provides a means for teachers and parents to raise the issue with young learners in a non-threatening and supportive way. The video also includes young teenage actors, which

	helps to make their experience more relatable and real for pupils.
RISKS	None identified.
WORKABLE – TRANSFERABLE PRACTICES	These resources are freely available to download through the Webwise portal for use in classroom and home settings with young learners aged 11 to 12 years. As such, they are transferrable to other primary schools where online safety and communication is an issue, and where teachers and parents are comfortable to work with resources available in English.
NOTES	N/A

Connected Generations /Generazioni Connesse – Safer Internet Center

 <p>Generazioni Connesse SAFER INTERNET CENTRE</p> <p><small>Co-financed by the European Union Connecting Europe Facility</small></p>	
GENERAL INFORMATION	
TOPIC	Safety
TITLE	Generazioni Connesse – Safer Internet Centre
DURATION	from: 2013 to: ongoing
LEAD PARTNER/COORDINATOR	Ministry of Education, University and Research (MIUR)
PARTNERS/NETWORK	Ministry of Internal Affairs Postal and Communication Police National Ombudsperson for Childhood and Adolescence University of Florence University of La Sapienza - Inter University Centre, Save the Children Italia Onlus, SOS - Il Telefono Azzurro Onlus, E.D.I. Social Cooperative Enterprise Movimento Difesa del Cittadino Skuola.net
WEB LINK	http://www.generazioniconnesse.it/site/it/home-page/
RELEVANT DOCUMENTS or OUTPUTS	<ol style="list-style-type: none"> 1) VADEMECUM - Guida operativa per conoscere e orientarsi nella gestione di alcune problematiche connesse all'utilizzo delle tecnologie digitali da parte dei più giovani / VADEMECUM - Operational guide for the management of issues connected to the use of digital technologies among the youth 2) E-book "Spoiler e la rete di Cosmos" (for kids) 3) E-book "Linked generation – Liberi di navigare" (for teenagers) 4) E-book "Net Educ@tion. Approfondimenti didattici e proposte laboratoriali" (guide for teachers)

INSIGHTS

DESCRIPTION	<p>The “Generazioni Connesse” project is promoted by the Italian Safer Internet Centre and co-funded by the European Commission within the program “Connecting Europe Facility” (CEF). Since July 1st 2016, the Project “Connected Generations” (SIC ITALY III) aims to become a growing national reference point on the topics related to a safer Internet for the young people. The Safer Internet Centre includes an Awareness Centre, two Hotlines and a Helpline.</p>
METHODOLOGY	<p>The project is addressed primarily to children and adolescents: 6-18 years of age. However, parents, educators, teachers and youth professionals are involved.</p> <p>The Safer Internet Centre implements a number of actions: Awareness and information actions aimed at schools throughout the country, Dissemination and visibility actions, actions to fight the spread of illegal material online, support and guidance assistance.</p> <p>Awareness and information actions are aimed mainly at actors and stakeholders from the school environment: management staff, families, teachers and students throughout the country. The planned interventions foresee the participation of the above-mentioned groups both online, through the use of an ad-hoc digital platform, as well as through face-to-face workshops in the field.</p> <p>The Consortium benefits of an Advisory Board that expands to public, private and third-sector players.</p>
RESULTING BENEFITS	<ol style="list-style-type: none"> 1. The Safer Internet Centre Italy is online with the portal http://www.generazioniconnesse.it, carrying out interventions of sensitization and training in Italian Primary and Secondary schools, through which thousands of children and teenagers have been able to know not only the dangers of the Net, but also its most beautiful and positive aspects; 2. Production of educational and informative materials intended for children, adolescents and educators (both teachers and parents), and promotion of existing online quality resources available at national and European level; 3. Two Hotline services for the report of online child sexual abuse and racist or xenophobic material, in collaboration with the Postal and Communication Police (a project partner), through the design of specific agreement protocols and the application of shared operational procedures.

<p>RISKS</p>	<p>Being a particular measure and implementation activity provided in the framework of the national Law 107/2015, the main difficulties emerged during the implementation of the National Plan for Digital School derive from the resistance and low level of digital competencies among the managers and teachers in the schools.</p>
<p>WORKABLE – TRANSFERABLE PRACTICES</p>	<p>The main transferable practice is the possibility to put at disposal of the Italian local scholastic institutions the digital tools offered by the project. The objective is to create an e-policy programmatic document, describing how to approach digital technologies and their use and how to improve didactical activities through digital tools, explaining the concept of online safety and what are the best behavioural norms regarding ICT (Information and Communication Technologies) in the school, what are the measures for the prevention of an incorrect use and the measures to detect and manage eventual problems.</p>

Cyber Kid - Pupils Workshop for Primary Schools

	
GENERAL INFORMATIONS	
TOPIC	Internet Safety
TITLE	Cyber Kid - Pupils Workshop for Primary Schools
DURATION	1 hour
LEAD PARTNER/COORDINATOR	ZEEKO Academy
PARTNERS/NETWORK	N/A
WEB LINK	https://zeeko.ie/primaryschools/
RELEVANT DOCUMENTS or OUTPUTS	<p>As described below, the trainers at ZEEKO Academy implement a pre-workshop survey with young pupils before commencing work with the school. The aim of this survey is to gain an insight into the real experience and actions of young pupils in online environments, and to use this data to provide schools with a ‘Trend Report’ which profiles the behaviour of their pupils when interacting with others online, highlights any potential risks and dangers associated with their online behaviour with their teachers and also forms the basis for discussion among teachers and school staff during a training workshop for teachers. These documents and outputs could serve as an example of best practice for DRC in monitoring and evaluating the effectiveness of our project outputs in improving the digital skills of primary school pupils.</p>
INSIGHTS	

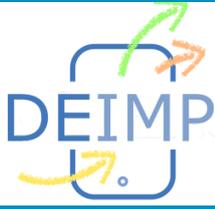
DESCRIPTION	ZEEKO Academy combined their expertise in the fields of psychology, social media and online safety to deliver in-class seminars to pupils from ages 8-12. As part of these workshops, experts from ZEEKO offer three different packages ranging from the CYBER KID seminars for young pupils to the CHATBUDI CHAMP package which advocates a whole-school approach to preventing cyberbullying by offering targeted training for pupils, teachers, school leaders and parents.
METHODOLOGY	The workshops with ZEEKO Academy begin by experts first conducting a class-wide survey with all pupils who will be participating in the workshop. The aim of this survey is to gain an anonymous insight into young pupils' real experience and behaviours when interacting with other in online environments; without fear of being punished by a teacher or parent. From the results of this survey, ZEEKO trainers adapt their workshop material to address the most significant issues affecting young pupils in each class.
RESULTING BENEFITS	By beginning their work with the school by conducting this survey, it allows the trainers to tailor the workshop content to address the real needs of pupils, and to make sure that any unsafe behaviour online is corrected in the classroom. Often with young pupils there is a lack of awareness of the dangers of communicating with others online, the repercussions of cyberbullying and the risks associated with sharing too much information online. As such, these surveys allow educators to identify where pupils are not behaving responsibly online, through an anonymous forum, and to raise their awareness of the dangers of their online behaviour in a safe environment. The surveys with pupils also provide a valuable insight to school leaders, teachers and parents regarding the actual experience of young pupils online.
RISKS	None identified.
WORKABLE – TRANSFERABLE PRACTICES	The use of this survey before commencing awareness raising and education programmes with schools to promote responsible digital citizenship with young pupils is a best practice that could be adopted in all primary schools and in our implementation activities in the DRC project.
NOTES	N/A

Cybersafe Ireland

	
GENERAL INFORMATION	
TOPIC	Internet Safety
TITLE	Kid's Corner
DURATION	N/A
LEAD PARTNER/COORDINATOR	Cybersafe Ireland
PARTNERS/NETWORK	Cybersafe Ireland is a registered charity that aims to provide training, support and guidance to teachers, parents and young people to keep all members of the school community safe online.
WEB LINK	http://cybersafeireland.org/index.php/kids-corner/
RELEVANT DOCUMENTS or OUTPUTS	Published on the Kid's Corner is sample 'Anti-bullying Charter' developed by a youth group from County Wicklow, which highlights some of the key rights and protections that they feel Internet users should have. This is a good example of a charter that has been fully developed by young people and that could be adapted and created as a classroom activity to engage young pupils in promoting online safety in their school.
INSIGHTS	
DESCRIPTION	The Cybersafe Ireland website is a useful information portal where teachers, parents and young people can access advice and information to promote internet safety and to protect young users online. As part of their website, they have a dedicated section called 'Kid's Corner' where projects and publications on the topic of internet safety that have been developed by young people and children are published as examples of best practice.

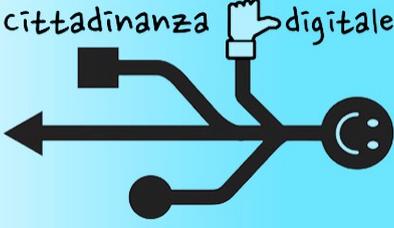
METHODOLOGY	The methodology practiced in this example is to allow an outlet for pupils to create and publish content in a public domain that will allow them to raise awareness about online safety or digital responsibility with their peers,
RESULTING BENEFITS	There are various benefits associated with the ‘Kid’s Corner’; firstly, it gives young people a voice in tackling issues of cyberbullying and in promoting online safety with and for their peers, because projects and works that are developed by young people are published and widely disseminated through the platform. Secondly, this section of the platform contains a range of resources that have been developed by young people – this means that they are interesting and engaging for young people and so teachers can access these materials and adapt them for use in their own teaching practice because they know that the materials will be relevant and applicable to young people in their class. Lastly, with the content published on the website, this can act as a source of inspiration for teachers, young people, schools and youth groups who may wish to develop a similar project to the ones profiled.
RISKS	None identified.
WORKABLE – TRANSFERABLE PRACTICES	Although this outlet for publishing the projects and work of young people is only currently available through the Cybersafe Ireland website, the practice of publishing the projects of young people on this topic can be adapted and implemented in local primary schools in all partner countries. This could include publishing a short newsletter or leaflet where the pupils write the content or dedicating a noticeboard in the school or a corner of the classroom for publishing these materials. If schools have their own websites, they may even consider creating a ‘Kid’s Corner’ on their website also.
NOTES	N/A

Designing and Evaluating Innovative Mobile Pedagogies

	
GENERAL INFORMATION	
TOPIC	Digital Content Creation Communication and Collaboration Problem solving
	Designing and Evaluating Innovative Mobile Pedagogies
DURATION	from: October 2017 to: August 2020
LEAD PARTNER/COORDINATOR	Professor Kevin Burden, University of Hull
PARTNERS/NETWORK	<ul style="list-style-type: none"> - University of Technology Sydney (UTS) - University of Hull (UoH) - Stichting - Hogeschool PXL - CARDET - Global Learning Ltd - TELLC - Grammar School Cyprus) - NUIG and Brendan McMahon
WEB LINK	http://www.deimpeu.com/
RELEVANT DOCUMENTS or OUTPUTS	http://www.deimpeu.com/deliverables.html
INSIGHTS	
DESCRIPTION	Designing and Evaluating Innovative Mobile Pedagogies is a three-year Erasmus+ project with partners in the UK, Australia, Ireland, Cyprus, Belgium and the Netherlands. The project aims to provide guidance and materials to help both in-service and preservice teachers design innovative mobile pedagogies as well as inform stakeholders as they plan and implement future policies.
METHODOLOGY	Design-based research

RESULTING BENEFITS	<p>The project aims to demonstrate how the professional profile of educators across this spectrum can be strengthened to ensure that learning is responsive to the benefits and opportunities afforded by mobile technologies. It seeks to define what transformational learning with mobile technologies looks like and to help stakeholders design and evaluate transformative mobile learning episodes using a bespoke mobile app, developed iteratively over three design cycles. Additionally, the app supports users in evaluating the impact of these transformational lessons, enabling teachers and their school leaders to make more informed judgments about how they invest and deploy these technologies in future. Teacher educators in universities working with the next generation of teachers, teachers and leaders in schools, and policy makers who can legislate for sustainable change at scale will be the direct beneficiaries of this project.</p>
RISKS	<p>N/A</p>
WORKABLE – TRANSFERABLE PRACTICES	<p>The project includes the following activities:</p> <ol style="list-style-type: none"> 1. The creation of a multi-purpose mobile app that will support educators and pre-service teachers in designing and evaluating creative and innovative learning episodes for their students. The project team uses a design-based research methodology to design and construct the app over three iterative cycles. 2. A scoping report informing the app development, involving extensive consultation with experts in the field of mobile learning. 3. Multimedia case studies on the use of the app in 24 partner schools. 4. An online MOOC and various academic papers to disseminate the outputs and findings from the project with a wider audience.
NOTES	<p>N/A</p>

Digital citizenship at school. Competences on the net for parents, students, teachers

	
GENERAL INFORMATION	
TOPIC	Information and data literacy
TITLE	Digital citizenship at school. Competences on the net for parents, students, teachers
DURATION	from May 2015 to May 2017
LEAD PARTNER/COORDINATOR	Istituto Comprensivo Montebello - Parma
PARTNERS/NETWORK	Cassa di Risparmio di Parma Foundation Parma Municipality, Office for Politics for the childhood and school Coinetica Cultural Association Telefono Azzurro Lions
WEB LINK	http://www.cittadini-digitali.it
RELEVANT DOCUMENTS or OUTPUTS	<p>Project documentation (http://cittadini-digitali.it/risorse/)</p> <p><i>Curricolo di Cittadinanza Digitale/Digital Citizenship curriculum</i></p> <p>The publication is the main output published by the Didactic Methodological Group and includes some learning units for students of primary and secondary school, to guide them in the attainment of the certified competencies at the end of the fifth year of primary school, and at the end of the third year of secondary school. (http://www.icverdiparma.gov.it/attachments/article/652/curricolo_cittadinidigitali.pdf)</p> <p>Guide for parents: Genitori digitali, siamo pronti! / <i>Digital parents: we are ready!</i> http://cittadini-digitali.it/wp-content/uploads/2015/12/genitori-digitali-per-invio-mail.pdf</p>

	<p>Other Documents</p> <ol style="list-style-type: none"> 1. Livio Cancelliere, Cyberbullismo: responsabilità di insegnanti e famiglie/ <i>Cyberbullying: responsibilities of the teachers and the families</i> 2. Anna Oliverio Ferraris, Crescere tra reale e virtuale. Gestire i media in casa e a scuola / <i>Growing between real and virtual. How to manage the media at home and at school</i> (Parma, 5 marzo 2016) 3. Silvia Panella e Stefania Caltieri, Patto educativo tra scuola e famiglie per un uso consapevole dei social / <i>Educational agreement between school and families for an aware use of the social media</i> (1st meeting for parents) 4. Silvia Panella e Stefania Caltieri, Intrappolati nella rete (Cyberbullismo- Sexting e Dipendenza da Internet) / <i>Trapped in the Web (Cyberbullying, sexting and internet addiction)</i>. (2nd meeting for parents)
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INSIGHTS

DESCRIPTION	<p>Through this project, the primary schools in the territory of the Municipality of Parma undertook the task to integrate in the scholastic curriculum the education to internet and social network use, adjusting the activities to the different levels of knowledge, abilities and competences of the different school grades.</p> <p>The project focuses on the following topics: safety; the relationship between real and virtual; the dangers deriving from the gap between the potential use of digital tools and the actual knowledge of young users (sexting, gambling, online enticements); the distorted or pathological uses of the web (e.g. cyberbullying); the dependencies that the Internet may cause.</p> <p>The objective of the activities proposed was to pursue the awareness and improve the competences of the students and their families regarding the use of the internet and social network, by creating and experimenting a specific curriculum, that begins in the primary school and ends in the secondary, involving at the same time parents, students and teachers.</p>
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<p>METHODOLOGY</p>	<p>The activities provided for the parents were:</p> <p>a) Informative meetings regarding the aware use of social networks, addressed to the families of the children in the 15 adherent schools;</p> <p>b) creation of a parent workgroup (consisting of a parents' representative for each school involved in the project) for the production of a "code of behaviour" for the use of the social networks. The activity benefitted of the advice of a psychologist and the possibility to access a helpdesk of psychologists for problematic situations.</p> <p>The activities for the students consisted in laboratory work and informational meetings regarding the aware se the intern and social networks.</p> <p>The activities for the teachers were:</p> <p>a) the constitution of a group of teachers (a representative from each school) for the elaboration of a vertical curriculum for digital competences;</p> <p>b) training for teachers through thematic didactic methodological groups;</p> <p>c) training and experimentation in the classrooms to introduce the social networks and the use of the internet in the daily didactical activities.</p>
<p>RESULTING BENEFITS</p>	<ul style="list-style-type: none"> - Elaboration and experimentation of a vertical educational curriculum for primary schools related to the digital competences and to the use of the internet; - Development and strengthening of digital citizenship competences of students, families and teachers; - Creation and strengthening of a territorial network of schools, at municipal level, promoting collaboration among groups of teacher and parents - Active involvement of local stakeholders (policy makers, educational institutions and local authorities) sustaining school activities and institutions and definition of policies for the digital citizenship at local level.
<p>RISKS</p>	<p>The main risks of this small-scale project are related to its financial sustainability, due to the insufficient resources at disposal of the private and public sectors destined to social and cultural activities. This issue derives from the contingent financial situation, connected to the economic cycle and the priority to elaborate economic and social politics on the national level.</p>

<p>WORKABLE – TRANSFERABLE PRACTICES</p>	<p>This local-scale project created two important documents (<i>Digital Citizenship Curriculum</i> and <i>Digital Parents: we are ready!</i>) that can be put at disposal of teachers, parents and school managers country-wise.</p> <p>At the same time, this project gave the possibility to partner Coinetica Association to autonomously develop the initiative “Internauti Consapevoli”, and to the Parma health system to offer to secondary schools the service “Among Salimebene” and the blog “To surf with style”, that gives tools and psychological support, and aims to open a shared discussion on the use of internet, computers and smartphones, as well as raising awareness on the possibilities, dangers and potentialities of the new technologies.</p>
<p>NOTES</p>	<p>The 15 primary schools of the Parma province involved in the projects are: Istituto Comprensivo Albertelli-Newton, Istituto Comprensivo D’Acquisto, IC Ferrari, IC Micheli, IC Toscanini-Einaudi, IC Via Montebello, IC Parmigianino, IC Puccini, IC Giuseppe Verdi, Convitto Nazionale M. Luigia, DD F.Ili Bandiera, IC Sanvitale Fra Salimbene, Istituto De La Salle, Istituto P.G.E. Porta, Istituto San Benedetto.</p>

Digital Skills Toolkit

	
GENERAL INFORMATION	
TOPIC	Digital Content Creation Information and data literacy
TITLE	Digital Skills Toolkit
DURATION	from: October 2017 to: August 2020
LEAD PARTNER/COORDINATOR	Mr. Chris Coward, Principal Research Scientist and Director, Technology & Social Change Group (TASCHA), Information School, University of Washington, Seattle and Michelle Fellows, Research Analyst, TASCHA, consultants to ITU, under the supervision of Susan Schorr, Head Digital Inclusion Division (DID) ITU Telecommunication Development Bureau (BDT) with inputs from Mr. William Natta, Junior Professional, DID, and under the general direction of Kemal Huseinovic, Chief, Infrastructure, Enabling Environment and e-Applications Department (IEE), ITU BDT.
PARTNERS/NETWORK	N/A
WEB LINK	https://www.itu.int/en/ITU-D/Digital-Inclusion/Youth-and-Children/Pages/Digital-Skills-Toolkit.aspx
RELEVANT DOCUMENTS or OUTPUTS	https://www.itu.int/en/ITU-D/Digital-Inclusion/Documents/ITU%20Digital%20Skills%20Toolkit.pdf
INSIGHTS	
DESCRIPTION	This toolkit provides stakeholders with guidance on developing a digital skills strategy. It is intended for policymakers, along with partners in the private sector, non-governmental organizations, and academia. Its overarching aim is to facilitate the development of a comprehensive digital skills strategy at country level. It is also possible to use this guide to focus on selected priorities that require a fresh approach. This toolkit provides policymakers and other stakeholders with practical information, examples, and step-by-step guides to help

	develop a national digital skills strategy. It can also be used to develop policies and programmes to address specific priorities.
METHODOLOGY	Toolkit
RESULTING BENEFITS	This toolkit has aimed to equip policymakers and other stakeholders with practical guidance for developing a digital skills strategy tailored to individual country needs.
RISKS	N/A
WORKABLE – TRANSFERABLE PRACTICES	N/A
NOTES	N/A

Educational robotics as a means of developing students' computational thinking and metacognition

 <p>ΑΡΙΣΤΟΤΕΛΕΙΟ ΠΑΝΕΠΙΣΤΗΜΙΟ ΘΕΣΣΑΛΟΝΙΚΗΣ</p>	
GENERAL INFORMATIONS	
TOPIC	Information Literacy Educational Robotics
TITLE	Educational robotics as a means of developing students' computational thinking and metacognition
DURATION	from: [date] to: 2018
LEAD PARTNER/COORDINATOR	Atmatzidou, P. Aristotle University of Thessaloniki. Faculty of Science. Department of Computer Science. Software and Interactive Technologies Laboratory Doctoral Thesis
PARTNERS/NETWORK	N/A
WEB LINK	http://hdl.handle.net/10442/hedi/42916
RELEVANT DOCUMENTS or OUTPUTS	N/A
INSIGHTS	
DESCRIPTION	The aim of the present thesis is to explore the development of metacognition and computational thinking skills in Educational Robotics activities. Initially, the thesis introduces a didactic model which sets rules and conditions for creating favourable and efficient learning conditions in EP activities. The model is called CPGC +, after Collaboration, Problem, Game, and Competition, while "+" stands for supplementary teachers' supportive interventions which aim to promote students' skills, e.g. computational thinking, metacognitive and problem-solving skills. The dissertation then presents research results exploring techniques for guiding and supporting students to develop metacognition and computational thinking skills. In particular, it focuses on the role of guidance (strong or minimal) and

	on the modality of the response to the prompting questions (written, selection or discussion), as well as on the role of the students' age and gender. The positive results of the research suggest that, in the framework of the CPGC+ model and with the appropriate support and guidance techniques, Educational Robotics can be a dynamic learning tool that supports the development of students' skills, regardless of their age and gender. In addition, incorporating prompts for written answers or for choosing the right answer, positively affects the development of their skills.
METHODOLOGY	Researchers held a series of seminars on educational Robotics in public schools in the region of Thessaloniki. Overall, the study included 164 students from two school grades (Gymnasium and Vocational school students).
RESULTING BENEFITS	The Educational Robotics is an instrument for the development of computational Thinking and metacognition
RISKS	N/A
WORKABLE – TRANSFERABLE PRACTICES	Investigation of evaluation tools for Computational Thinking skills development.
NOTES	N/A

Educational Robotics in primary education



GENERAL INFORMATIONS

TOPIC	<ul style="list-style-type: none"> Information Literacy, Robotics
TITLE	Educational Robotics in primary education. Review of long-term implementation in the school environment through differentiated teaching approaches
DURATION	from: 2010 to: 2015
LEAD PARTNER/COORDINATOR	26 th Primary School of Acharnes / Greece
PARTNERS/NETWORK	29 th Primary School of Acharnes / Greece / Co-operating school
WEB LINK	http://1dim-olympic.att.sch.gr/?page_id=2
RELEVANT DOCUMENTS or OUTPUTS	http://www.etpe.gr/custom/pdf/etpe2536.pdf

INSIGHTS

DESCRIPTION	<p>The last years have seen a growing tendency in introducing educational Robotics in formal education through different approaches, sometimes organized and sometimes disjointed. The 26th and the 29th elementary schools of Acharnon are two public schools co-located and the last six years have introduced educational Robotics in all classes. Depending on the age of the students and the educational objectives, robotic systems are used in varying degrees of complexity. This work reviews the methodological approaches followed by the schools for a smooth integration of educational Robotics in educational practices, the experience of using different robotic systems, their impact on both the pupil's learning and their emotions, and within the overall school climate. The work discusses the problems encountered, the solutions provided and the impact of Robotics programs on students and educators, as well as on the wider school community.</p>
METHODOLOGY	<p>Students start from the basics of the construction and programming of robots, to then move on to trying out, exploring and choosing the best procedures for solving problems. For example, children tackle educational scenarios associated with the problems of everyday life, or enter into challenges such as participating in robotics competition and striving to achieve optimal motion of their robots.</p>
RESULTING BENEFITS	<p>Effective teaching techniques employed during the programme were:</p> <ul style="list-style-type: none"> • Learning by doing approach where pupils work with clear instructions. After successfully completing each learning activity, pupils gain a feeling of self-confidence. • Guided exploration, based on detailed steps. <p>Students initially investigate robot movement and how it changes according to the input received through various robotic components (sensors, actuators, building blocks). Then, pupils move on to more complex activities.</p> <ul style="list-style-type: none"> • Experimentation, where pupils modify the parameters of robotic motion (duration of motion, speed of motion, direction of motion), controlling the overall robot movement. • Working in groups, where students are distributed into groups in order to carry out activities, solve problems and arrive to conclusions. The teamwork strengthens the active participation of the pupils, encourages cooperation and develops the free expression of ideas. • The educator acts as team work coordinator, monitors the work of

	each group and intervenes where necessary.
RISKS	Instructors who are not qualified teachers usually do not follow pedagogical aims and processes, while teaching for robotic contests deprives learning activities from interactivity and pupils' thinking development.
WORKABLE – TRANSFERABLE PRACTICES	The inclusion of the planned/robotic provisions in daily practice of the elementary school is a process of research and of constant reformation and evaluation of teaching practices. The accumulated experience allows us to better understand the pedagogical/educational value of specific tools, overcoming "show off" and "playing with new games" tendencies. Today, there are several tools available, and can be used according to pupils' age and to various instructional requirements. All teachers can easily gain the know-how to operate robotic devices and use them as valuable educational tools.
NOTES	N/A

Empowering Literacy in Adolescents through Creative Engagement with Comics

	
GENERAL INFORMATION	
TOPIC	Digital Content Creation Information and data literacy
TITLE	Empowering Literacy in Adolescents through Creative Engagement with Comics
DURATION	from: October 2017 to: August 2020
LEAD PARTNER/COORDINATOR	N/A
PARTNERS/NETWORK	<ul style="list-style-type: none"> - Institute of Technology and Development (ITD) - CARDET - Meath Partnership - Meath Partnership - INNOVADE - The University of Pitești (UPIT) - The University of Social Sciences (Społeczna Akademia Nauk) - The University of Social Sciences (Społeczna Akademia Nauk)
WEB LINK	http://www.commix-project.eu/en/about
RELEVANT DOCUMENTS or OUTPUTS	http://www.commix-project.eu/elearning http://www.commix-project.eu/en/resources http://www.commix-project.eu/en/news
INSIGHTS	
DESCRIPTION	<p>The Comics (COMMIX) project aims to:</p> <ul style="list-style-type: none"> - address under achievement in basic skills with a focus on literacy through the support of comics and interactive tools; - improve achievement in relevant, high level, and transversal competences by promoting Open Education Resources (OER) and ICT-based training on the integration of comics in education; - support schools to tackle early school leaving. <p>COMMIX argues that collaboration through the use of interactive</p>

	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 11-16 and at-risk students.
METHODOLOGY	Design-based research
RESULTING BENEFITS	Promoting the use of comics in education is the scope of the COMMIX project.
RISKS	N/A
WORKABLE – TRANSFERABLE PRACTICES	<p>The main activities of COMMIX project consist of:</p> <ol style="list-style-type: none"> 1. Research report on the use of comics in education 2. Comics as a genre and review of significant texts 3. Guidelines and ideas for using comics in the development of literacies 4. Sample activities and units for using comics in the development of literacies 5. Commix teacher professional development modules and curricula 6. Commix case studies from European schools 7. Online modules and OER
NOTES	N/A

European Framework for the Digital Competence of Educators: DigCompEdu

GENERAL INFORMATION	
TOPIC	Information and data literacy, Communication and collaboration, Digital content creation, Safety Problem solving
TITLE	
DURATION	from: October 2017 to: August 2020
LEAD PARTNER/COORDINATOR	European Commission's Joint Research Centre (JRC), on behalf of the Directorate-General for Education, Youth, Sport and Culture (DG EAC). European union 2017
PARTNERS/NETWORK	N/A
WEB LINK	https://ec.europa.eu/jrc/en/digcompedu
RELEVANT DOCUMENTS or OUTPUTS	https://ec.europa.eu/jrc/sites/jrcsh/files/digcompedu_leaflet_en-2017-10-09.pdf https://ec.europa.eu/jrc/en/publication/eur-scientific-and-technical-research-reports/european-framework-digital-competence-educators-digcompedu https://ec.europa.eu/jrc/sites/jrcsh/files/figure_2_2018-01-corr-cropped.png https://ec.europa.eu/jrc/en/digcomp https://ec.europa.eu/jrc/en/digcomporg mailto:christine.redecker@ec.europa.eu?subject=DigCompEdu%20info%20request
INSIGHTS	

DESCRIPTION	DigCompEdu is a scientifically sound background framework which helps to guide policy and can be directly adapted to implement regional and national tools and training programmes. In addition, it provides a common language and approach that will help the dialogue and exchange of best practices across borders. The DigCompEdu framework is directed towards educators at all levels of education, from early childhood to higher and adult education, including general and vocational training, special needs education, and non-formal learning contexts. The European Framework for the Digital Competence of Educators (DigCompEdu) responds to the growing awareness among many European Member States that educators need a set of digital competences specific to their profession in order to be able to seize the potential of digital technologies for enhancing and innovating education.
METHODOLOGY	Conceptual framework
RESULTING BENEFITS	It aims to provide a general reference frame for developers of Digital Competence models, i.e. Member States, regional governments, relevant national and regional agencies, educational organisations themselves, and public or private professional training providers.
RISKS	N/A
WORKABLE TRANSFERABLE PRACTICES	– SELFIE asks questions to school leaders, teachers and students and based on this feedback it provides a picture, that is a SELFIE: a snapshot of the school’s strengths and weaknesses in their use of digital technologies for learning and OER
NOTES	N/A

Girls into Global STEM project

	
GENERAL INFORMATION	
TOPIC	Digital Content Creation Problem Solving
TITLE	Girls into Global STEM project
DURATION	from: October 2017 to: August 2020
LEAD PARTNER/COORDINATOR	The University of Hull (UK)
PARTNERS/NETWORK	<ul style="list-style-type: none"> - Practical Action (UK) - Centre for Citizenship Education (PL) - Centre for Advancement of Research and Development in Educational Technology Ltd-CARDET (CY) - University of Boras (SE) - de Ferrers Academy (UK) - Zespole Szkół w Siennicy (PL) - The Grammar School, Nicosia (CY) - Sandgärdskolan (SE)
WEB LINK	http://gigsproject.eu/
RELEVANT DOCUMENTS or OUTPUTS	http://www.gigstoolkit.com/ebooks.html http://www.gigstoolkit.com/resources.html http://www.gigstoolkit.com/online-training-course.html http://www.gigstoolkit.com/research-and-dissemination.html http://www.gigstoolkit.com/
INSIGHTS	
DESCRIPTION	<p>The 'Girls into Global STEM' project aims to create materials and establish new methodologies that schools across Europe and in the wider world can use. At the moment, we know that many more boys than girls are interested in STEM subjects and in going on to STEM subjects in higher education and in their careers. We also know that an area of STEM that particularly interests girls is when STEM skills are used to improve the lives of others, including those in the developing world. That is why the project is focussed on a number of global issues</p>

	and ways in which STEM based skills can be used to help lift people out of poverty.
METHODOLOGY	Global learning methodologies into their STEM teaching
RESULTING BENEFITS	The project aims to demonstrate how the professional profile of educators across this spectrum can be strengthened to ensure that learning is responsive to the benefits and opportunities afforded by mobile technologies.
RISKS	N/A
WORKABLE – TRANSFERABLE PRACTICES	<ol style="list-style-type: none"> 1. To increase the employment potential of young Europeans, especially girls, by improving their interest and engagement in STEM linked with wider awareness of global issues and facilitated through digital skills. 2. To support teachers in the embedding of digital skills and global learning methodologies into their STEM teaching 3. To integrate digital literacy set within a global context into STEM education policy and practice
NOTES	<p>Twitter: #gigsproject</p> <p>FB: #GIGS STEM Project</p>

Happy onLife Toolkit



GENERAL INFORMATION	
TOPIC	Safety Information and data literacy
TITLE	Self-reflection tool for digitally capable schools (SELFIE)
DURATION	from: October 2017 to: August 2020
LEAD PARTNER/COORDINATOR	JRC developed the Happy Onlife toolkit sponsored by the Italian Safer Internet Centre and Ministry of Education, University and Research (MIUR, 2016).
PARTNERS/NETWORK	N/A
WEB LINK	https://web.jrc.ec.europa.eu/happyonlife/
RELEVANT DOCUMENTS or OUTPUTS	http://publications.jrc.ec.europa.eu/repository/handle/JRC100030 https://github.com/happyonlife/hol https://play.google.com/store/apps/details?id=ec.europa.publications.happyonlife&hl=en https://web.jrc.ec.europa.eu/happyonlife/webgame_en.html
INSIGHTS	
DESCRIPTION	JRC researchers have conceived and developed the Happy Onlife product as a peer and media edutainment toolkit promoting safe and responsible uses of ICT among adults and children (8 - 12 yrs. old). It comprises a set of resources and best practices to raise awareness

	about ethical and educational challenges of ICT, including online safety risks for privacy, cybersecurity and cyberbullying affecting children's life.
METHODOLOGY	Happy Onlife is a toolkit, including a game, for children, parents and teachers, aimed at raising awareness of the risks and opportunities of the internet and promoting the best online practices. The game and toolkit are proposed as work in progress to be extended with the contributions of all stakeholders applying innovative research methods for formal, informal and participatory education in the use of digital technologies with children aged between 8 and 12.
RESULTING BENEFITS	JRC infield events highlighted that Happy Onlife opens a path to empower teachers and parents in actively guiding children to become smarter, responsible, and respectful when using digital technologies and help them understand opportunities, skills, risks and consequences behind the decisions they make online.
RISKS	N/A
WORKABLE – TRANSFERABLE PRACTICES	By playing with Happy Onlife, children and adults can: <ul style="list-style-type: none"> • improve privacy, safety awareness and skills • co-create online research tools, voicing their needs and issues playfully • enhance their digital skills individually and collectively • participate actively in research while giving their feedback on the Happy Onlife toolkit.
NOTES	Since its release on August 2015, until October 2016, more than 1500 IT paper kits were distributed for free in 16 Italian regions, and more than 2186 worldwide installations were downloaded for free from online stores.

iDecide

	
GENERAL INFORMATION	
TOPIC	Information and data literacy
TITLE	iDecide
DURATION	from: October 2017 to: August 2020
LEAD PARTNER/COORDINATOR	Ministry of Education and Culture, Cyprus (MOEC) – Coordinator
PARTNERS/NETWORK	<ul style="list-style-type: none"> • UNIVERSITATEA DIN PITESTI (UPIT) • UNIVERSITY OF PELOPONNESE (UOP) • Centre for the Advancement of Research and Development in Educational - Technology (CARDET) • Louth Meath Education and Training Board (LMETB) • Municipio de Lousada • INNOVADE LI (InnovADE)
WEB LINK	https://idecide-project.eu/index.php/en/
RELEVANT DOCUMENTS or OUTPUTS	https://idecide-project.eu/index.php/en/ https://play.google.com/store/apps/details?id=org.cardet.idecide
INSIGHTS	
DESCRIPTION	The project iDecide aims to develop an innovative toolkit and induction course to support evidence-based policy making that can lead to the reduction of disparities in learning outcomes and marginalization, by supporting school leaders, school staff, and policymakers to engage in shared and inclusive decision making. By implementing the toolkit and collecting rich data, we aim to understand the complexities of how decisions at school level influence marginalized groups and develop concrete recommendations for policy and practice on how to engage in shared decision making, giving voice to all stakeholders.
METHODOLOGY	Quantitative (questionnaires) and Qualitative research (interviews and focus groups, ethnographic method/ observations)

RESULTING BENEFITS	<ol style="list-style-type: none"> 1. Development of an innovative toolkit and an induction course - (face-to-face & on-line) for school leaders and school staff, based on effective principles and processes to promote shared decision making regarding the development, implementation, evaluation and improvement of inclusive policies. 2. Evidence-based policy-making which can lead to the reduction of disparities in learning outcomes and marginalisation in schools. 3. Support the EU in reducing disparities in learning outcomes affecting learners from disadvantaged backgrounds. 4. Strengthen cooperation & exchange of information and good practices between different areas of Europe
RISKS	N/A
WORKABLE – TRANSFERABLE PRACTICES	<ol style="list-style-type: none"> 1. The toolkit The toolkit constitutes a user-friendly package with various resources to support school leaders and school staff to make decisions and engage all stakeholders in inclusive decision making at the school and policy level. 2. eLearning platform The iDecide eLearning platform includes online courses and useful material for school leaders, school staff, parents and students to make inclusive decisions at the school and policy level.
NOTES	N/A

Internet Safety Guide for Parents - ZEEKO Academy

	
GENERAL INFORMATION	
TOPIC	Internet Safety
TITLE	Internet Safety Guide for Parents
DURATION	N/A
LEAD PARTNER/COORDINATOR	ZEEKO Academy
PARTNERS/NETWORK	N/A
WEB LINK	https://zeeko.ie/wp-content/uploads/2018/07/Zeeko-Internet-Safety-Guide-FINAL1.pdf
RELEVANT DOCUMENTS or OUTPUTS	<p>ZEEKO Academy has developed a set of Internet Safety Guidelines for parents and teachers to support them in their work of protecting young pupils online. The 'Internet Safety Guide – Empowering Children to Protect Themselves Online through Education' offers to parents and teachers a 220-page handbook which covers the following topics:</p> <ul style="list-style-type: none"> • Your child's digital footprint • Safely social • How to talk to your child in their language • The virtual school yard bully • Stranger danger • Excessive internet use • Safety settings • Devices • Inappropriate content <p>While the content of these guidelines is restricted by copyright, they provide a good overview of the type of topics that should be addressed in training materials for parents and teachers, and so they serve as an example of good practice for the DRC project.</p>

INSIGHTS	
DESCRIPTION	The Internet Safety Guidelines developed by experts in ZEEKO Academy offer parents and teachers advice and guidance on how to protect their children from the dangers of online environment. The aim of these guidelines is to support parents and teachers to educate themselves about online safety, so that they can then work to protect their children and pupils from common pitfalls of social media, online games, online communication and collaboration tools, etc. By using the content of these guidelines, it is hoped that parents and teachers can teach their children and pupils how to be responsible Internet users.
METHODOLOGY	The Guidelines provide support to parents and teachers in the form of useful information, tips and advice, which cover the following topics: <ul style="list-style-type: none"> • Set safety settings • Protect your child's digital footprint • Talk your kid's language • Protect against cyberbullying and stranger danger • Defend against excessive internet use • Safeguard against inappropriate content
RESULTING BENEFITS	The benefit of using these Guidelines is that they can support parents and teachers to better understand some of the pitfalls and dangers which are present in online environments and which pupils could be susceptible to. Also, rather than just providing information to parents and teachers in one-off workshops, it is useful to provide parents and teachers with a set of accessible guidelines which they can re-visit if they need additional support.
RISKS	None identified
WORKABLE – TRANSFERABLE PRACTICES	As mentioned above, it is a good idea to present information and advice for parents and teachers in the format of guidelines that they can continue to reference beyond attending a workshop – this ensures that parents and teachers develop a full and complete understanding of how to keep young pupils safe online and to support them to become responsible digital citizens. As such, the DRC project could adopt this approach of developing a handbook with advice and guidance for parents and teachers on the topic of digital responsibility.
NOTES	N/A

Internet safety interactive material for elementary and middle school children

 <p>ΠΑΝΕΠΙΣΤΗΜΙΟ ΠΕΙΡΑΙΩΣ UNIVERSITY OF PIRAEUS</p>	
GENERAL INFORMATIONS	
TOPIC	Internet Safety
TITLE	Internet safety interactive material for elementary and middle school children
DURATION	from: [date] to: April 2013
LEAD PARTNER/COORDINATOR	Postgraduate Diploma Thesis University of Piraeus, Department of Digital Systems, Postgraduate Programme " e-Learning
PARTNERS/NETWORK	N/A
WEB LINK	http://dione.lib.unipi.gr/xmlui/handle/unipi/8547
RELEVANT DOCUMENTS or OUTPUTS	The material that was created consists of two distinct parts: an electronic interactive guide, that is suitable for children and is titled "Security on the Internet (Internet Safety) for children Elementary and high school", and the digital informational guide created for parents and educators, entitled "Internet safety for parents and teachers".
INSIGHTS	
DESCRIPTION	The project aims to create a digital, interactive guide which deals with the issue of safe use of the Internet. It addresses elementary and secondary schools (children 9-14 years of age), as well as parents and teachers, helping them to discover the digital world of the Internet with the maximum possible safety.
METHODOLOGY	Utilization of the QuickLessons web design and course development tool
RESULTING BENEFITS	The QuickLessons features were used, so that the final product is easy to use, simple and understandable and boasts multimedia content which is attractive to children and of high aesthetics and functionality. A simple and colourful version of the QuickLessons environment was used in order to become attractive to children.

RISKS	N/A
WORKABLE – TRANSFERABLE PRACTICES	Utilization of a course authoring tool to develop a series of lessons on internet safety.
NOTES	N/A

Internetopoli - Ludoteca del Registro.it

	
GENERAL INFORMATIONS	
TOPIC	Information and data literacy
TITLE	Internetopoli - Ludoteca del Registro.it
DURATION	form: 2012 to: on going
LEAD PARTNER/COORDINATOR	Registro.it - Institute of Information Technologies and Telematics of National Research Council
PARTNERS/NETWORK	N/A
WEB LINK	http://www.internetopoli.it/ - http://www.ludotecaregistro.it/
RELEVANT DOCUMENTS or OUTPUTS	<p>Didactical tools: http://www.ludotecaregistro.it/offerta-didattica/</p> <ol style="list-style-type: none"> 1. Presentation of the project 2. Brochure 3. Description of the cycles 4. Teachers' Guide to Internetopoli (http://www.internetopoli.it/wp-content/themes/internetopoli/template-parts/guida/mobile/#p=10) 5. Downloadable Table game "Internetopoli – The Game" <p>For teachers: http://www.ludotecaregistro.it/per-gli-insegnanti/, that includes documents of close examination of toons and games proposed by the project.</p> <p>For parents: http://www.ludotecaregistro.it/per-i-genitori/, that provides essential instructions, suggestions and tips for a correct navigation of the internet and links to web resources and videos.</p>
INSIGHTS	

<p>DESCRIPTION</p>	<p>The Ludoteca of the Registro.it is promoted by Registro.it (the Italian authority for the registration of the Internet domain .it) and managed by the Institute of Computer Science and Telematics (IIT) of the National Research Council (CNR).</p> <p>The educators of the Ludoteca aim to help the young web surfers to be conscious of the issues and opportunities that the world of the Internet has to offer. It is a free project, open to all Italian schools, that wants to stimulate and strengthen awareness and self-awareness, critical thinking, interactivity and critical elaboration of contents among the young students.</p> <p>The main target are children in primary school (ages 7-11), where the project teaches how to make a responsible daily use of the technological tools at their disposal: pc, tablet, smartphone. In order to reach this objective, the Ludoteca offers an educational course focused on the use of the web, that begins in the primary school, and combines gaming and learning, to stimulate interest and curiosity towards the Internet, and, at the same time, a correct understanding of its values and risks.</p>
<p>METHODOLOGY</p>	<p>Ludoteca del Registro.it uses a set of tools based on a playful approach and the use of gamification.</p> <p>Accessible online is the cartoon series "Safe surfing with Professor Itti" (http://www.ludotecaregistro.it/cartoni-e-giochi/), that introduces to the topics related to safe navigation: computer viruses, privacy policies, copyright, reliability of online contents.</p> <p>Ludoteca 2.0 provides activities for classes that have the possibility to use tablets to go online and create multimedia contents.</p> <p>The App "Internetopoli – The Internet City" is the main tool of the project. Targeted at primary school students, it aims to help teachers and parents that want to educate "digital native" students and children to a responsible use of the Internet, and to favour the confrontation with the potentialities of the Web. The application, downloadable on www.internetopoli.it, creates the virtual environment of a city, where children can begin a journey divided in 8 gaming levels: 1. How Internet works; 2. Domain names; 4-5. Aware and safe use; 6. The opportunities of the Web; 7 -8. Smart cities and Internet of things. The contents appear on "info points" (informative windows), "hotspots" (docs of close examination) in the city, keywords, video tutorial, toons, quizzes.</p>

	<p>In the “Games” section, users can find 4 different games online: “Quiz on the net”, “Memory”, “Find the couple”, “Gioco dell’Oca” (game similar to the English “Snakes and Ladders”).</p> <p>Teachers can download the table game (Internetopoli - the Game), that offers the possibility to work in groups on the topics treated in the App during the lessons.</p> <p>Internetopoli creates a multifunctional learning environment, where the role of the teachers is to guide the students in building their own activities, that correspond to the exigencies of the single students or the entire class groups, and to challenge them to use Internetopoli as a teaching tool, according to the model of the flipped lesson.</p>
RESULTING BENEFITS	<ul style="list-style-type: none"> - To stimulate among students an attitude the most possible positive, curious and participative towards the Web. - To teach to students the enormous possibilities offered by the Web to enrich their own theoretical and practical knowledges - To put in disposition of teachers a set of tools on Internet to drive their students in the responsible use of the Web. - To create spaces and experiences of interchange and sharing among old and new didactic methodologies.
RISKS	<p>The success of this project depends on the effective interest of the teachers in developing activities and programmes to address Digital Citizenship, and their will to include dedicated tools in their didactical programmes. It requests a positive attitude towards innovation in teaching and didactical practices, thus the overcoming of the resistances to the change.</p>
WORKABLE – TRANSFERABLE PRACTICES	<p>In 2015, Ludoteca Registro.it proposed the related project of peer education “Let’s bit!”, with the aim to put in contact two generations of digital natives: secondary school students will become junior educators of primary school children, actively collaborating with the local staff of the Ludoteca and primary school teachers in the lessons devoted to the aware use of the Web.</p>
Note	N/A

Living with social media - Una vita da social



GENERAL INFORMATIONS

TOPIC	Safety
TITLE	Una vita da social
DURATION	2013 – on going
LEAD PARTNER/COORDINATOR	Italian Postal and Communication Police
PARTNERS/NETWORK	<p><i>In collaboration with</i> Ministry of Education, University and Research (MIUR)</p> <p><i>Business partners</i> Facebook, Fastweb, Google, 3(H3G), Libero, Microsoft, Poste Italiane, Telecom, Symantec, Skuola.net, Vodafone, Virgilio.it, Wind, Youtube, Gruppo Eventi</p>
WEB LINK	https://www.facebook.com/unavitasocial https://www.commissariatodips.it/vita-da-social.html
RELEVANT DOCUMENTS or OUTPUTS	<p>PDF File Documents</p> <ul style="list-style-type: none"> - <i>I consigli per una vita da social</i> - <i>Il progetto "Una vita da social"</i> - <i>Giovani e social network</i> - <i>Le tappe del truck</i> <p>Social research activities will be carried out during the project, in order to investigate students', teachers' and parents' levels of awareness on the risks and dangers of the Web. At the end of the project, a conclusive report will be produced, with a final evaluation.</p>

INSIGHTS

<p>DESCRIPTION</p>	<p>The project “Una vita da social” is an itinerant face-to-face information and training campaign targeted at students aged 8-19, their parents and teachers, that involves meetings and training activities. The initiative interests all the national territory, and the meetings take place both in the schools and in public places. The objective is to prevent episodes of violence, oppression, defamation, nuisances, stalking and bullying online, and to achieve a correct perception of the importance of legal online behaviours, as well as to develop a collective consciousness of the risks and dangers connected to an incorrect and illegal use of the web and other tools online.</p> <p>The project implementers travel on a truck branded with the logo of the project, that is parked in schools and squares and catches the passer-by’s attention, interesting them in the initiative.</p> <p>The students can pass on their positive message against cyberbullying and illegal web practices using the hashtag #unaparolaebacio (<i>one word and one kiss</i>) and through a logbook.</p>
<p>METHODOLOGY</p>	<p>The contents developed in each meeting are:</p> <p>a) the Internet: advantages and risks connected to new technologies;</p> <p>b) focus on social networks, cyberbullying, child grooming.</p> <p>The meetings are structured 3 modules of 1 hour, addressed to respectively students, teachers and parents.</p> <p>Informative documents are provided to the parents (Importance of the dialogue with their children) and the teachers (Dialogue with students and possible didactical activities).</p>
<p>RESULTING BENEFITS</p>	<ul style="list-style-type: none"> • Development of a tool able to promote a more complete reflection on the responsible and legal use of the social networks for the prevention of compulsive illegal behaviours; • Dissemination of tools to control and restrict internet access addressed to parents and teachers, and of the relative instruction for the installation and use of the specific software; • From the beginning of the project, active involvement of: 1,3 million students both in outdoor meetings and in school, 109.125 parents, 61.451 teacher, for a total of 9.748 scholastic Institutes, 190 cities reached on the national territory, and two twitter and Facebook profiles with over 121.000 likes and 12 million monthly contacts on topics related to online safety.

<p>RISKS</p>	<p>The main risk of this kind of initiatives is represented by the difficulty to involve the parents, who, in many cases, do not perceive clearly the potential risks related to an unsafe internet use. The promoters of the initiative refer that the success of this initiative depends on the active interest of the school managers and/or their collaborators (e.g. digital animators), when they are positive to the employment of resources, and when willing to include activities relating responsible Digital Citizenship.</p>
<p>WORKABLE – TRANSFERABLE PRACTICES</p>	<p>In addition to the direct impact on children and parents, the expectation is that the modules addressed to the teachers, that focus on possible didactical activities, will be the opportunity to organize local initiatives for a larger number of students and schools. The achievement of this goal will be made easier thanks to the participation of those teachers responsible for digital animation in their schools.</p>

Maker@scuola

	<h1>Maker@scuola</h1> <p>Stampanti 3D nelle scuole dell'Infanzia e Primaria</p>
GENERAL INFORMATIONS	
TOPIC	Creation of digital content
TITLE	Maker@scuola
DURATION	from: 2014 to: on going
LEAD PARTNER/COORDINATOR	INDIRE – Istituto Nazionale Documentazione Italiana Ricerca Educativa
PARTNERS/NETWORK	N/A
WEB LINK	http://3d.indire.it/
RELEVANT DOCUMENTS or OUTPUTS	<p>in3Dire, a single board computer (SBC) based server that provides a set of web services dedicated to 3d modelling and printing through a private Wi-Fi network:</p> <ol style="list-style-type: none"> 1) Owncloud: freeware software for file sharing; 2) SugarCAD: cad for 3D modelling and .stl file generation, born and developed within the "Maker@Scuola" research project, allows teachers, students and makers to shape their ideas; 3) Octoprint: print management software and creation of models generated by SugarCAD or other 3D modelling software; 4) Wordpress: the writing environment for 3D print experiences, in a blog-like format. <p>in3Dire can be downloaded for free, after registering on the website of the project.</p>
INSIGHTS	
DESCRIPTION	<p>The "Maker@School" project analyses the details of the "Maker Model" applied to didactics. The research carried out by Indire intends to investigate possible interactions between the working methods of "craftsmen 2.0" and student learning schemes. The aim is to verify whether these models, replicated in class, can contribute to overcoming traditional education methods, and support more up-to-date innovative didactics, where pupils become protagonists of their learning.</p>

METHODOLOGY	<p>The laboratorial activities use the Think-Make-Improve (TMI) methodology. The TMI is a didactic cycle that aims to increase the awareness of the students through reflection, hypothesizing, attempt and making mistakes to find the solution to a problem. The TMI cycle finds its foundation in the process of problem solving, and always begins with a problem to be solved by the children, who have to plan the proper tools, elements and more. The problem is dealt with on the pragmatic level by building an object, and during this activity the TMI method leads the children to individuate their mistakes, undo them and re-plan their actions, in order to improve the results.</p> <p>The Share-ing philosophy behind the project stimulates collaboration and sharing of knowledge, facilitating the dialogue among peers and generating social self-regulation, assertiveness and personal responsibility.</p> <p>Finally, the Haker-ing approach applied wants to analyse the functioning of certain objects, decomposing and recomposing them and to use the knowledge acquired to create new objects.</p>
RESULTING BENEFITS	<p>The inclusion in the didactic program of the “Maker” activity allows to achieve some important results:</p> <ol style="list-style-type: none"> 1) development of logical-mathematics, scientific and linguistic competences in the students; 2) experience a more pragmatic aspect of learning, through a participative and involving approach that helps teachers and students to develop a feeling of affiliation to the school; 3) educate to re-use objects and optimise resources; 4) educate to a positive approach to the resolution of the problems where the error is a moment of reflection and not a failure; 5) create a bridge between the scholastic environment and the external world, by giving to new competences the students, that they can easily apply outside the school. 6) activate processes of analysis and auto analysis of the practices, knowledges and abilities.
RISKS	<p>The main risks and the strongest obstacles to this project are connected to the technological adequacy of the Italian schools. The National Plan for the Digital School - PNSD promoted the introduction of the LIMs (multimedia interactive blackboards) in schools, while only few schools are equipped with hardware and laboratories dedicated to robotics and 3D printing, even if the last few years registered</p>

	improvements in the numbers.
WORKABLE – TRANSFERABLE PRACTICES	<p>In September 2016, the initiative “Primary 3D” was carried out, in order to adapt the already existing project for pre-primary school “Building Toys with the 3D Printer” to the necessity of primary school students.</p> <p>In 2017, a new project started: “The hydroponic greenhouse at school – a new way to observe and study a natural phenomenon”. The aim is to support scientific educational pathways for pre-primary and primary school, through observation, experimentation and modelling of the phenomenon observed.</p> <p>During the school year 2017/18, the research on the use of 3D printers continued, involving more than 100 schools. Indire’s researchers aim to promote continuity between pre-primary and primary school, focusing on the educational curriculum and the development of competencies.</p>
NOTES	N/A

MENTEP

	
GENERAL INFORMATION	
TOPIC	Information and data literacy
TITLE	MENTEP (MENToring Technology-Enhanced Pedagogy)
DURATION	from: March 2015 to: May 2018
LEAD PARTNER/COORDINATOR	European Schoolnet (www.europeanschoolnet.org), a network of 30 Ministries of Education from across Europe
PARTNERS/NETWORK	16 partners in 13 countries: Cyprus, Czech Republic, Finland, France, Greece, Estonia, Italy, Lithuania, Spain, Portugal, Slovenia
WEB LINK	http://mentep.eun.org
RELEVANT DOCUMENTS or OUTPUTS	http://mentep.eun.org/c/document_library/get_file?uuid=86906af4-c4d9-492c-8ef9-a35aa78486a1&groupId=5467409 http://mentep.eun.org/c/document_library/get_file?uuid=220631df-253f-4396-90fe-dac9726200d4&groupId=5467409 http://mentep.eun.org/c/document_library/get_file?uuid=11c92a86-d118-4eb9-a019-6edf12d35fd9&groupId=5467409 http://mentep.eun.org/c/document_library/get_file?uuid=07097920-3c9e-4346-9b38-80f4b902ea1e&groupId=5467409
INSIGHTS	
DESCRIPTION	<p>The MENTEP (MENToring Technology-Enhanced Pedagogy) project addresses the need in Europe for teachers able to innovate using ICT in their classroom and for improved data on teachers' digital competence. It also tackles the need to enhance the uptake of ICT in teaching and learning, to promote stronger coherence between different EU and national transparency and recognition tools, and strengthen the professional profile of the teaching profession. Based on this premise, MENTEP investigates the potential of an online self-assessment tool to empower teachers to progress in their</p>

	Technology-Enhanced Teaching (TET) competence at their own pace.
METHODOLOGY	MENTEP policy experiment
RESULTING BENEFITS	<ul style="list-style-type: none"> • Develop a reliable, user-friendly and sustainable tool for teachers to self-assess progress in Technology-Enhanced Teaching (TET) competence; • Test the tool's usefulness, its effect on TET competencies and peer learning; • Provide policy-makers with a national and EU picture of teachers' TET competency, its evolution over a school year and training needs; • Identify optimal conditions for the tool to be used; • Disseminate and sustain the tool, the experimental approach and the findings; • Investigate the feasibility of European-wide certification of TET competence; • Increase national capacity in running field trials and policy experimentation.
RISKS	N/A
WORKABLE – TRANSFERABLE PRACTICES	<ul style="list-style-type: none"> • Development of the TET-SAT online assessment that aims to help teachers; • Develop digital pedagogical competence; • Engage more actively in reflecting on their pedagogical practice using ICT, stimulated by a structured self-assessment exercise providing feedback according to five levels of progression; • Self-direct their learning and develop their competence whenever they want, at their own pace, extending professional development opportunities to informal online learning environments; • Establish a personal competence profile which can be compared to other teachers; • Access a tailored ecosystem of European and national training resources to further develop their competencies according to need or interest.
NOTES	N/A

Methodologies of collaborative creation of digital artefacts by students

	
GENERAL INFORMATIONS	
TOPIC	Information Literacy
TITLE	Methodologies of collaborative creation of digital artefacts by students
DURATION	N/A
LEAD PARTNER/COORDINATOR	Aegean University
PARTNERS/NETWORK	N/A
WEB LINK	http://www.etpe.gr/custom/pdf/etpe2490.pdf
RELEVANT DOCUMENTS or OUTPUTS	N/A
INSIGHTS	
DESCRIPTION	The aim of this work is to introduce specific methodologies of cooperative creation of digital artefacts by students. These artefacts relate to the collaborative construction of (a) digital posters, (b) digital stories, (c) digital card games (“snake”). It is proposed that a combination of the collaborative methods “Jigsaw”, “Inquiry Groups”, “Structured learning teams”, “Focused list”, “Roundtable”, “Think-Pair-Share” and “Three stages interview”. These methodologies have been tested in practice with positive results.
METHODOLOGY	Literature review and implementation of methodologies in practice.
RESULTING BENEFITS	Guidelines of teaching practices.
RISKS	N/A

<p>WORKABLE – TRANSFERABLE PRACTICES</p>	<p>A. Teaching strategy of digital poster creation</p> <ol style="list-style-type: none"> 1. Selection of digital tool 2. Send poster template link to pupils 3. Individual thinking process 4. Sharing with group 5. Digital poster creation <p>B. Teaching strategy of collaborative creation of digital presentations / stories</p> <ol style="list-style-type: none"> 1. Individual thinking process 2. Sharing with group 3. Creation of digital presentation / story (whole class or groups of pupils) <p>C. Creation of “Snake game”</p> <ol style="list-style-type: none"> 1. Collection of resources to be included in game boxes 2. Separation of class into small groups 3. Selection of resources to be included in game 4. Design of game board 5. Design of game cards 6. Creation of the game
<p>NOTES</p>	<p>N/A</p>

MySelfie - Primary Anti-Cyber Bullying Resource

GENERAL INFORMATIONS	
TOPIC	Cyberbullying & Digital Drama
TITLE	MySelfie - Primary Anti-Cyber Bullying Resource
DURATION	N/A
LEAD PARTNER/COORDINATOR	Webwise, the Irish Safer Internet Centre
PARTNERS/NETWORK	Webwise is the Irish Internet Safety Awareness Centre which is co-funded by the Department of Education and Skills and is co-financed by the European Union’s Connecting Europe Facility.
WEB LINK	https://www.webwise.ie/myselfie-wider-world/
RELEVANT DOCUMENTS or OUTPUTS	<p>This programme has been developed as a series of 5 interactive online lessons that can be used with primary school-aged children to tackle the issue of cyber-bullying in Irish primary schools. Interactive lessons are presented as a series of simulation animation videos, supported by worksheets and handouts for young learners to complete in class or as part of their homework.</p> <p>These digital resources are supported by a teacher’s handbook and a parent’s handbook. By involving both teachers and parents in supporting young learners to tackle instances of cyber-bullying, this programme advocates a ‘whole-school’ programme to promote safe</p>

	internet use among primary school-aged children.
INSIGHTS	
DESCRIPTION	<p>The Primary Anti-Cyber Bullying Teachers' Handbook is an SPHE resource developed to engage 5th and 6th class primary school students on the topic of cyber bullying. A series of short animations are the centre-piece of the resource. These will help students develop the skills and understanding to be responsible, socially conscious and effective internet users, as they explore social networks for the first time.</p> <p>The MySelfie programme provides interactive lessons for primary school teachers to use in the classroom to deliver content on cyber-bullying to young learners. These interactive lessons are arranged as five separate lessons, as described below:</p> <ul style="list-style-type: none"> • Lesson 1 - My World Online This lesson will teach young learners how to reflect on their use of the internet and will help them consider the roles it plays in their lives. • Lesson 2 - What is Cyber Bullying? This lesson deals with exclusion as a form of bullying and gives young learners opportunities to empathize with victims and intervene in a positive and safe way. • Lesson 3 - How Bullying Feels. Online bullying can result in and be caused by strong emotions, this lesson gives young learners an opportunity to explore the emotions involved. • Lesson 4 - You've Been Framed. This lesson explores the topic of digital photo sharing and will help young learners to become more responsible in their photo sharing practices. • Lesson 5 - #Up2Us In this lesson, young learners will be given an opportunity to devise guidelines for taking and sharing photos online and for better internet and technology use in general.
METHODOLOGY	Teachers are encouraged to use this suite of digital resources in a whole-group setting, but where learners have access to personal iPads they can complete some of the activities in smaller groups or pairs.

	<p>The following is an overview of the methodology for each lesson:</p> <ul style="list-style-type: none"> • Lesson 1 includes two activities that can be completed in the classroom - 'My Internet' where learners are encouraged to reflect on how they use the internet and to share their favourite websites; and 'Technology and Safety Concerns through the Ages' which is presented as a worksheet. • Lesson 2 includes a Webwise animation, which is available through the web portal, and a worksheet called 'What can you say?' As part of this lesson, young learners are encouraged by their teachers to show the cartoon to their parents at home and complete Worksheet 2.1: What can you say? This activity will encourage young learners and parents to think about how they should respond to cyber bullying. • Lesson 3 includes 4 worksheets to complete after they watch further anti-cyber-bullying animations. These worksheets are on the topics of: 'the emotions involved in cyber-bullying', 'my side of the story', 'crack the anti-cyber bullying code' and 'your problems solved'. • Lesson 4 includes an animated video called 'The Photo' which is accompanied by a worksheet 'Going viral - How photo sharing can get out of hand'. These activities aim to highlight with young learners that anything they share online can be shared and is no longer private. • In Lesson 5 learners are encouraged to agree an online code where they devise guidelines for taking and sharing photos online and for better Internet and technology use in general. Once drafted, these guidelines can then be displayed in the classroom to encourage learners to practice safe online behaviour.
<p>RESULTING BENEFITS</p>	<p>By involving both teachers and parents through interactive resources and worksheets, these Webwise resources advocate a whole-school approach tackling the issue of cyber-bullying, which is of benefit to young learners because as we know, cyber-bullying primarily happens outside of school where young learners are bullied even at home.</p> <p>In addition, with these digital resources being presented as a series of animated simulation videos, primary school students can learn about cyber-bullying and how to make sure they stay safe online in <u>an</u> engaging way.</p>
<p>RISKS</p>	<p>None identified.</p>

WORKABLE – TRANSFERABLE PRACTICES	These resources are freely available to download through the Webwise portal for use in classroom and home settings with young learners aged 10 to 12 years. As such, they are transferrable to other primary schools where cyber-bullying is an issue, and where teachers are comfortable to work with resources available in English.
NOTES	N/A

Policultura

	
GENERAL INFORMATIONS	
TOPIC	Digital content creation
TITLE	Policultura
DURATION	from: 2006 to: on going
LEAD PARTNER/COORDINATOR	HOC-LAB - Interdisciplinary laboratory of the Department of Electronics and Information of Polytechnic University of Milan, specialized in Multimedia and Multichannel Communication
PARTNERS/NETWORK	<ul style="list-style-type: none"> • Ministry of Education, University and Research - MIUR • School of Environmental and Territorial Civil Engineering of the Polytechnic of Milan • School of Building, Engineering and Architecture of the Polytechnic of Milano • School of Industrial Engineering and the Information of the Polytechnic of Milan • Department of Sciences of the education "G. M. Bertin" of the University of Bologna.
WEB LINK	http://www.policultura.it/
RELEVANT DOCUMENTS or OUTPUTS	<p><i>Portal</i></p> <p>The portal of PoliCultura (www.policulturaportal.it) collects all the stories created by the children in the school, at all the scholastic levels and in all formats.</p> <p>Every story is available in an interactive format, and compatible with both tablets and PCs.</p> <p><i>Rule of the contest</i></p> <p>http://www.policultura.it/wp-content/uploads/2017/10/PoliCultura2018_Regolamento-6.pdf</p> <p><i>Bibliography</i></p> <p>Di Blas, N., Paolini, P. (2013). Beyond the School's Boundaries: PoliCultura, a Large-Scale Digital Storytelling Initiative. In T. Leo, L. Spalazzi, P. Ghislandi, M.G. Ierardi (Eds.) Journal of Educational</p>

	Technology & Society Special Issue on “Innovative technologies for the seamless integration of formal and informal learning”, vol. 16, 1; 15-27.
INSIGHTS	
DESCRIPTION	<p>PoliCultura is an initiative of HOC - LAB of the Polytechnic of Milan, the greatest technical - scientific university in Italy. It is a contest that since 2006, has involved 25.000 students, aged 5-18, and more than 1.500 teachers. The students are appointed to create interactive multimedia stories using <i>1001Storia</i>, an innovative authoring tool created by HOC – LAB.</p> <p>The results consist in a website (compatible with PCs, tablets and smartphones), an App, a CD-ROM, paper documents, a poster and a Web-TV that can be seen on YouTube.</p> <p>At the end of the contest, each student, teacher and school that successfully concluded the story receive a certificate and a "digital badge", in agreement with the international standards for badges. The teachers together with their students can also participate in a National Contest, that awards the narrations according to the different scholastic levels. HOC-LAB offers remote support through an online course (MOOC. Massive Open Online Courses) "PoliCultura 2018", reserved to the enrolled teachers to the contest (www.dol.polimi.it/mooc).</p>
METHODOLOGY	<p>The core of the PoliCultura project is the digital storytelling, meaning the creation of stories by combining texts, images, audio and video. The Digital Storytelling uses the tool <i>1001Storia</i>, available online. Students and teachers can easily learn to use the tool in 20-30 minutes.</p> <p>The creation of a multimedia narration is built up of three phases:</p> <ol style="list-style-type: none"> define the publishing plan, that is the narrative structure of the story: text, explanations, images (photos, sketches, etc.), audio files, videos, etc.; choose how to build the story and manage the different media, with the help of an online tutor (to be contacted by email); check the final result of the work through a "preview" function, and make the necessary improvements. <p>When the narration is in its final form, the staff of PoliCultura produces the different versions for the different channels and tools.</p>

<p>RESULTING BENEFITS</p>	<p>Some of the most remarkable didactic benefits (pointed out by the teachers as well) are:</p> <ol style="list-style-type: none"> 1) Cognitive benefits: better understanding of the matter at stake; ability to gather relationships; ability to synthesize; ability to work in group; better relationship with the teacher; development of collaborative attitudes; 2) Motivational benefits: increase in the involvement in the activity; better and easier involvement in the scholastic activities in general, especially regarding subjects that are generally the most problematic; 3) Benefits related to the abilities: ability to use the technologies; to develop didactic (and not for really personal fun) assignments and tasks; ability to write texts for the multimedia; ability to edit audio files and images; ability to search information, images, or other materials online.
<p>RISKS</p>	<p>The principal risks for a project based on digital storytelling are the inadequate digital competencies of the Italian teachers, as well as a generalised resistance to change and innovation in scholastic environment.</p>
<p>WORKABLE – TRANSFERABLE PRACTICES</p>	<p>After the edition of 2017, more than 1.600 narrations could be counted, involving almost 34.000 students and 2.700 teachers from every Italian region. Since the edition of 2013, the contest was open to international participation, and in the scholastic year of 2014-2015 the contest was fully devoted to the Expo themes, with the PoliCultura Expo Milano 2015 “special edition”, involving more than 900 classes coming from 10 different countries.</p>

Programma il futuro

	
GENERAL INFORMATIONS	
TOPIC	Problem solving
TITLE	Programma il futuro
DURATION	from: 2014 to: on going
LEAD PARTNER/COORDINATOR	Ministry of Education, University and Research (MIUR), in collaboration with CINI – Consorzio Interuniversitario Nazionale per l'Informatica/ <i>National Inter-University Consortium for the Computer Science</i>
PARTNERS/NETWORK	<p>The project is exclusively financed by few partners, sensitive to the digital growth of the Country, who offer financial resources and technological support through actions of Corporate Social Responsibility</p> <p><i>Partners:</i> Engineering, TIM;</p> <p><i>Donors:</i> CA Technologies, De Agostini Scuola, Seeweb.</p> <p><i>Framework agreements of collaboration:</i> Confindustria Digitale, Andinf, ANP</p>
WEB LINK	https://www.programmailfuturo.it/

<p>RELEVANT DOCUMENTS or OUTPUTS</p>	<p><i>For teachers</i></p> <ol style="list-style-type: none"> 1. Common sense education – Programma il Futuro, Cittadinanza digitale consapevole: Un primo percorso per la Scuola Primaria / <i>Aware digital citizenship: a first path for Primary School</i> (https://programmmailfuturo.it/media/docs/cittadinanza-digitale/cittadinanza_digitale_consapevole.pdf) 2. Centro Ricerche Themis (eds.), Indagine sull'uso consapevole delle tecnologie digitali / <i>Investigation on the aware use of digital technologies</i> (https://www.programmailfuturo.it/media/docs/Report-indagine-uso-consapevole-2018.pdf) 3. Ora del Codice: Guida alla partecipazione / <i>Hour of Code: guide to participation</i> 4. Enrico Nardelli, Programma il futuro: risultati e novità / <i>Programme the Future: news and results</i> (presentation 15.06.2018) (https://programmmailfuturo.it/media/docs/evento-celebrativo-quarto-anno/PiF-presentazione-evento-giugno-2018.pdf) 5. Monitoraggio dell'andamento del progetto (Settembre 2017 – Gennaio 2018) / <i>Report of the Project Monitoring</i> (September 2018 – January 2018) (https://programmmailfuturo.it/media/docs/Rapporto-monitoraggio-settembre-2017-gennaio-2018.pdf) <p><i>For parents</i></p> <p>Common sense education – Programma il Futuro, Cittadinanza digitale consapevole: schede per genitori / <i>Aware digital citizenship: data sheets for parents</i></p>
INSIGHTS	

<p>DESCRIPTION</p>	<p>The objective of this initiative is to give a series of simple tools to the schools, that are amusing and easily to access to introduce the students to the basic concepts of computer science.</p> <p>The project has been awarded as a European excellence initiative for digital education within the European Digital Skills Awards 2016.</p> <p>The project adopts the scientific-cultural approach of the computer science (defined as computational thinking), aiming to develop logical competences and creative and efficient problem solving in children, the citizens of the future. The simplest and most amusing way to develop computational thinking is through the planning (coding) in a gaming context.</p> <p>The project objective is to integrate the education to computational thinking in the Italian scholastic curricula, as an obligatory discipline. In the National Plan for Digital School (PNSD), the teaching of computational thinking becomes part of the curricula for Primary School with the action n. 17, that clearly recognises the “Programma il futuro” project as the national programme of reference for this didactic activity, and points out that 10 hours of the curricula should be dedicated to this topic.</p>
<p>METHODOLOGY</p>	<p>The tools offered by the projects are easy to use even for less skilled teachers, and can be employed in the teaching of various subjects, at all school levels. They can be used in two different modalities: basic or advanced.</p> <p>The basic modality consists in “The Hour of Coding”, and introduces the students to computational thinking through an hour-long activity. The advanced modality goes beyond the superficial contact with matter, and goes on to study and practice computational thinking in a more detailed way, structuring the activity in operations of different difficulty degree, in agreement with the age and level of competence of the students.</p> <p>Both modalities can be carried out with technological lessons, (available at: https://programmaitfuturo.it/come/lezioni-tecnologiche/introduzione), and with traditional lessons (available at https://programmaitfuturo.it/come/lezioni-tecnologiche/introduzione). The material was elaborated by the scientific experts of CINI, as to be suitable for the Italian context, and a guide to their use was made available.</p> <p>The project offers to the teachers a tool for active participation in a</p>

	<p>community of educators: the PIF Laboratory. It consists in a meeting for those teachers who wish to share the reflections and to discuss the experiences related to the themes of the project, with the aim to develop new techniques to teach computational thinking.</p>
RESULTING BENEFITS	<p>The data published in May 2018 show a high impact of the project: 77% of the Italian schools involved, (59% of which are primary schools), 31.462 teachers, 2.044.785 students, with an average of 15,04 hours of work.</p> <p>It was confirmed that the project contributed to effectively spread computational thinking among the schools, with the result of making available interactive lessons and didactical tools, contributing to increase and develop logical competences and problem solving among the next generation of digital citizens.</p>
RISKS	<p>The main risk of a project that works on a national level is that it directly depends on the actions of public and governmental institutions, and the decisions of the policy makers, connected to the political conditions of the country.</p> <p>The recent change of government in Italy could seriously jeopardize the continuity, or interrupt the implementation of the National Plan for Digital School – PNSD, and in particular "Programme the Future", that constitutes one of the pillars of the general reform of the national scholastic system previously created by the past administration.</p>
WORKABLE – TRANSFERABLE PRACTICES	<p>In 2018, the award “Programma le regole/ <i>Program the Rules</i>” was introduced, to elect the best product reflecting on the aware use of technologies inside the familial, scholastic and friendship context. The project gave birth to an Association of Social Promotion (“Programma il Futuro”), with the aim to manage the crowdfunding campaign “Dona una linea di codice/ <i>Donate a code line</i>” (www.programmailfuturo.it), launched in November 2017 to sustain the project and guarantee its continuity.</p>

SaferInternet.gr



GENERAL INFORMATIONS

TOPIC	Internet safety Privacy and security
TITLE	Saferinternet.gr
DURATION	From: 2004 To: Today
LEAD PARTNER/COORDINATOR	Greek Center of Safe Internet
PARTNERS/NETWORK	<ul style="list-style-type: none"> • WIND Hellas • ALFA BANK • National Bank of Greece • Greek School Network • Ministry of Education • Webfest • Democritus Research Centre • EU Kids online • Greek Union of ICT Professors
WEB LINK	http://www.saferinternet.gr
RELEVANT DOCUMENTS or OUTPUTS	http://www.saferinternet.gr/index.php?parentobjId=Page15

INSIGHTS

DESCRIPTION	<p>Saferinternet.gr is part of the pan-European network Insafe, and aims to:</p> <ul style="list-style-type: none"> • Protect young Internet users from inappropriate or harmful content and from inappropriate or harmful behaviour; • Inform parents about how they can protect themselves as well as to effectively protect their children from the dangers caused by the improper use of interactive technologies, such as the Internet or mobile phone; • Promote the positive aspects of interactive technologies as tools of our daily lives; • Educate teachers on the safe use of the Internet and the mobile phones, by giving information about both internet benefits and potential risks; • Encourage dialogue between children and parents about Internet use, and promote digital literacy and critical thinking skills; • Support parents, teachers, and young internet users with informational materials.
METHODOLOGY	<p>Saferinternet.gr implements a series of activities, such as organizing informational events for the public, seminars for teachers, promoting issues related to Internet safety in the media, creation of multimedia online and printed information material, as well as TV and radio campaigns. Saferinternet.gr cooperates with representatives of State, industry of new technologies as well as with non-governmental organizations in Greece and abroad with the primary purpose to ensure a safer online environment.</p>
RESULTING BENEFITS	<p>N/A</p>
RISKS	<p>N/A</p>
WORKABLE – TRANSFERABLE PRACTICES	<p>http://www.saferinternet.gr/index.php?parentobjId=Page15</p>
NOTES	<p>N/A</p>

Scratch for Learning

 Promoting and supporting the integration of ICT in education	
GENERAL INFORMATION	
TOPIC	Digital Skills for Teachers
TITLE	Scratch for Learning
DURATION	10 hours
LEAD PARTNER/COORDINATOR	PDST Technology in Education
PARTNERS/NETWORK	PDST (Professional Development Service for Teachers) provides a range of up-skilling and CPD programmes for teachers. Their courses in the field of technology in education aim to develop the digital competences of teachers so that they can more comfortably integrate technology into their teaching practice.
WEB LINK	https://www.pdsttechnologyineducation.ie/en/Training/Courses/Scratch-for-Learning-online-.html
RELEVANT DOCUMENTS or OUTPUTS	This best practice provides training and up-skilling opportunities for teachers by completing a short online programme on how to use Scratch coding software in their teaching practice. The aim of this programme is to build the digital competence of teachers so that they can then build the digital skills of their learners; as such, it serves as an example of best practice in up-skilling teachers to work in online environments through providing a bespoke e-learning programme.
INSIGHTS	
DESCRIPTION	This is a 10-hour online course which aims to build the digital competence of teachers in Irish schools, by teaching them how to use Scratch coding software to teach literacy and numeracy in the classroom. It is included here as a best practice example because it is unique in Ireland in that it specifically aims to develop the digital skills of teachers so that they can integrate technology into their teaching practice. The learning outcomes from this programme are as follows:

	<ul style="list-style-type: none"> • Comfortable in using Scratch software; • Using Scratch software in the classroom to support literacy and numeracy; • Integrating Scratch across the curriculum; • Accessing support and resources for Scratch; • Creating their own Scratch project – to build the digital skills of pupils.
<p>METHODOLOGY</p>	<p>The programme for teachers is delivered through a 10-hour online curriculum, which provides teachers with learning content across three modules. These modules are described as follows:</p> <ul style="list-style-type: none"> • “Module 1 – Introduction to Scratch Coding <p>This module provides an introduction to the basic features of Scratch and an overview of Scratch resources, in particular the scratch.mit.edu website. Participants are also provided with examples of Scratch being used in the classroom.</p> <ul style="list-style-type: none"> • Module 2 – Scratch in the Classroom <p>In this module, Scratch skills are further developed and participants learn how to edit and create a Scratch project. Participants will also explore uses of Scratch to support literacy and numeracy.</p> <ul style="list-style-type: none"> • Module 3 – Planning for Scratch <p>This module focuses on classroom management and planning for effective use of Scratch in teaching and learning. Participants will explore strategies to integrate Scratch into their teaching and will review the role of Scratch in assessment. As the final course assignment, participants are required to share a link to their own Scratch project.”</p>

RESULTING BENEFITS	The benefits of this programme are that it aims to foster the digital competence of teachers, so that they can use advanced digital tools and resources in the classroom, to improve their teaching practice. This is a unique programme in Ireland, as it aims to teach teachers how to use coding software which would be considered advanced digital skills when the primary school curriculum in Ireland is considered. The benefits of investing in in-service training for teachers in this field is that it leads to the further integration of technology in the primary school curriculum, as teachers who complete the training will integrate more technology into their teaching practice; and this in turn leads to the development of enhanced digital skills of young pupils.
RISKS	None identified.
WORKABLE – TRANSFERABLE PRACTICES	This programme advocates providing up-skilling programmes for teachers in the field of IT and also through the medium of online learning. As such, this is an innovative practice which could be adapted by the DRC project in providing training support to teachers.
NOTES	N/A

SELFIE



GENERAL INFORMATION

TOPIC	Digital Content Creation Information and data literacy
TITLE	Self-reflection tool for digitally capable schools (SELFIE)
DURATION	from: October 2017 to: August 2020
LEAD PARTNER/COORDINATOR	
PARTNERS/NETWORK	SELFIE has been developed in-house by the European Commission (Joint Research Centre and DG Education, Culture, Youth and Sport) and a team of experts from across Europe
WEB LINK	https://ec.europa.eu/jrc/en/digcomporg/selfie-tool
RELEVANT DOCUMENTS or OUTPUTS	N/A

INSIGHTS

DESCRIPTION	<ul style="list-style-type: none"> • An online self-reflection tool for digitally capable schools in Europe developed by a Pan-European network (EC, 2017). • SELFIE asks questions to school leaders, teachers and students and provides a snapshot of school's strengths and weaknesses in their use of digital technologies for learning. • It generates a fine-grained description of what it takes to educational organisations to be digitally capable.
METHODOLOGY	SELFIE is based on the Digitally-Competent Educational Organisations (DigCompOrg) conceptual framework. For the design of the tool, SELFIE team received input from more than 5000 school leaders, teachers and students in January 2017. More than 67000 school leaders, teachers and students from 650 schools in 14 countries

	tested SELFIE's beta version in early October 2017.
RESULTING BENEFITS	N/A
RISKS	N/A
WORKABLE – TRANSFERABLE PRACTICES	
<p>SELFIE focuses on learning rather than technology. It considers all dimensions: school strategies, teaching, learning and assessment practices, infrastructure, curricula, student experience.</p>	
<p>Source: https://ec.europa.eu/jrc/en/digcomporg/selfie-tool</p>	
NOTES	<p>Next phase in 2018</p> <p>The analysis of the data from the pilot implementation of SELFIE supports the fine-tuning and the development of the next version of SELFIE, expected for 2018.</p>

Smart Coding

	
GENERAL INFORMATIONS	
TOPIC	Problem solving
TITLE	Smart Coding
DURATION	from: 2014 to: 2015
LEAD PARTNER/COORDINATOR	Samsung Electronics
PARTNERS/NETWORK	Ministry of Education, University and Research (MIUR)
WEB LINK	http://www.smart-coding.it/
RELEVANT DOCUMENTS or OUTPUTS	<p>The section of the website “Scopri di più / <i>Discover more</i>” contains all the documents and components of the didactical kit and some guide lines for teachers.</p> <p>The section “Guarda I vincitori / <i>See the winners</i>” contains all the products of the project awarded.</p>
INSIGHTS	
DESCRIPTION	<p>With this initiative, Samsung reaffirms its support to the development of the education for young generations progressing towards the future. Through the project, Samsung Electronics guarantees a better future to the new Italian generations, with a social initiative to share the benefits of its own technological innovation with the public.</p> <p>Smart Coding is the name of the above-mentioned project, launched in the scholastic year 2014-2015 in collaboration with the Ministry of Education, University and Research (MIUR).</p> <p>The project was a continuation of the pilot project Smart Future (2013), that took place in 54 primary and secondary school classes (18 from primary school, 36 from secondary school), that were transformed into “smart classrooms” thanks to the technologies offered by Samsung Electronics.</p> <p>Smart Coding proposes a rigorous didactic laboratorial method to increase the creativeness of the students.</p>

<p>METHODOLOGY</p>	<p>In the first phase of the project, Samsung informed 20.300 teachers from primary and secondary school about the objectives and benefits of the project, and to the present moment, the initiative has been implemented in 750 schools and almost 1.000 classes, that involved Smart Coding in their curricula, receiving a kit supplied by Samsung with all the tools necessary to carry out digital projects.</p> <p>Every class was appointed with a “Smart Team” of 25 specialized educators, that initially introduced the initiative and illustrated the use of the didactical material of the kit, and consequently supported the implementation of the activities, stimulating an environment favourable to sharing and cooperation.</p> <p>The project also used a website to manage the project and share information about coding, that also functioned as a platform to upload the works realized in the schools by May 2015.</p> <p>The work of the classes was continuously supported by a call centre always available.</p> <p>To select the 10 best works of all the outputs of the project from the different classes, Samsung created a panel composed by coding experts and members of the Advisory Board of the Smart Future project. The winning schools would receive tablets and e-boards to support teaching and learning and to encourage the digitalisation of education.</p>
<p>RESULTING BENEFITS</p>	<p>The main results of Smart Coding are:</p> <ul style="list-style-type: none"> - Guidance and support for teachers and students through the experimental phases of the project, bearing in mind the consideration that digitalisation of education must be well “programmed” through specific rules; - Promotion of creative thinking to young Italian students, through “Computational thinking”, encouraging a more positive inclination to problem-solving; - Experimentation of the planning and creative process behind video game development, in an “unplugged mode”; - Valorisation of the work of the classes that involved the use of digital resources in teaching/ learning, in agreement with the guidelines from the European Union and the MIUR, and with the new social trends; - Contribution to the implementation of Action #17 “Introduce computational thinking to primary schools” of the National Plan for

	Digital School (PNSD), that aims to improve the digital skills of Italian students, and to increase digital literacy in the first school degrees.
RISKS	The main risk of this project is due to the limited period of implementation (scholastic year 2014-2015) and to the nature of the initiative: being it promoted by a private entity, new proposals and projects depend on the changing marketing policies of the company.
WORKABLE – TRANSFERABLE PRACTICES	Throughout the year of implementation, the project delivered 1.013 Kits to 776 Italian schools, holding 508 meetings involving around 30.000 students. This action was encouraged by the MIUR, as contributing to the initial phase of implementation of the National Plan for Digital School, especially Action #17.

Social4School

 <p>Social network: un gioco da ragazzi</p>	
GENERAL INFORMATION	
TOPIC	Communication and collaboration
TITLE	Social4School. Social network: un gioco da ragazzi
DURATION	from: 2015 to: ongoing
LEAD PARTNER/COORDINATOR	Computer Science Department of the University of Torino
PARTNERS/NETWORK	Cassa di Risparmio of Torino Foundation
WEB LINK	https://www.social4school.eu/
RELEVANT DOCUMENTS or OUTPUTS	Publications: Ruggero Pensa - Antonella Torasso, Social4School: la rete è un gioco/ <i>Social4School: the net as a game</i> , in "Bricks", a. 7, n.3, pp.45-51. http://www.rivistabricks.it/wp-content/uploads/2017/09/SET2017_07_Pensa.pdf
INSIGHTS	
DESCRIPTION	<p>The objective of the project is to create a simulator of the social networks, to be used in primary schools to allow the students to discover the importance of respecting the privacy on the Web.</p> <p>Thanks to the collaboration of a researcher and two Computer Science bachelor students, the project developed the web application Social4School (http://www.social4school.eu), that is a social network simulator thought to be used in a computer classroom, equipped with PCs, laptops or tablets.</p>

METHODOLOGY

Each student will create a personal profile on the app, choosing a name and a personalised avatar. The students participate in social sessions, during which they can publish default sentences, “like” sentences from other students and share them. Every child is connected to the other children through a friendship, their connections are casual and nobody has immediate visibility of the other participants. This aspect is crucial to obtain positive results from the game.

Every action (publication, sharing or like of a post) is, indeed, visible to all the friends. But, due to the diffusion of contents through the actions of liking and sharing, the visibility of a child’s post is propagated on the network, potentially reaching all the participants, just as it happens in the real social networks.

Each published and shared sentence benefits from a pre-arranged setting, that decides the degree of sensibility towards the privacy of the author or of the people (e.g. parents, other family members, friends, teachers, etc.) quoted in the publication.

The likes and shares of the publications constitute scores, that are summed up and appoint a personal score to each child. This totality represents the child’s degree of privacy awareness. At the end of the game, the children’s scores are classified and a badge is given to the first three winners. Depending on the score, the participants receive personalised suggestions.

The teachers are provided with a control dashboard, that allows them to continuously control the activity of the class, since the creation of new gaming sessions, to the real-time visualization of the actions, up to the visualization of the final statistics. The teacher has, therefore, a tool that can be used in different ways, and is suitable for classes composed by a minimum of six students to an indefinite maximum, and that can stimulate deeper discussion on the meaning of web privacy.

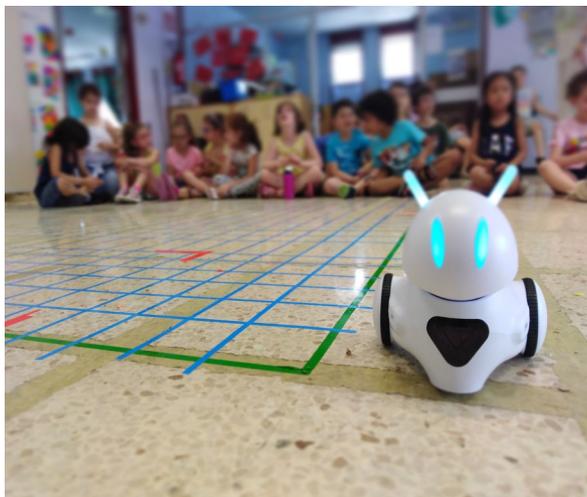
RESULTING BENEFITS

The main benefit of this project is the improvement of the perception and awareness of personal and other people’s web privacy among primary school students, regarding especially social networks.

Other important result of the activity is the experimentation of a participative and interactive approach, more suitable to face the educational issues related to digital citizenship and, in particular, the use of social networks and the respect of the privacy.

<p>RISKS</p>	<p>The main risk of such a project is that it remains a scholastic initiative, without involving parents and families, that play a fundamental role in transmitting a correct awareness towards the media.</p> <p>Outside the experience with Social4School, the first contact of the children with the social networks is, indeed, through the devices (smartphones and tablets) of their parents. However, parents are often unprepared to digitally educate their children, due to the scarce diffusion of the digital culture in Italy.</p>
<p>WORKABLE – TRANSFERABLE PRACTICES</p>	<p>The Social4School application is available on the website http://www.social4school.eu, where the interested schools can apply for their participation by filling in a specific form. During the experimentation phase, the project was presented to the families, to allow them to continue the educative activity at home.</p>
<p>NOTES</p>	<p>A pilot implementation of the project was carried out in 2016 in fourth degree classes of Istituto Comprensivo "Dasso" of Chivasso, and consequently, the project was implemented in the following schools: two in Turin (IC "Padre Gemelli" and IC "Murialdo-Vivaldi"), one in Chivasso (IC "Dasso") and one in the province of Cuneo (IC "Centallo-Villafalletto"). The experimentation has involved until now around 450 children from 22 classes of fourth and fifth grade, and more of 25 teachers.</p>

TI MAGIO! A teaching module by DENSA cooperativa sociale

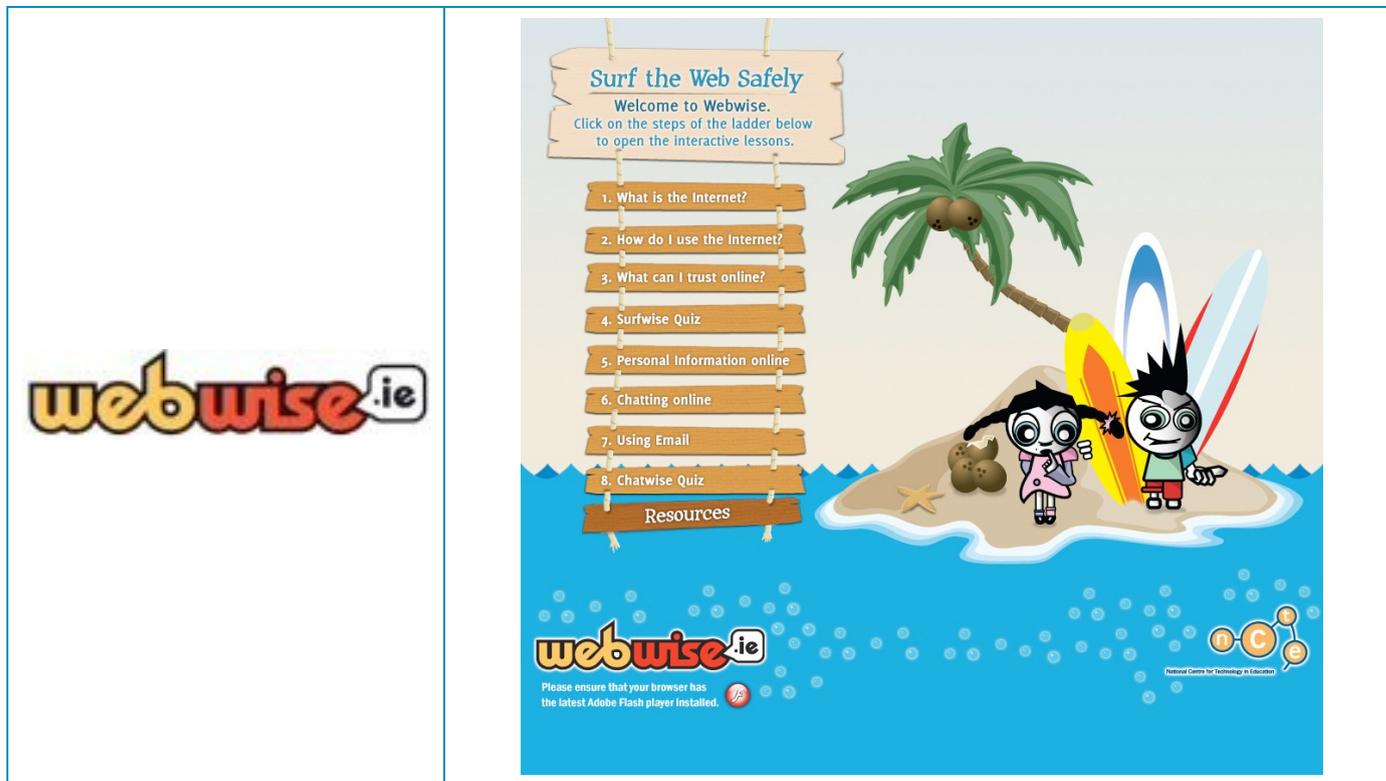


TOPIC	Choose one from: <ul style="list-style-type: none"> • Use of ICT • Computational Thinking • Robotics • Story-telling
RESEARCH/TOOL	TI MANGIO!
AUTHOR(S)	DENSA cooperativa sociale - Non profit organization
DATE	2019
SOURCE	<ul style="list-style-type: none"> • https://www.andersenpress.co.uk/books/the-day-louis-got-eaten-2/ • http://www.helloruby.com • http://www.helloruby.com/loveletters • https://photonrobot.com/ • https://www.herve-tullet.com/

<p>DESCRIPTION</p>	<p>“TI MANGIO!” is a teaching module that intends to approach and to implement subjects as robotics and digital literacy in the first and second grade of primary school.</p> <p>Through the learning by doing and gamification methods, the participants are welcome in a process of experimentation of the computational approach and block programming.</p> <p>The main intent is to convey the acquisition of cognitive and digital skills, starting from the idea that the basic notions of the binary code and generally computer knowledges can be applied in both cognitive and technical areas.</p> <p>Students are encouraged to consider the computational approach as a resource and tool to reinterpret their everyday life.</p> <p>Coding as a universal language becomes useful for a creative and critical use of technology and of great potential in the field of personal expression.</p> <p>Core of the module is to educate to an active approach to the resolution of problems and to convey positive reactions toward the idea of error.</p> <p>The didactic cycle intends to integrate in the academic curriculum the education to block programming while gaining tangible skills in developing instructions and to be able to generalize patterns into rules.</p> <p>In order to bridge the CT approach with the methods that are widely used among teachers, the module bases its practice with the illustrated children’s book by John Fardell “The day Louis got eaten” (Andersen Press 2012, ISBN: 9781849393874).</p> <p>The structure of the story appears quite fitting for the ideas of presentation of a criticality that has to be solved (the unexpected event), the identification of a regular pattern and the resolution of the problem.</p> <p>As he rides through the woods with his sister Sara, Louis is swallowed by five funny monsters.</p> <p>The analysis of the text allows a quite clear identification of the story-telling structures and points out that the narration follows the regular rhythm: main character - monster - scenery.</p> <p>This pattern recognition is at the base of the activities of the whole module.</p> <p>Practices are approached at first with an unplugged method, through the use of analog techniques as collage, illustration and painting.</p> <p>Participants will identify which are the algorithms that can help with the resolution of the dilemma and that at second instance will be translated to the block programming approach.</p> <p>By designing the route that Sara has to run across the five scenarios and computing which are the movements needed in order to reach her brother, the participants can spontaneously approach the use of the interactive educational robot chosen for this module.</p> <p>The use of the new technologies as block programming, robots and related applications are introduced through direct experiences and participative approaches and supports a cognitive awareness in its varying degrees of complexity.</p> <p>Given the age of the students, the analog approach helps to experience a more tangible aspect of learning that at times allows all those abstractions that are required in order to enjoy, comprehend and correctly apply the processes of computational thinking.</p>
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BENEFITS	<ul style="list-style-type: none"> • Use of ICT • Computational Thinking • Robotics • Story-telling
WORKABLE – TRANSFERABLE PRACTICES	<p>http://www.istitutocomprensivoperugia4.it/computo-ergo-sum-pon-fse-_____pensiero-computazionale-e-cittadinanza-digitale/a-scuola-di-binario- corso-2-prima-parte/</p> <p>https://cooperativadensa.it/work/cittadinanzadigitale/</p>
NOTES	<p>Computational thinking, robotics and story-telling are included as fundamental topics of the teaching activity. TI MANGIO! was implemented during the DRC Project as part of the lesson plan <i>A scuola di binario “To Binary School”</i> implemented with 1st grade students of Istituto Comprensivo Perugia 4 (ICPg4)</p>

Surf the Web Safety



GENERAL INFORMATIONS

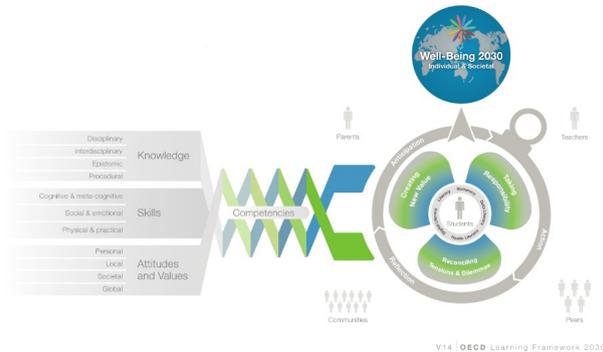
TOPIC	Internet Safety
TITLE	Surf the Web Safely
DURATION	N/A
LEAD PARTNER/COORDINATOR	Webwise, the Irish Safer Internet Centre
PARTNERS/NETWORK	Webwise is the Irish Internet Safety Awareness Centre which is co-funded by the Department of Education and Skills and is co-financed by the European Union’s Connecting Europe Facility.
WEB LINK	https://www.webwise.ie/sphe/

<p>RELEVANT DOCUMENTS or OUTPUTS</p>	<p>The ‘Surf the Web Safely’ digital resource provides a series of interactive lessons and digital resources for teachers in primary education on topics related to internet safety. These are available at the web link provided.</p> <p>The implementation of these digital resources and interactive lessons is supported by a downloadable Teacher’s Handbook, which provides additional theory on each of the 8 digital resources available through the online portal; and also gives teachers some advice and hints on implementing these resources in a classroom setting.</p>
<p><u>INSIGHTS</u></p>	
<p>DESCRIPTION</p>	<p>This Programme was specifically designed for primary school teachers who wish to introduce internet safety into their teaching of the SPHE curriculum.</p> <p>The Education Programme, contained in a teacher handbook, has been developed to assist and support educators when teaching students about the safe and responsible uses of the Internet. It is envisaged that this Programme will be taught as part of Social, Personal and Health Education (SPHE) curriculum in schools for children between the ages of 8 and 12.</p> <p>The ‘Surf the Web Safely’ digital resources provides primary school teachers with access to a series of 8 interactive lessons on the following topics:</p> <ol style="list-style-type: none"> 1. What is the Internet? 2. How do I use the Internet? 3. What can I trust online? 4. Surfwise Quiz 5. Personal Information Online 6. Chatting Online 7. Using Email 8. Chatwise Quiz <p>This programme is made up of paper-based classroom activities and digital interactive lessons. The interactive lessons contain much of the exposition and key learning points. They introduce children to the characters of Niamh and Fionn as they learn about the internet for the first time.</p> <p>These interactive cartoons are designed to be used as a whole-class</p>

	<p>activity using a white board or digital projector. The activities may also be set up for a pair, an <u>individual</u>, or a <u>small group to use at a classroom computer</u>.</p>
METHODOLOGY	<p>The programme utilises a range of teaching methodologies with emphasis on the key methodology of the SPHE curriculum; active learning. The methodologies include discussion, circle work, pair and group work, responding to the media, in particular digital media. It integrates other curriculum subjects such as drama, language and visual arts methodologies.</p> <p>The first part of the Webwise programme (Chapters 2, 3, and 4 the teacher's handbook) focuses on skills needed for surfing the web such as effective and safe searching, downloading images, and determining what online content can be trusted. It is appropriate to use with children who are learning to use the internet for schoolwork or for generally finding information. It is designed specifically with 1st and 2nd class in mind. This section is followed by an assessment to determine if pupils have achieved the desired learning outcomes. A Surfwise certificate is provided and may be awarded to successful pupils.</p> <p>The second section deals with the skills required to safely and effectively communicate online (Chapters 6, 7, and 8). It deals with issues relating to sharing personal information online, treating others with respect, and dealing with spam. The chapters are designed for 3rd–6th class with some differentiated activities for 5th and 6th class only. It is envisaged that these lessons be used first in 3rd or 4th class then revisited in 5th and 6th class using the differentiated activities provided.</p>
RESULTING BENEFITS	<p>This resource will help to advance young people's use of new media from initial enthusiasm towards empowerment and community participation.</p>
RISKS	<p>N/A</p>

<p>WORKABLE – TRANSFERABLE PRACTICES</p>	<p>With the <u>information</u> and guidance provided in the teacher’s handbook, using the Webwise digital resources and interactive lessons is transferable to all teachers who wish to deliver an education programme to young learners aged between 8 and 12 years; provided that the young learners are being taught through English. With the interactive lessons, which are available freely online and the teacher’s handbook which is downloadable from the web link, these resources are transferable to primary school teachers across Ireland and in other EU Member States, where teachers are comfortable using resources in English.</p>
<p>NOTES</p>	<p>N/A</p>

The Future of Education and skills. Education 2030



GENERAL INFORMATION

TOPIC	Information and data literacy Communication and collaboration Digital content creation Safety Problem solving
TITLE	The Future of Education and Skills 2030 project
DURATION	from: 2018 to: 2030
LEAD PARTNER/COORDINATOR	UNESCO 2018
PARTNERS/NETWORK	UNESCO 2018
WEB LINK	http://www.oecd.org/education/2030/
RELEVANT DOCUMENTS or OUTPUTS	https://www.oecd.org/education/2030/E2030%20Position%20Paper%20(05.04.2018).pdf http://unesdoc.unesco.org/images/0026/002618/261853e.pdf http://www.oecd.org/education/school/Flyer-The-Future-of-Education-and-Skills-Education-2030.pdf http://www.oecd.org/education/2030/E2030%20Position%20Paper%20(05.04.2018).pdf

INSIGHTS

DESCRIPTION	<p>The Future of Education and Skills 2030 project aims to help countries find answers to what knowledge, skills, attitudes and values are needed for today's students to thrive and shape their world, as well as how instructional systems can effectively develop them.</p> <p>This OECD Learning Framework 2030 offers a vision and some underpinning principles for the future of education systems. It is about orientation, not prescription. The learning framework has been co-created for the OECD Education 2030 project by government representatives and a growing community of partners, including thought leaders, experts, school networks, school leaders, teachers, students and youth groups, parents, universities, local organisations and social partners. This is work in progress and we invite you to join us in developing future-ready education for all.</p>
METHODOLOGY	<p>The Learning Framework for 2030 defines:</p> <p>A clearer vision and set of goals for education systems and a common language for countries, schools, teachers, and other stakeholders.</p>
RESULTING BENEFITS	<ul style="list-style-type: none"> • Co-create a conceptual Learning Framework for 2030 with all stakeholders • Conduct an International Curriculum Analysis • Build common ground on the principles and instructional designs that can effectively implement intended curricula • Explore the types of competencies and profiles of teachers who can support all students to achieve desired outcomes for their future success
RISKS	<p>N/A</p>
WORKABLE – TRANSFERABLE PRACTICES	<p>N/A</p>
NOTES	<p>N/A</p>

The Gamification as a Tool for fostering Sociocultural awareness

 University of the Basque Country	 ΕΛΛΗΝΙΚΟ ΑΝΟΙΚΤΟ ΠΑΝΕΠΙΣΤΗΜΙΟ
GENERAL INFORMATIONS	
TOPIC	Gamification Serious games Sociocultural awareness
TITLE	The Gamification as a Tool for fostering Sociocultural awareness
DURATION	November 2017
LEAD PARTNER/COORDINATOR	Sitas E. Phd Candidate University of the Basque Country Hellenic Open University
PARTNERS/NETWORK	N/A
WEB LINK	https://eproceedings.epublishing.ekt.gr/index.php/openedu/article/view/112
RELEVANT DOCUMENTS or OUTPUTS	39th International Conference in Open & Distance Learning - November 2017, Athens, Greece
INSIGHTS	
DESCRIPTION	Today, digital games came into the foreground of our culture and play a key role. This paper presents examples from the United Nations website, offering cross-cultural experiences designed to develop social and cultural consciousness. They try to develop understanding and tolerance towards migrants, to increase social interaction and cooperation between different ethnic groups. The value of serious games should not be underestimated because through the narrative space of games we can build a strong personal or cultural identity.

METHODOLOGY	<p>A game's story is fascinating, even if the story is distant to the player's everyday life. The player identifies himself through the game. In other words, the game turns into an extension of our own perspective, giving us the option to talk through it, through an avatar for example. Thus, participation in a game means interaction with and within a representative universe, a place of possibilities with narrative dimensions. Through following the rules of the game and earning game experience, players feel motivated and develop a sense of control in exploring and transforming the world.</p>
RESULTING BENEFITS	<p>The games on the website of the United Nations share the following common objectives: they try to develop understanding and tolerance towards migrants and to increase social interaction and cooperation between different ethnic groups. The United Nations developed, through videogames, a clever way in which the more affluent countries will raise awareness of the problem of hunger in the refugee crisis. One of the most important feature of the game is the fact that they can engage the player into 'living' the life of another human being. In this way, gamification is used as a tool to foster the user's human loyalty by enhancing both their social and cultural conscience.</p>
RISKS	<p>Games can cause serious addictive consequences to the person who participates in the game. Games can also be used as a manipulation tool.</p>
WORKABLE – TRANSFERABLE PRACTICES	<p>The term “serious games” characterises all games that withhold a "serious" purpose and originate from the 70's. Games are equally important in the contemporary cultural economy, as human labour was important in the industrial economy. Serious games can help players to easily and enjoyably learn new skills and to familiarize with novel contexts.</p>
NOTES	<p>The next level of video games and serious games will give us the ability to feel. Players will not play using mobile devices, since the virtual reality or holographic equipment expand, offering more features and feelings to the player and more exciting game scenarios.</p>

The use of new technologies by 6th grade students in elementary school: Issues of Internet addiction and electronic bullying

 <p>ΑΡΙΣΤΟΤΕΛΕΙΟ ΠΑΝΕΠΙΣΤΗΜΙΟ ΘΕΣΣΑΛΟΝΙΚΗΣ</p>	
GENERAL INFORMATIONS	
TOPIC	Safety Cyberbullying Internet addiction New technologies
TITLE	The use of new technologies by 6th grade students in elementary school: Issues of Internet addiction and electronic bullying
DURATION	03/2012 - 2013
LEAD PARTNER/COORDINATOR	Touloupis T. Aristotle University of Thessaloniki School of Philosophy Department of Psychology
PARTNERS/NETWORK	Athanasiadou C. Aristotle University of Thessaloniki School of Philosophy Department of Psychology
WEB LINK	http://ikee.lib.auth.gr/record/131250
RELEVANT DOCUMENTS or OUTPUTS	<ul style="list-style-type: none"> • Statistical Package for Social Sciences (SPSS 18.0) https://www.ibm.com/analytics/spss-statistics-software • Internet Addiction Test, (IAT) της Young (1998)_ https://books.google.gr/books?hl=el&lr=&id=vaRaDwAAQBAJ&oi=fnd&pg=PA5&dq=internet+addiction+test+young+1998&ots=h_yMiXIFdG&sig=QLmX2OzETvNhqtCnjshpprSJ2WQ&redir_esc=y#v=onepage&q&f=false • Cyberbullying Questionnaire των Smith και συνεργατών (2006) Goldsmiths College, University of London https://www.education.gov.uk/publications/eOrderingDownload/

RBX03-06.pdf	
INSIGHTS	
DESCRIPTION	<p>This research involves the use of new technologies by six grade students who have internet access and/or use a mobile phone. More specifically, it is examined the existence of internet addiction and cyberbullying cases in this age group. This is an areal study uses both quantitative and qualitative methodology. The survey involved 452 students (242 boys, 210 girls) of primary schools in urban areas (Thessaloniki and Axarnai Attica). In the above sample was distributed self-reporting questionnaire relating to internet addiction (Internet Addiction Test, Young, 1998) and cyberbullying (short form of Cyberbullying Questionnaire, Smith et al., 2006). In addition, there were individual semi-structured interviews with eight (8) teachers to enrich the quantitative data. Apart from recording the frequency of internet addiction and cyberbullying cases, the research examines the relationship between the two phenomena and their possible relation to sex and/or student’s school performance. The results showed that the internet addiction and cyberbullying, two phenomena positively correlated to each other, are real issues for primary school students. Moreover, these two phenomena did not appear to be linked to the level of school performance while male gender was associated negatively only with internet addiction. The findings of this study are a first step to carry out other relevant research and implement programs for prevention and intervention in elementary schools.</p>
METHODOLOGY	<p>This research used both quantitative and qualitative methodologies (use of a self-reference questionnaire to students, conducting semi-structured individual interviews with primary school teachers). The statistical programme SPSS 18.0 was used for the analysis of the quantitative data. Questionnaires were administrated to the pupils during the class period (30-40 minutes). The researcher made sure that all participants who filled in the questionnaire had internet access through a PC and/or mobile phone. Questions dealt on the Internet and the frequency of internet use, but also on more specific Web services such as email, chat rooms, MSN, Facebook, twitter, websites, etc. Respondents gave their answers on a 6 point, Likert type scale. Depending on the overall score, pupils were ranked in the following levels of internet use: under normal, normal, upper normal and compulsive Internet use. The teacher interview lasted 20-25</p>

	minutes and included 10 questions, covering all topic dimensions.
RESULTING BENEFITS	<p>The survey results reveal that excessive/addictive Internet use and electronic bullying constitute an issue of concern for elementary school children. All teachers think internet addiction is a real threat, even for 6th grade pupils, while the electronic bullying is considered by the majority of educators a risk for this age group of children. Concerning electronic bullying, research revealed that:</p> <ul style="list-style-type: none"> • it is usually experienced through messages and phone calls; • most children have been "witnesses" of harassment incidents; • bullying victims and "bystanders" look for support from their friends; • a great percentage of bullying victims and "bystanders" do not report bullying incidents, while they do not address to classroom teachers since they do not value them as trustworthy persons or able to effectively intervene; • the victimization usually lasts one to two weeks; nevertheless, small proportion of pupils experiences a long-term victimization; • restricting or banning the use of mobile and/or Internet is considered by most kids as an effective measure in treating electronic bullying.
RISKS	Self-report questionnaire and interview answers are susceptible to socially acceptable responses, which negatively affects the internal validity of data. Additionally, pupil sample was not representative of the general student population, so generalizability of results cannot be taken for granted.
WORKABLE – TRANSFERABLE PRACTICES	The data suggest an expansion of the phenomenon of internet addiction and electronic bullying in elementary school children. At the same time, the specific age constitutes a "breeding ground" for the implementation of programmes that will intervene and will prevent behaviours that may prove problematic in the future.
NOTES	For the purposes of this research, the number of questions was limited to just 12 (the original questionnaire consisted of 88 questions). This made it possible for pupils to fill in the questionnaire within a class session, without affecting the level of pupil attention and concentration. Questions concerning electronic bullying have been modified so that they can be expressed with concrete examples, since research suggests that younger children may not understand quite general questions concerning electronic bullying.

The Webwise Charter of Online Rights of the Child

<h1 style="background-color: black; color: white; padding: 5px;">The Webwise Charter of Online Rights of the Child</h1>	
GENERAL INFORMATIONS	
TOPIC	Digital Citizenship Rights
TITLE	The Webwise Charter of Online Rights of the Child
DURATION	N/A
LEAD PARTNER/COORDINATOR	Webwise
PARTNERS/NETWORK	Webwise is the Irish Internet Safety Awareness Centre which is co-funded by the Department of Education and Skills and is co-financed by the European Union’s Connecting Europe Facility.
WEB LINK	https://developmenteducation.ie/media/documents/TB4UC_WEBWISE_CRC.pdf
RELEVANT DOCUMENTS or OUTPUTS	A copy of the Webwise Charter of Online Rights of the Child is available to download from the link provided above. It is a short one-page document which highlights 9 rights which children should have and respect in online environments.
INSIGHTS	
DESCRIPTION	<p>This is a short one-page document which provides a set of 9 rights which Webwise has chosen, as being relevant to children when communicating, collaborating and interacting online. These rights include:</p> <ol style="list-style-type: none"> 1. You have the right to protect your identity while online; 2. You have the right to withhold personal details if you do not know who is at the other end or you feel unsure; 3. You have the right to participate, have fun and search for all the information available that is appropriate to your age and personality; 4. You have the right to express yourself freely when online, while always respecting others; 5. You have the right to be heard and to be treated with respect;

	<ol style="list-style-type: none"> 6. You have the right to safeguard anything that you have created, anywhere, even on the web; 7. You have the right to be critical and to dispute or discuss anything you read or come across while online; 8. You have the right to make use of new technologies to develop your personality and increase your capabilities; 9. You have the right to protect yourself from viruses and spam.
METHODOLOGY	<p>This Webwise Charter was drafted by Webwise with the aim of stimulating debate and collaboration between young pupils, so that they can work together, engage fully with the topic of online safety and draft a chart of online rights for their own class group, or even for the school as a whole. The charter can then be compared with the chart from Webwise, and once finalized, it can be displayed in the class or in the school for all students to adhere to.</p>
RESULTING BENEFITS	<p>The benefits of using this Charter as a guide to develop an activity for young pupils is that firstly, it encourages young pupils to think about their behaviour online and to evaluate what it means for them to be responsible online. Similarly, it asks young pupils to assess which rights they think should be attributed to young people. It further encourages young pupils to collaborate, negotiate and debate with their peers, on the topic of online safety, so that they can develop a chart for their class or school. In this way, it represents a good example of active learning for young pupils as it directly involves them in the process of drafting the charter for their class or school.</p>
RISKS	None identified.
WORKABLE – TRANSFERABLE PRACTICES	<p>A copy of this Charter of Online Rights is freely available to download through the Webwise portal for use in school setting to be used to promote online responsibility with young pupils. As such, the Charter in its current form is transferrable to other primary schools where Internet safety is an issue, and where teachers are comfortable to work with resources available in English. As an adaptation to the Charter of Online Rights, teachers may decide to use the sample from Webwise as the basis of an activity/project whereby pupils and teachers work together to generate a Charter of Online Rights for their class or school.</p>
NOTES	N/A

Think B4 U Click



Think before you click

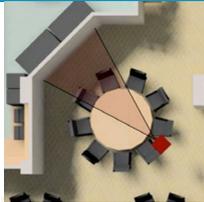
GENERAL INFORMATIONS

TOPIC	Internet Safety; Digital Responsibility; Online Privacy
TITLE	Think B4 U Click
DURATION	N/A
LEAD PARTNER/COORDINATOR	Webwise
PARTNERS/NETWORK	Webwise is the Irish Internet Safety Awareness Centre which is co-funded by the Department of Education and Skills and is co-financed by the European Union's Connecting Europe Facility.
WEB LINK	http://cybersafeireland.org/index.php/cybersafeschools
RELEVANT DOCUMENTS or OUTPUTS	<p>This digital resource is presented in the form of a handbook for teachers with a set of 10 lesson plans which include interactive activities. The 10 lesson plans deal with the following topics:</p> <ol style="list-style-type: none"> 1. Lesson 1 – What is privacy? 2. Lesson 2 – My autobiography 3. Lesson 3 – The images 4. Lesson 4 – Simulation: Privacy under threat 5. Lesson 5 – Debating the issues 6. Lesson 6 – What the laws say 7. Lesson 7 – Reflecting on online rights 8. Lesson 8 – The committee 9. Lesson 9 – The tree of solutions 10. Lesson 10 – Think before you click

INSIGHTS

DESCRIPTION	This resource aims to empower young people to be responsible, autonomous online users by using active learning methods to engage them in the topic of responsible digital citizenship. The resource is developed to stimulate discussions among learners and to encourage pupils to reflect on their behaviour related to what and how they share information online, and to understand how this affects them personally. It is pitched at lower level secondary school students but can also be used with upper primary school students aged 11-12.
METHODOLOGY	As well as the lesson plans mentioned above, these digital resources also include a range of different scenarios for role play activities and well as instructions and templates for implementing activities with pupils in the classroom. One such example is the template for an action project which gives pupils the opportunity to develop a set of peer guidelines for taking and sharing photographs online and for better internet use in general by young people.
RESULTING BENEFITS	The benefits of using these digital resources with young pupils is that it will empower them to be safe and responsible online users, and to be able to use technology responsibly without supervision or support from teachers and parents.
RISKS	None identified.
WORKABLE – TRANSFERABLE PRACTICES	These lesson plans and templates for the poster activity are freely available to download through the Webwise portal for use in a classroom setting with young learners aged 11 to 12 years. As such, they are transferrable to other primary schools where cyberbullying is an issue, and where teachers are comfortable to work with resources available in English.
NOTES	N/A

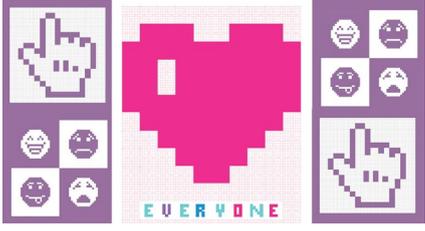
Uibi – Ubiquitous learning

	
GENERAL INFORMATIONS	
TOPIC	Communication and collaboration
TITLE	Uibi – Ubiquitous learning
DURATION	from: 2011 to: 2017
LEAD PARTNER/COORDINATOR	Cassa di Risparmio di Lucca Foundation
PARTNERS/NETWORK	Livorno Foundation
WEB LINK	http://www.uibi.it/
RELEVANT DOCUMENTS or OUTPUTS	<p>UiBi Project Abstract http://www.uibi.it/getFile.php?id=287</p> <p>Il Progetto UiBi: un portale per condividere e distribuire contenuti didattici per le scuole/ <i>The Uibi Project: a portal to share and provide didactical contents for schools</i> (http://www.edaforum.it/sites/default/files/Progetto%20UIBI.pdf)</p> <p>Andrea Guastini, Portale Didattico Social Learning Environment Presentazione 11 dicembre 2015/ <i>Social Learning Environment Didactical Portal 11th December 2015 presentation</i> (http://www.riscat.it/sites/default/files/2016-01/Presentazione%20RISCAT%2011%20dicembre%202015.pdf)</p>
INSIGHTS	
DESCRIPTION	<p>UiBi is a project opened to all school institutes in the Provinces of Lucca and Livorno. Its objective is to realize a Social Learning Environment and it supplies tools and contents to the students to pursue such aim.</p> <p>An important general objective behind the project is to build a bridge between formal learning contexts and informal contexts, bearing in mind the important educational value that puts the students at the center of the teaching/learning process.</p> <p>It preserves the positive elements of the Social Networks (such as the environment that promote sharing of information and perspectives), and applies them to learning.</p> <p>To prepare the students for the activity, the project includes a phase</p>

	<p>of training, organized in three moments: a “cultural moment”, focused on the relationship between didactics and new technology; an “operational moment”, that addresses the use of digital didactics; and a more specific moment dedicated to content creation and to the use of the resources of the Portal, as well as the functioning of the App of the project.</p>
<p>METHODOLOGY</p>	<p>Three are the main digital methods used to implement the project:</p> <ol style="list-style-type: none"> 1) A teachers’ Community of Practice to collect, discuss and publish their own, to deepen specific topics and to co-build a professional training; 2) A web portal that aims to: support learning activities (on individual, group, class, school and territory level); constitute a multimedia repository; create an e-portfolio for each pupil in the project; design lessons and tests; report the topics studies; 3) A Personal Learning Environment through a mobile App that transforms the educational contents of the Portal into gaming activities available for the students. <p>All the activities, tools and services involved in the Uibi project is supplied for free to the participating schools.</p>
<p>RESULTING BENEFITS</p>	<p>The different tools developed during the project activities contribute to the achievement of a series of important results:</p> <ul style="list-style-type: none"> • The possibility for the teachers to be continuously trained through the didactic portal; • A Community of Practice at disposal of the teachers, that facilitates the sharing of experiences, materials and opinions; • The parents feel reassured, because the Learning Environment is safe, controlled and has filtered access, which prevents the participation of undesirable guests; • The learning process of the single student is improved, as it is enriched through the contribution of teachers and classmates; • Growth of the students’ motivation against truancy; • Increase in the awareness towards the management of the media in students and teachers; • Overcoming the difficulties related to geographical distance, by proposing multimedia contents (courses, lessons, close examinations, test) that are easily accessible online; • Support to students with learning disabilities;

	<ul style="list-style-type: none"> • Creation of a personal e-portfolio that certifies the competences acquired; • Contribution to the improvement of the services offered by the Scholastic Community, as consequence of a better internal communication
RISKS	As a local initiative, interesting a limited quantity of schools concentrated in the Provinces of Lucca and Livorno, the main risk is its financial sustainability, that depends on the private institutions that created the project.
WORKABLE – TRANSFERABLE PRACTICES	<p>UiBi was born to sustain the scholastic communities (families, teachers and students) of the Province of Lucca. In 2014, the action extended to the Province in Livorno, thanks to the contribution of the Foundation of Livorno. The project, however, progressively opened to more realities on the regional and national territory, benefitting from a diffused and deep use of the New Technologies in the didactics.</p> <p>UiBi has, indeed, expanded beyond the borders of the Province of Lucca, involving an increasing number of schools in the Region of Tuscany. Moreover, in February 2016, the Cassa di Risparmio di Lucca Foundation (FCRLU) established the “UiBi Foundation for pedagogical-didactic innovation”, which operates on both regional and national level, with the specific mission to consolidate an innovative vision of school and education.</p>

UP2US Campaign

 	
GENERAL INFORMATIONS	
TOPIC	Cyberbullying
TITLE	UP2US Campaign
DURATION	N/A
LEAD PARTNER/COORDINATOR	Webwise
PARTNERS/NETWORK	Webwise is the Irish Internet Safety Awareness Centre which is co-funded by the Department of Education and Skills and is co-financed by the European Union's Connecting Europe Facility.
WEB LINK	https://www.webwise.ie/up2us-2/
RELEVANT DOCUMENTS or OUTPUTS	This digital resource comprises a teachers' handbook with 10 lesson plans and activities for use with older primary school and junior cycle secondary school students, with the aim of supporting these pupils to combat instances of bullying and cyberbullying in their school communities. The resource also includes guidelines and templates for delivering a poster activity directly with pupils, which can be used to raise awareness and understanding of cyberbullying among young learners.
INSIGHTS	
DESCRIPTION	These digital resources come in the format of an interactive toolkit for teachers to use to address the topic of bullying and cyberbullying in their schools. This toolkit includes a teacher's handbook with lesson plans, templates and materials for organizing a poster campaign in the school and guidelines for developing a wider campaign to tackle the issue of cyberbullying in primary and post-primary schools. Although these resources are targeted at junior cycle secondary school students

	(aged 12-14), the materials are relevant and transferrable to pupils in the upper classes of primary school (aged 11-12)
METHODOLOGY	<p>The teacher's handbook contains a set of lesson plans which provide instruction and activities on each of the following topics:</p> <ol style="list-style-type: none"> 1. Lesson 1 – Bullying: The Effects 2. Lesson 2 – Private and Anonymous 3. Lesson 3 – Like/Dislike 4. Lesson 4 – Who's Involved 5. Lesson 5 – Report #UP2US 6. Lesson 6 – Two side of the Internet 7. Lesson 7 – Rewriting the Rules 8. Lesson 8.- Imagining a school without bullying 9. Lesson 9 – Making a stand against bullying (Part 1) 10. Lesson 10 – Making a stand against bullying (Part 2)
RESULTING BENEFITS	<p>The benefits of using these materials is that they are engaging and interactive for young pupils, and they raise awareness of the negative effects of cyberbullying. Many young pupils are unaware of what constitutes cyberbullying, and how it can impact on them and their peers, both as a victim and as perpetrators (digital footprint), as such, these resources are useful in raising awareness of cyberbullying among young pupils, but also in empowering young pupils to take a stand against cyberbullying and to tackle instances of bullying in their school. For this reason, the poster activity is particularly beneficial for teachers to use with their pupils to foster their empowerment to be actors against cyberbullying.</p>
RISKS	None identified.
WORKABLE – TRANSFERABLE PRACTICES	<p>These lesson plans and templates for the poster activity are freely available to download through the Webwise portal for use in a classroom setting with young learners aged 11 to 12 years. As such, they are transferrable to other primary schools where cyberbullying is an issue, and where teachers are comfortable to work with resources available in English.</p>
NOTES	N/A

Utilization of the PBL method in a technology-supported learning environment for developing 21st century skills

 ΠΑΝΕΠΙΣΤΗΜΙΟ ΠΕΙΡΑΙΩΣ UNIVERSITY OF PIRAEUS		
GENERAL INFORMATIONS		
TOPIC	Information literacy	
TITLE	Utilization of the PBL method in a technology-supported learning environment for developing 21st century skills	
DURATION	2014	
LEAD PARTNER/COORDINATOR	Gemisi Sofia	
PARTNERS/NETWORK	Paraskeva Foteini (Greece) Sampson Demetrios (Greece) Supervisors Papagianni Ekaterini (Greece) Alexiou Ekaterini (Greece)	
WEB LINK	http://dione.lib.unipi.gr/xmlui/handle/unipi/8556	
RELEVANT DOCUMENTS or OUTPUTS	Seminar evaluation questionnaire. Internal evaluation rubric. Rubric for evaluating collaborative skills. Rubric for evaluation of communication skills. Review of regularity distribution of the cooperation indicators.	
INSIGHTS		
DESCRIPTION	This research combines a theoretical framework for learning and a technology-supported learning environment, for supporting the development of cooperation skills and communication among primary school teachers. The aim is to solve complex problems, working in teams and communicating effectively through an electronic platform of managing courses (Moodle - Modular Object Oriented Dynamic Environment). In this way, both a continuing lifelong learning process and professional development will be attained.	
METHODOLOGY	For the design and implementation of the training sessions the PBL- Problem Based Learning theory and the collaborative Jigsaw II theory were used. The training session were hosted on the online Moodle	

	platform.
RESULTING BENEFITS	Trainees working in groups gained a deep understanding in solving complicated problems and had the opportunity to engage multiple learning activities. They also build knowledge on the basis of their own understandings. Their involvement in group projects promoted team spirit.
RISKS	The researcher encountered a variety of difficulties in conducting the investigation. Some of these were: a) modern communication and synchronization of group members was not always easy, there were objective difficulties, e.g. the time of each Member (attended 12 different schools of P.e. teachers of Attica); b) It was not easy to organize the seminar; c) trainees thought that separated from other forms of knowledge.
WORKABLE – TRANSFERABLE PRACTICES	The PBL method can be extended to other levels of education, as in secondary and tertiary education. It is a method appropriate for conducting conferences. It is recommended for the development of multiple skills that characterise the 21st century, such as entrepreneurship and creativity.
NOTES	N/A

STEAM: AUGMENTED REALITY FOR EDUCATION

	
GENERAL INFORMATIONS	
TOPIC	Communication and collaboration
TITLE	STEAM Augmented Reality for Education
DURATION	from: 01/05/2019 to: [date]
LEAD PARTNER/COORDINATOR	1st Primary School of Rafina, Greece
PARTNERS/NETWORK	Facilitator: Nancy Pyrini
PARTNERS/NETWORK	CleverBooks, Ireland
WEB LINK	https://www.cleverbooks.eu/
RELEVANT DOCUMENTS or OUTPUTS	"Practical Guide: Augmented Reality at school" available at https://www.cleverbooks.eu/shop/
INSIGHTS	
DESCRIPTION 1000 characters max	<p>Augmented Reality (AR) applied to CleverBooks educational products is the most affordable way to use modern technology for the benefit of your classroom or school learning. You only need a mobile device (a tablet or mobile phone based on Android or Apple), the free apps from CleverBooks and products like DIY building blocks, map of the world, pocket workbooks in Geography and Geometry.</p> <p>Augmented Reality applied to the CleverBooks app will help young learners to visualize 3D objects and interact with them. Students will be able to learn about other countries without travelling, geometrical shapes, which are difficult to conceptualize through a flat images in a text book, allowing them to freely manipulate and observe them from any angle, thus greatly improving their visualisation.</p> <p>1. GEOGRAPHY</p> <ul style="list-style-type: none"> • Geographical peculiarities of the continents • Political structure • Monuments and other heritage • Flora and fauna • Water animals! • Interactive weather for each season • Interesting facts about each animal, feed the Animal mode ... and much more! <p>2. GEOMETRY</p> <ul style="list-style-type: none"> • View geometric 2D and 3D shapes from all angles

	<ul style="list-style-type: none"> • Voiceover for all the shapes and interactions made by kids • See sides of 3D shapes unfold into 2D shapes (decomposition is visualized!) • Cross section in 3D • Find out about different variations of 2D shapes • Learn and understand fractions • Compare and identify objects in the environment with geometric shapes using Augmented Reality • Develop spatial imagination by observing 3D and flat models • Learn properties of geometric 2D and 3D shapes and fractions • Interactive knowledge test
<p>METHODOLOGY 500 characters max</p>	<p>Interdisciplinary and Constructivist Approach A classroom with an active learning approach increases student motivation, knowledge retention, and content transferability. Parental involvement Family engagement in schools improves student achievement, reduces absenteeism, and restores parents' confidence in their children's education. Active Citizenship Many of the ideas, concepts and discussions associated with the workshop, such as habitats conservation, will cause students to analyze the community they live in and hopefully instill a need for active citizenship.</p>
<p>RESULTING BENEFITS 500 characters max</p>	<p>Augmented Reality:</p> <ul style="list-style-type: none"> • New, inspiring technology which enhances learning using real world 3D images • 3D Graphics • Facilitates educational visualization process • School Curriculum based: Validated by teachers and tested by happy users (school kids) • Enhances Motivation to Learn: Great combination of technology and interactive education for modern kids
<p>RISKS 500 characters max</p>	<p>The students faced the following challenges:</p> <ul style="list-style-type: none"> • Poor battery life • Tablet/Phone or App crashes. <p>Students have been advised to bring extra devices just in case there were technical problems so there was no real inconvenience just frustration the moment the problem came up.</p>
<p>WORKABLE – TRANSFERABLE PRACTICES 500 characters max</p>	<p>Augmented Reality is brilliant for classroom environment. All is needed is a projector and tablet/mobile phone connected to it. The application works on both apple and android devices at no extra cost. Use your device with pre-installed app, flash cards and a projector for group instruction. Teachers can use the app along with a whiteboard or projector connected to a phone or tablet to create an engaging and dynamic learning environment where students can interact with 3D objects. Using their imagination, the possibilities are endless!</p>

NOTES



Download App for Android from Google Play (CleverBooks Geography).

Download App for Apple from Apple Store (CleverBooks Geography).



CONCLUSIONS

This collection of best practices chosen by the partners within their country contexts, offers us a real experiences framework for promoting Digital skills and literacy in different parts of Europe.

The scope of a transnational partnerships in this field is to promote new approaches to teaching and assessing digital literacy skills, starting from the consideration that digital literacy must be considered as important as any other literacy (linguistic, mathematic, scientific, etc.) in the contemporary educational and scholastic curricula.

From the experiences described above, it can be highlighted that introducing the concepts related to digital citizenship to the students since an early age, throughout their school career, represents a valuable practice to train digitally literate citizens, and create a more balanced and connected digitalized society.

This clarifies to the stakeholders in the educational system, the importance of a concrete, sustainable investment in resources, projects and initiatives, that promote digital citizenship in primary school.

For this reason, including ICT training in the scholastic curricula for children aged 6-12, does not aim exclusively to teach to the students how to use computers or specific software, or train them in generic technological skills, but also to develop their “basic” skills like investigation, critical thinking, modelling solutions, synthesis, creativity, communication and cooperation and to prepare them for participation in contemporary society.

From the above catalogue of best practices, comprehensive of feedbacks from researchers in the partner countries, it can be underlined that making digital resources and educational materials available for teaching/ learning in primary and secondary school, has the positive effect of keeping young users safe and when surfing online, and of educating parents and teachers to the risks and dangers of using social media at a young age, such as cyberbullying. The concepts of privacy, safe web surfing and security tools are widely promoted in schools in every context. For this reason, the first strategical step in making an investment towards digital literacy, should be addressed to improving the IT infrastructures in primary schools, and, more generally, to integrating ICT resources into primary school teaching practices. This is, indeed, the challenge for the future European educational system, and a shared priority to guide the new generations towards the new

global digital economy, a dimension which requests more and more human resources that are digitally competent, skilled and responsible.

All the partners highlighted that there are further steps and efforts to be made to fully include the use ICT technologies and tools in school, but there is a growing consensus that, in order to keep young 'digital native' learners engaged, and to prepare pupils to be prepared employees for the future digital economy, there is a current need to invest in teacher training (aimed to upskill the teachers in the use of digital resources), and to structure the digital competences in young pupils. The review of the good practices in use in the partner countries of the project and at European level, show a dynamic reality and a starting point to intensify the effort in offering to the teachers the tools and opportunities to improve their abilities for educating to a responsible use of digital resources in a connected world.

RECOMMENDATIONS

The desk research based on the overview of the national best practices in the teaching/learning of digital skills and of the responsible use of digital resources, constitutes an opportunity for the DRC project partners to design a pedagogical framework, in which they can elaborate suggestions and practical guidelines, addressed to teachers, educators, and other key stakeholders and policy makers of the educational sector.

After the review of the past and current experiences in digital learning, what can be particularly recommended for the improvement of the teaching/ learning of digital skills is the following:

- 1) Define a clear methodological approach that, adopting both formal and non-formal education, combines teacher training, programs, curricula and educational material, suitable to digitally-supported teaching models, in order to guide children through the complexity of the digital world;
- 2) Elaborate, encourage, promote and finance specific initiatives to introduce digital citizenship in the school curricula, through the incorporation of information technology, i.e. computing lessons constituting a stand-alone discipline taught by expert teachers, with the support of specific trainings and programs to orient them on how to deliver the lessons and get the most out of the resources;
- 3) Engage students aged 6-12 through the implementation of active learning methods, that are more effective in educating young pupils to some of the most difficult and sensitive topics related to online safety;
- 4) Favour the access and use of open data resources and collaborative digital technology tools and methods, in order to promote the above-mentioned changes in both the formal and informal education systems;
- 5) Promote and strengthen the teaching of fundamental values (e.g. freedom, democracy, human dignity and respect for fellow human beings), as the starting point for providing lifelong skills and spreading safe, appropriate and responsible behaviour;
- 6) Carry out programs/initiatives with the aim to develop young students' digital skills, providing teachers with concrete support and additional training materials, to ensure their confidence in educating to online safety and responsibility;

- 7) Give special attention to initiatives and tools aimed at developing the topics related to online safety and cyberbullying with pupils, teachers and school leaders, and create more opportunities to share information on such matters with parents and care-givers;
- 8) Invest more resources (i.e. professional training activities, budget and equipment) in order to support, update and further develop teacher training activities and projects, in the framework of a general strategy and specific policy guidelines and plans (i.e. Italy's and Ireland's national plans and strategies);
- 9) Create, manage and support national repositories, platforms and databases for the collection of best practices, in order to achieve an effective and wide sharing of teaching/learning experiences, materials, free tools and suggestions for future activities, that involves not only teachers and school managers, but also parents and, in general, all the school system stakeholders.

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