Digital, Responsible Citizenship in a Connected World

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

List of tools for the development of digital skills

Table of Contents

PARTNERS

An alternative use of the NetLogo modeling environment, Where the student "thinks" and "acts" like an Agent, in order to teach concepts of Ecology

TOPIC	Use of ICT
RESEARCH/TOOL	NetLogo modeling environment
AUTHOR(S)	Aristotelis Gkiolmas, Anthimos Chalkidis, Maria Papaconstantinou, Zafar Iqbal & Constantine Skordoulis
DATE	2014
SOURCE	https://bit.ly/2NdR2Mv
DESCRIPTION	The Multi-Agent-Based programming, modeling and simulation environment of NetLogo (Wilensky, 1999) has been used extensively during the last fifteen years for educational purposes. The learning subject, when interacting with the User's Interface of NetLogo, can easily study properties of the simulated natural systems, as well as observe the latter's response, when altering their parameters. In this research, NetLogo was used in the view that the learning subject (student or prospective teacher) becomes and active "agent" when interacting with the model, as they do it in a deeper manner. This is not achieved by forcing the learner to program (write NetLogo code), but by interviewing them, together with "applying" the choices that he/she makes on the model. The scheme was carried out, as part of a broader research, with interviews, and web-page-like interface menu selections, in a sample of 17 University students in Athens (prospective Primary School teachers), and the results were judged as encouraging. At a further stage, the computers were set as a network, where all the agents performed together. In this way, the learners could watch onscreen the overall outcome of their choices and actions on the modeled ecosystem. This seems to open a new – small – area of research in NetLogo educational applications.
MAIN AFFORDANCES	Have the students conceptualize natural and environmental systems models (especially Multi-Agent-based models) from "the inside", by

	leading them to understand the behavior of agents, without introducing them to computer programming, and Make the learners capable of building models of natural systems and ecosystems, not "from the scratch", but by deciding the behavior of agents, a skill that is crucial for understanding how the modeled systems will behave under different rules. Through the use of simple NetLogo models and their variations, as well as through navigation in specifically created interfaces, students may learn how to act and "think" like members of a natural system or ecosystem, thus understanding its functions and behavior. In a further stage of application, similar to Wilensky's "HubNet" (Wilensky & Stroup, 1999), the aim is that each student can move one agent, e.g. through the use of a joystick, and altogether watch the results of their combined actions on a NetLogo screen, provided that their computers are networked.
EXAMPLES	NetLogo. http://ccl.northwestern.edu/netlogo/ NetLogo Fire model. http://ccl.northwestern.edu/netlogo/models/Fire NetLogo Ants model. http://ccl.northwestern.edu/netlogo/models/Ants
NOTES	N/A

Animation as a tool for innovation in educational activities within the Jean Monnet programme: A case study of implementing an experiential workshop to fight intolerance and fundamentalism in the framework of the European Union

TOPIC	Use of ICT
RESEARCH/TOOL	Animation
AUTHOR(S)	Siakas, S. & Goutsios C.
DATE	2015
SOURCE	http://dx.doi.org/10.12681/icodl.75
DESCRIPTION	Use of animation as a cooperation learning tool, aiming at the development of European Union key principles such as fighting intolerance and fundamentalism.
MAIN AFFORDANCES	Technical level: Understanding of the operation and basic principles of the art of animation Mastering the animation creation process to such an extent that we can use it to express a variety of messages. Content level: Understanding various aspects of concepts associated with European integration; Promote dialogue and research in the field of European studies; Enrichment of European studies with innovative uses of technology.
EXAMPLES	Jean Monnet "Information Projects", a European project under the title "Universities4EU", which organized the Department of international and European studies of the University of Piraeus in cooperation with Jean Monnet headquarters of the Aegean University, Faculty of Social Sciences, Department of sociology
NOTES	N/A

Be in Ctrl – a Digital Resource that teaches young learners about online relationships, communication and staying safe online

TOPIC	Safety
RESEARCH/TOOL	Be in Ctrl
AUTHOR(S)	Webwise
DATE	2018
SOURCE	https://www.webwise.ie/trending/be-in-ctrl/
DESCRIPTION	The Be in Ctrl programme was developed in partnership between Web Wise and An Garda Siochana (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.
MAIN AFFORDANCES	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. The benefits of using these resources with pupils is that they 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.
EXAMPLES	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. More resources can be found at these links: • https://www.webwise.ie/trending/be-in-ctrl/ • https://www.webwise.ie/teachers/resources/
NOTES	N/A

Be Internet Awesome

TOPIC	Digital citizenship and online safety
RESEARCH/TOOL	Online game, Curriculum and pledge
AUTHOR(S)	Google in partnership with iKeepSafe
DATE	2017
SOURCE	https://beinternetawesome.withgoogle.com/en/
DESCRIPTION	Be Internet Awesome teaches kids the fundamentals of digital citizenship and safety, so they can explore the online world with confidence. Interland is an adventure-packed online game that makes learning about digital safety and citizenship interactive and fun—just like the Internet itself. Here, kids will help their fellow Internauts combat badly behaved hackers, phishers, oversharers, and bullies by practicing the skills that they need to be good digital citizens. The Be Internet Awesome curriculum gives educators the tools and methods they need to teach digital safety fundamentals.
MAIN AFFORDANCES	To help kids be safe, confident explorers of the online world.
EXAMPLES	https://beinternetawesome.withgoogle.com/en/resources https://beinternetawesome.withgoogle.com/en/slides https://www.blog.google/technology/families/be-internet-awesome-helping-kids-make-smart-decisions-online/ https://www.youtube.com/watch?v=1_uHacsxAp4 https://www.youtube.com/watch?v=i307esUZTSc
NOTES	N/A

Computational thinking: a guide for teachers

TOPIC	USE OF ICT
RESEARCH/TOOL	PENSIERO COMPUTAZIONALE: una guida per insegnanti / *Computational thinking: a guide for Teachers*
AUTHOR(S)	Computing at School association (CAS) Institute for Didactical Technologies of National Research Council (ITD – CNR)
DATE	2015
SOURCE	Computational Thinking a Guide for Teachers (CAS) https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=2&ved=2ahUKEwiSsPjomMfdAhViMOwKHYVnD0kQFjABegQICRAC&url=https%3A%2F%2Fcommunity.computingatschool.org.uk%2Ffiles%2F6695%2Foriginal.pdf&usg=AOvVaw3Fomhq-Sift8Rp6hrFA4rB Italian version (ITD –CNR) http://pensierocomputazionale.itd.cnr.it/pluginfile.php/957/mod_page/content/7/Guida%20al%20Pensiero%20Computazionale.pdf Italian web on Computational Thinking resources (Programmare per apprendere project) http://pensierocomputazionale.itd.cnr.it/ http://pensierocomputazionale.itd.cnr.it/mod/page/view.php?id=85
DESCRIPTION	The National Plan for Digital School wants to promote an appropriate education to the "computational thinking", that goes beyond the digital literacy training for teachers. It is in fact essential in order for the new generations to be able to face the society of the future not as passive and unaware technology and services consumers, but as subjects aware of all the aspects at stake, and as actors who actively participate in their development. The association Computing At School (CAS), formed by teachers and English researchers, has produced a useful guide on computational thinking for educators that was translated into Italian and adapted

	to the national context. The Italian translation of the Guide is part of a general activity of the Institute for Didactical Technologies of the National Research Council (ITD – CNR), that comprehends the related research project "Programmare per apprendere", with the aim to create a real synergy between educational research and teaching/learning activities in the classroom, and to define and experiment vertical educational paths, in order to promote "computational thinking" starting from the primary school.
MAIN AFFORDANCES	The proposed methodological approach foresees the following qualifying points: - to have the pupils work on plans (meaningful in contents, concepts and complexity); - to encourage them to experiment and learn from their mistakes; - to promote collaborative working and sharing of experiences.
EXAMPLES	Material, resources and examples of activities for teachers are described in the section of the site "Programmare e imparare con Scratch / *Program and Learn with Scratch* (http://pensierocomputazionale.itd.cnr.it/course/view.php?id=6) The section "Computational Thinking" http://pensierocomputazionale.itd.cnr.it/mod/page/view.php?id=85 of the website of the ITD CNR contains all the resources for training and use of computational thinking in class, available for the teachers.
NOTES	N/A

Cyber Kid – Internet Safety Workshop for Primary School Students, Teachers and School Leaders

TOPIC	Safety
RESEARCH/TOOL	Cyber Kid - Pupils Workshop for Primary Schools
AUTHOR(S)	ZEEKO Academy
DATE	2015
SOURCE	https://zeeko.ie/primaryschools/
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.
MAIN AFFORDANCES	The workshops with ZEEKO Academy begin with experts first conducting a class-wide survey with all the 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 others in online environments, without the fear of being punished by a teacher or a parent. From the results of this survey, ZEEKO trainers adapt their workshop material to address the most significant issues affecting the pupils in each class. The workshops tend to cover the following topics: • Understanding our Digital Footprint • Stranger Danger Online • Finding a ChatBudi
EXAMPLES	Beginning their work with the school by conducting this survey allows the trainers to tailor the workshop content, to address the real needs of the 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. Therefore, 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. The use of this survey before beginning 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. More resources and advice are available at: https://zeeko.ie/blog/
NOTES	N/A

Digital Poster Creation Cooperative tool

TOPIC	Use of ICT
RESEARCH/TOOL	Digital poster creation cooperation tool
AUTHOR(S)	Agiomavritis, M.
DATE	November 2015
SOURCE	http://edu.glogster.com/ http://padlet.com/ http://www.photovisi.com/ http://www.postermywall.com/ http://www.picmonkey.com/
DESCRIPTION	A poster creation activity can bring about a number of important educational benefits for students of all grades. One of the major benefits is the development of cooperation skills. However, there are not many platforms that support collaborative digital poster creation, while the ones available use technologies which gradually cease to be supported by browsers. In this context, a tool for digital poster creation was created for primary and secondary school children, which fully supports collaboration, incorporating the latest Web application development technologies. This system was evaluated by elementary school students through the method of empirical assessment, showing very encouraging results.
MAIN AFFORDANCES	Key advantages of creating posters within the educational process (O ' Neil & Jenkings, 2012): The posters help students for whom it is easier to learn by looking at the information (Visual types) (Summers, 2005). Students show great enthusiasm and active participation (Walker, 2005). Students are provided with the opportunity to discuss constructively about their learning (Briggs, 2009). It can be an authentic assessment tool (Summers, 2005).
EXAMPLES	Students of the fourth grade must be assessed for knowledge gained about Alexander the Great and his life, in the history course. Spyros, one of the students, chose to create a poster, that will include highlights of the life of Alexander the Great and present the

	information to know. Spyros noticed that the learning process is more effective when the work contains images, audio and video in addition to text. In this way, it seems easier to understand and assimilate information, and more work can be done in less time. Also, since he makes several spelling mistakes, he has more confidence when the size of the text he writes is relatively small and has a succinct format. Spyros uses the following platforms to create posters: http://edu.glogster.com/ http://padlet.com/ http://www.photovisi.com/ http://www.postermywall.com/ http://www.picmonkey.com/
NOTES	The creation of digital posters is an activity with many educational benefits for students. These benefits are not limited merely to the fact that posters help students to acquire skills for effective verbal and non-verbal communication, but comprehend also a cultivation of the students' aesthetic, the acquisition of skills of cooperation, etc. Moreover, the posters are used effectively in various stages of education, as tools for evaluating the degree of knowledge achievement. Although the pedagogical value of poster creation activities is undeniable, the digital tools available do not always combine those features that impart pedagogical value in the process (i.e. cooperation, usability, simplicity, etc.).

Digital story telling as a problem-solving tool in school context

TOPIC	Use of ICT
RESEARCH/TOOL	Digital story telling as a problem-solving tool in school context
AUTHOR(S)	Fokides, E., Makarouna, F., Saltidou, E.
DATE	2017
SOURCE	http://opensimserver.aegean.gr/publications/2016_conf_GR_Fokides_Makarouna_Saltidou.pdf
DESCRIPTION	The difficulties of integrating immigrant students in the school environment and bullying situations are two problems that pupils and teachers encounter frequently, and have important psychological and social implications. Digital storytelling is an instrument often used in the educational practice, with interesting outcomes. The article presents the results of two educational interventions in the primary schools of Rhodes, which employed digital storytelling to address the issues mentioned above. The key characteristic of the interventions was the active involvement of students in the process, while the researcher held a consultative-auxiliary role. Data were collected with a variety of research tools, to ensure research validity. The data showed that the interventions had positive results and helped children deal with both immigrant integration and bullying situations. Educational interventions were kept short but still flexible, since they did not require a special preparation or special equipment. They can be either part of wider educational programs or self-contained actions.
MAIN AFFORDANCES	Findings support the idea that digital storytelling can help: (a) the immigrant students, giving them the opportunity to express their thoughts and feelings and, thus, adapt more easily and (b) their school-mates to understand the problems of foreign peers, thus changing their attitude towards them. Furthermore, the findings of this study support the idea that the intervention helped pupils organize their thoughts about bullying, reflect about the issue and understand its implications. However, it is unclear whether the teaching interventions helped in shaping children attitudes and

	behaviour. Since digital stories were hypothetical situations, it is unknown how children would react in real-life situations.
EXAMPLES	N/A
NOTES	N/A

Digital YES, Digital NO

TOPIC	USE OF ICT
RESEARCH/TOOL	Digitale si, digitale no / *Digital YES, Digital NO*
AUTHOR(S)	ImparaDigitale Centro Studi Metodi – Strumenti – Risorse in partnership with Bocconi University of Milan and CNIS - Association for the National Coordination of the Specialized Teachers The research was financed by Acer for Education
DATE	2017-2018
SOURCE	http://www.imparadigitale.it/ricerca/progetto-digitale/ http://www.imparadigitale.it/wp-content/uploads/2018/06/PROGETTO-DIGITALE-SI-DIGITALE-NO.pdf
DESCRIPTION	This research plan aims to involve various realities that operate in the field of the research in digital education. Its aim is to appraise the new exigencies of the teaching method for Italian primary schools, as the students' learning process has been modified by the advent of the digital technologies and their use in the children's everyday life. The objective is to produce guidelines for the Italian teachers, to enable them to define all the criticalities and potentialities of digitization for the growth of Italian children, through neuroscientific and educational approaches. The main purpose is to analyse the teaching/learning process in its most diffused methodologies, to understand which ones are the most suitable to face an educational model that wants to strengthen the potentials of the student. The general objective of the project is to evaluate the effectiveness of specific digital tools in the expansion of the learnings. It will be investigated what types of use of the digital tools can have the best effects: - in the basic cognitive processes: oral and visual-spatial memory, both on brief and long-term levels; executive functions; sustained attention; auditory perception;

	- in the basic learning capacities for the acquisition of the instrumental abilities of: reading, writing, calculation and understanding of the written and oral text; - on the behavioural aspects of: self-regulation, motivation, emotional intelligence and social behaviours.
MAIN AFFORDANCES	The ambition of the research is to demonstrate that: - Technology can effectively help to improve the speed and fluency of the teaching/learning process, and it is also useful for exercising, but its advantages become evident only when the fruition of contents becomes individual; - Multimedia improved learning: however, it is necessary to carefully plan the digital intervention; - Multimedia helps teaching in terms of harmonization of cognitive processes, especially on cases of learning disabilities.
EXAMPLES	The association ImparaDigitale launched a call on the Internet to invite the best-known experts in the various methodologies to participate for the research project. In a meeting at Bocconi University, held on November 18th 2017, the first 25 national referents underlined the common and divergent aspects of the various didactic methodologies in analyses, and commented on the spaces, infrastructures, and technologies, with the objective to create a "model of school", that can be organised in learning units for every typology of activity implemented by the teacher in their daily activity with the class. The main results and examples of the research tool use were presented on May 21st 2018 in Bergamo, at the Auditorium of the Episcopalian College Sant'Alessandro, in the free seminar "Digital yes, digital no". http://www.imparadigitale.it/digitale-si-digitale-no-interventi-seminario/?hp In the occasion, they awarded the winners of the second edition of the Game@School. National Olympiad of the Video game in the Didactics. A story map of the project is available at

	https://esriitaliatm.maps.arcgis.com/apps/Cascade/index.html?appid=9130ef3f2626450d8a9fb0e365c1809b
NOTES	N/A

Digizen Game

TOPIC	Cyberbullying, digital citizenship, online values, rights and responsibilities
RESEARCH/TOOL	Game based learning
AUTHOR(S)	ChildNet international
DATE	2005-2018
SOURCE	http://www.digizen.org/resources/digizen-game.aspx
DESCRIPTION	The main aim of this game is to personalize and reinforce learning from a film. It allows the students to log on to a computer and create your own character, who goes to the same school where the cyberbullying has taken place.
MAIN AFFORDANCES	Learn about cyberbullying and how students can support people who face negative experiences online. During a school day, consider the situation and make informed decisions as a digital citizen.
EXAMPLES	http://www.digizen.org/resources/cyberbullying/interactive/ http://webarchive.nationalarchives.gov.uk/20130321053909/https://www.education.gov.uk/publications/eOrderingDownload/Let'sFightItTogether_guide.pdf
NOTES	N/A

Education and new media

TOPIC	Use of ICT
RESEARCH/TOOL	Educazione e nuovi media/ *Education and new media* a) Diritti e responsabilità verso una cittadinanza digitale. Guida per insegnanti / *Rights and responsibilities towards digital responsibility. A Guide for teachers* b) Guida per genitori / *Guide for parents*
AUTHOR(S)	*Guide for teachers* Published by Save the Children – Mondadori Education Main author: Elisabetta Papuzza Co-Authors: Cristiana De Paoli, Mauro Cristoforetti, Maria Elisa Marzotti Editor: Walter Nanni (Editor) *Guide for Parents* Published by Save the Children – AdiConsum (association of consumers) – Coordinamento Genitori Democratici Co-Authors: Elisabetta Papuzza, Adele Rita Medici, Maria Elisa Marzotti, Mario Russo Editor: Walter Nanni (Editor)
DATE	a) 2008 b) 2009
SOURCE	https://www.sicurinrete.it/wp-content/uploads/2018/08/GUIDA-INSEGNANTI.pdf https://s3.savethechildren.it/public/files/uploads/pubblicazioni/educazione-e-nuovi-media_0.pdf
DESCRIPTION	*Guide for teachers* The guide offers didactic guidelines and practical examples to create lessons for children and teenagers, focused on the awareness of the rights of the individual online, and on the actual use of digital technology, in agreement

	with the U.N. Convention on the rights of the infancy and the adolescence (1989).
	The intervention is thought for pupils from primary school (8-10 years of age), secondary school (11-13 years of age) and first two years of high school (14-15 years of age).
	The manual is divided in three parts:
	1. a panoramic on the relationship of today's young people with the New Media, and on the theme of responsibility and safety online;
	2. a proposal for schools on New Media Education: Save the Children methodological approach, founded on the rights and the tools used;
	3. an operational-didactic section, containing a series of examples of activities to organise with the class group.
	Guide for parents
	This guide is targeted to parents, with the aim to provide them with correct information and practical guidelines for the education of their children to a correct use of the new technologies.
	The objective is to valorise and promote the potentialities of these new tools in the life of the children, while alerting them to the risks at stake in their use. It's an educational proposal, from which parents can draw the values and specific elements of their own role.
	The Guide tries to analyse the needs and motivations behind the use of multimedia instruments, to better understand why children use them, how they use them and how risky behaviours can be prevented.
	Finally, it is proposed an educational model, that wants to orientate the children towards the development of specific competences (critical sense, autonomous thinking, sense of responsibility, etc.), and to act in the name of determined values (respect of themselves and of the others, of the legality, of the community, etc.), in the use of new media.
	At the same time, the Manual offers some suggestions to help parents to regulate usage time and ways.
	The structure of the guide foresees four sections, divided according to the technological tool treated in each one: mobile phones, Internet, TV and videogames.
MAIN AFFORDANCES	*For teachers:* promote a responsible behaviour in the use of the New Media in young generations;

	to be able to regulate affective dynamics and to report them (emotions, motivations, sociability, needs, etc.); to acquire and develop dynamic cognitive capacities (knowledges and technical competences of the tool); to acquire and develop values and moral and ethical principles, as well as the ability to assume social responsibility, which is connected to the maturity of the subject and their level of sense of citizenship. *For parents:* In an educational polycentric conception, the responsibility of education involves different educational agents (family, school, institutions, associations, civil society etc.), each one bearing a specific assignment. These agents are called to work together on a common project, within shared educational functions.
EXAMPLES	*For teachers* The third section of the manual proposes various activities: A set of activities regarding the theme of the New Media, that can be pragmatically conducted in class by the teachers, having as general reference the illustrated theoretical-technical model. Such activity has been divided in 3 sub-typologies that work mainly on: • the recognition of emotions (affective level) to reflect on the needs, motivations, representations, and meaning of certain behaviours, in agreement to the context of reference (school, family, etc.); • the technical knowledge (cognitive level) to provide notions on the functioning of the tools, on the characteristics of the net, of the media, etc.; • the values and matters connected to the rights (civic level) to reflect and to debate on the rights and on the responsibilities, on the roles in the society, on the moral principles that are part of the individual and social behaviour and on the characteristics of the Digital Citizenship. A fourth and last group of activities (evaluation level) aims to support the student in the evaluation of the activity.
NOTES	N/A

Elementary students' difficulties with the SCRATCH programming language

TOPIC	Use of ICT
RESEARCH/TOOL	Elementary students' difficulties with the SCRATCH programming language
AUTHOR(S)	Nikolos, D., Komis, V.
DATE	2017
SOURCE	http://www.etpe.gr/custom/pdf/etpe2505.pdf
DESCRIPTION	The paper describes the difficulties that 5th graders face when they get involved in an educational scenario for the learning of programming with the programming language of SCRATCH. Some of these difficulties existed in earlier programming languages too, while others appear in recent education oriented languages. These difficulties can be categorized into (a) beginner difficulties, (b) difficulties in basic structure "forever if" and (c) difficulties related to the new language features of Scratch 2.0. Finally, the paper proposes some solutions to overcome these difficulties in the context of the educational scenario.
MAIN AFFORDANCES	The paper suggests the following educational scenario for teaching the SCRATCH language: Lesson 1 – Introduction: Introduction to SCRATCH programming language environment Lesson 2 – Views: Commands, which manage objects' appearances Lesson 3 – Interaction: Interaction takes place with the command "if … then" Lesson 4 – Messages: Send and receive messages for object synchronization Lesson 5 – Variables: Setting game score monitoring. Initializing variables Lesson 6 – Repetition: Repetition of main concepts Lesson 7 – Creation of new commands: Create processes from existing commands using Turtle geometry. Lesson 8 – Clones: Developing a game using clones Lessons 9 – 10 – Game creation: Pupils create their own game

EXAMPLES	A list of educational scenarios on teaching with SCRATCH programming language uploaded by the Greek Institute of Educational Policy AESOP (Advanced Educational Scenarios Operating Platform) gateway: http://aesop.iep.edu.gr/senaria?search_api_views_fulltext=scratch&sort_by=field_ekp_vathm&sort_order=ASC
NOTES	N/A

eSafety Kit

TOPIC	Digital competences; e-safety
RESEARCH/TOOL	eSafety Kit
AUTHOR(S)	The Greek Awareness Centre (Saferinternet.gr) and Cyprus Pedagogical Institute (https://internetsafety.pi.ac.cy/), which are the national representatives for Greece and Cyprus respectively of the Insafe Network of Safer Internet Awareness Centres.
DATE	2016
SOURCE	http://www.esafetykit.net/index2.html
DESCRIPTION	Online platform which includes an eSafety battery of activities, quizzes, suggestions for teachers, parents and students aged 6-12.
MAIN AFFORDANCES	N/A
EXAMPLES	http://www.esafetykit.net/teachers/ir/index.html http://www.pi.ac.cy/InternetSafety/entypo_yliko/games.pdf
NOTES	N/A

Essediquadro

TOPIC	Use of ICT
RESEARCH/TOOL	Essediquadro
AUTHOR(S)	Institute for Didactical Technologies of National Research Council (ITD – CNR)
DATE	2003-on going
SOURCE	http://www.sd2.itd.cnr.it/
DESCRIPTION	Essediquadro is the telematic service of documentation on the available Didactic software, managed by the Institute for Didactical Technologies of National Research Council (ITD – CNR), in partnership with the MIUR (Ministry of Education, University and Research).
	Born from the experience of the Library for the Didactic Software initiated in 1985, Essediquadro offers a large documentation on the digital resources for education currently available on the national and international market. The information is organized to give a complete picture of the problems of usage, and on how to effectively employ technology in the didactics.
	Since 2003, Essediquadro begun a job of recognition, technical evaluation and analysis of the didactic characteristics and software to be used Open Source, with educational purposes. Those products that overcome the trial of technical functionality and didactic usability are accompanied by a vast documentation and made available on Essediquadro webpage.
	The software Open Source is an integral part of a Database of didactic Software in continuous increase, and represents an enjoyable free service, mainly addressing the needs of the teachers. Essediquadro allows to access a complete documentation on the didactic characteristics and techniques of more than 4000 products that can be used as didactical software; but it is also a tool that informs the teachers on how the software can be employed effectively in the school. The system offers indeed: a series of analysis of the software designed for specific disciplinary sectors, various proposals of "didactical paths" to use the software, documentation on the most meaningful didactic experiences and a remotely consultable service.

MAIN AFFORDANCES	Main affordances for teachers offered by ESSEDIQUADRO: - Promotion among teachers and orientation to the use of didactic software - Possibility to explore and use functional products in didactical activities - Knowledge of experiences of use behaviours in existing scholastic contexts - Update on the theme of didactic software. Essediquadro offers a remote consultation service (sd2@itd.cnr.it), and it created a forum to allow for the discussion of topics related to the didactic use of the software (http://sd2.itd.ge.cnr.itlphpBB/index.php). - Realization of training events to update the teachers on the characteristics, the possibilities and the formalities of the use of the digital resources.
EXAMPLES	Didactical software Database of open source software https://sd2.itd.cnr.it/?r=site/ricerca In-depht documents https://sd2.itd.cnr.it/?r=site/approfondimenti A series of in depth documents on the use of the digital resources (didactic resources, sectors' analysis, experiences and elements for reflection or debates) Training https://sd2.itd.cnr.it/?r=site/formazione A collection of training courses to update the teachers on the topics od technology and inclusion. In 2006, within the MIUR project "New technologies and disability", under the action "Accessibility of the didactic Software", a methodology of evaluation of the software's compatibility with disable students' capacities was developed and integrated in the existing database of 250 examples. Such information is available in the data bank, accessible through the button "Focus disabilità" among the search keys.
NOTES	N/A

Exploitation of Electronic Games in Education

TOPIC	Use of ICT 3D Simulation Games
RESEARCH/TOOL	Educational application of Sim Safety in 3D virtual environment: Development of critical thinking in primary school pupils with the teaching technique of SBL Simulation
AUTHOR(S)	Mourniakis, E University of Pireaus Department of Digital Systems Teaching of technology and digital systems
DATE	2012
SOURCE	http://dione.lib.unipi.gr/xmlui/bitstream/handle/unipi/8540/Mournianakis_Emmanouil.pdf?isAllowed=y&sequence=1
DESCRIPTION	The purpose of this study is to take full advantage of the 3D virtual environment of Simsafety for educational scenarios orchestrated utilizing the SBL educational method (Simulation Based Learning), in order to develop the skills of critical thinking and safer Internet use in primary education. It aims to have the students familiarize with potential dangers. Players are encouraged to cultivate critical thinking, to reflect, to acquire knowledge and to develop general skills in making a safe use of the internet.
MAIN AFFORDANCES	Games promote important skills such as safe Internet navigation skills, inquiry and reflection skills. Virtual worlds are an educational tool for the development of critical thinking Simulations help simplify complex learning situations Virtual / 3D worlds enhance learner motivation
EXAMPLES	http://www.simsafety.eu
NOTES	N/A

FUNecole

TOPIC	ICT, Social Skills, Thinking Skills, Science, Literacy, Philosophy and Languages skills
RESEARCH/TOOL	21st Century Syllabus Teaching Content &Learning Platform Curriculum
AUTHOR(S)	Digipro Education limited
DATE	N/A
SOURCE	https://www.funecole.com/
DESCRIPTION	FUNecole® learning environment integrates educational tools and cross curricular instructions that develop ICT, Social Skills, Thinking Skills, Science, Literacy, Philosophy and Language skills for primary school students over a period of six (6) academic years. The platform provides students with access to interactive learning media, ICT tools, thinking skills recourses, whereas, teachers can have access to web-based learning plans, games, teaching recourses and ICT tools.
MAIN AFFORDANCES	N/A
EXAMPLES	https://www.funecole.com/21st-century-learning-with-funecole https://www.funecole.com/digital-instructional-content-and-lesson-materials https://www.funecole.com/digital-learning-sharing-and-collaboration-platform https://www.funecole.com/teaching-the-uk-national-primary-computing-curriculum-with-funecole
NOTES	N/A

Guide for Digital Responsible Citizenship

TOPIC	USE OF ICT
RESEARCH/TOOL	Guida alla cittadinanza digitale consapevole / *Guide for Digital Responsible Citizenship*
AUTHOR(S)	Common Sense Education, in collaboration with the Ministry of Education, University and Research (MIUR)
DATE	2018
SOURCE	Website https://programmailfuturo.it/come/cittadinanza-digitale PDF document https://programmailfuturo.it/media/docs/cittadinanza-digitale/cittadinanza_digitale_consapevole.pdf Schemes for parents https://programmailfuturo.it/cittadinanza-digitale/genitori.pdf
DESCRIPTION	In a dedicated section of the website of Programma il Futuro teachers are provided with examples of lessons addresses to primary and secondary school students, that show how to navigate the Internet with awareness and safety. These lessons aim to intervene on such matters, and every lesson allows to download the relative didactic material. The lessons and the relative materials are produced by Common Sense Education, with whom we undersigned an agreement of collaboration for the adaptation of their educational material to the Italian language.
MAIN AFFORDANCES	The main important affordances of this tool are: - teachers can allow their students to develop their digital citizenship by using the Net and the Media in a critical and more aware way; - students can practice valorise the autonomous use of the technological tools;

	- inform students on how to protect themselves from the dangers of the Web and the Media (plagiarism, frauds, enticement etc.); - educate students to respect specific norms (i.e. respect of the privacy, respect and guardianship of the authors' rights).
EXAMPLES	Examples of learning are contained in specific sections *My digital urban district*: the pupils learn how to visit online fantasy places and how to do this safely, following some fundamental rules. https://www.programmailfuturo.it/come/cittadinanza-digitale/il-mio-quartiere-digitale *Stop and think online*: in this video, a song underlines the importance to think "from head to fit", and to navigate in a responsible way in the digital world. https://www.programmailfuturo.it/come/cittadinanza-digitale/fermati-e-pensa-online/ *The power of the words*: in this lesson, the pupils are invited to reflect on the fact that, while they are having a good time on their favourite web sites, they risk to be exposed to messages from other children that can be offensive, violent or vulgar, and they learn how to manage the actions of cyberbullying. https://www.programmailfuturo.it/come/cittadinanza-digitale/il-potere-delle-parole/ *Super digital citizen*: in this lesson, the objective is to teach what it means to act respectfully and responsibly towards their own community, both in the real world and online. In the video that accompanies to the lesson, a superhero helps the protagonist to make the correct choices to responsibly and safely navigate the Internet.
NOTES	N/A

Happy onLife Toolkit

TOPIC	Online safety, digital skills
RESEARCH/TOOL	WEB /mobile app and toolkit
AUTHOR(S)	European Commission, Joint Research Centre
DATE	2015
SOURCE	https://web.jrc.ec.europa.eu/happyonlife/
DESCRIPTION	Happy Onlife product is 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.
MAIN AFFORDANCES	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.
EXAMPLES	https://web.jrc.ec.europa.eu/happyonlife/publications_en.html
NOTES	N/A

iDecide: An innovative toolkit for inclusive decision-making policies

TOPIC	Education & Learning Social Justice & Migration Elearning & Digital Solutions
RESEARCH/TOOL	Toolkit and e-learning platform
AUTHOR(S)	N/A
DATE	2015
SOURCE	http://www.idecide-project.eu
DESCRIPTION	Inclusion, integration and addressing the needs of marginalized groups, are key priorities for many European countries. CARDET, in collaboration with the Ministry of Education and Culture from Cyprus and partners from 5 EU countries participate in the project iDecide, under the ERASMUS+ KA3 Support for Policy Reform program of the European Commission. The project aims to develop an innovative toolkit, a mobile app, and an 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, partners will better understand the complexities of how decisions at school level influence marginalized groups. The project will also develop concrete recommendations for policy and practice on how to engage in shared decision making, giving voice to all stakeholders.
MAIN AFFORDANCES	To develop an innovative toolkit and an induction course to help teachers integrate inclusive education practices in their school. Specifically, it will 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.
EXAMPLES	https://idecide-project.eu/elearning/ https://www.idecide-project.eu/index.php/en/resources
NOTES	N/A

Interactive educational games in the Greek environment

TOPIC	Games
RESEARCH/TOOL	Interactive educational games in the Greek environment
AUTHOR(S)	Divanis, S.
DATE	6/12/2014
SOURCE	http://www.oikoskopio.gr/map/ http://www.kids.nationalgeographic.com/kids/ http://www.canadiangeographic.ca/default.asp http://www.biodiversity911.org/ http://www.gowild.wwf.org.uk/ http://www.kidsplanet.org/ http://www.energyhog.org/
DESCRIPTION	The use of new technologies in environmental education coupled with well-designed activities support important educational processes. This thesis deals with the design and development of interactive educational activities in the form of mini-games on the website "Oikoskopio" of the WWF Hellas. The «Oikoskopio» is an online cartographic application, which gives each user the ability to view and share diverse environmental information. A website was created in the form of a playground, which offers to the children opportunities for pleasant practice and knowledge acquisition by "playing" with environmental issues such as endangered species, protected areas, and forest types of Greece. Website activities integrate pedagogical methods and educational techniques used today in environmental education programs.
MAIN AFFORDANCES	All the playful activities created in the context of Oikoskopio are interactive, in the sense that they have the "ability" to react to commands and the actions of the user. This feature makes the player's role in the game active, because attaining game objectives depends solely on the player's decisions and actions. A key element of all educational activities for the player is receiving feedback according to his/her answers and actions. The feedback may have the form of numbers (score), graphic (a window with a

35

	comment) or oral. All the games of "Oikoskopio Kids" incorporate a rating system, so that the player gets updates both for his successes and failures. All interactive educational activities of "Oikoskopio" were created with the tool "Raptivity 5.5".
EXAMPLES	1. "Who stays where?". The display of this activity consists of a map of Greece with protected areas. On the left side of the screen there are 6 pictures of endangered animal species. Using "drag and drop" and utilizing knowledge about the habitats of endangered animals in Greece, the player is required to move each icon and place it on the appropriate protected area of the map. After putting all the pictures in place, the player receives an overall feedback on the correctness of the choices, accompanied by the necessary information for the population of the species left in the protected area. If the mappings are incorrect, there is the possibility to compare the wrong choices with the right ones. 2. "Get the wetlands on the map". This educational activity is a matching quiz, that presents a map of Greece with the sketches of seven wetlands protected by the international Ramsar Treaty. A list of names of water appears on the left side of the screen, and each name should match a scribble on the map. The mapping is done with the mouse in "drag and drop" mode. The player moves the names of wetland and drops them in the appropriate places on the map. If placed correctly, then they receive a positive message, otherwise they are informed of their failure to correctly complete the matching activity.
NOTES	It should be noted that the playful activities of "Oikoskopio" are nothing more than a learning tool for primary education, which maintains all the features to be attractive for children. Let's not forget that learning environments using the PC do not need to guide and modulate learning processes, but mainly to create situations and to provide tools that offer to the students opportunities to build

	their knowledge. For the learning to be effective, it should be enjoyable and fun and when the child becoming active through the "Oikoskopio Kids" is one of the basic conditions for achieving positive learning outcomes.

Ikanos Test

TOPIC	Digital competences, ICT
RESEARCH/TOOL	Self-diagnosis test
AUTHOR(S)	Basque Government
DATE	2017
SOURCE	N/A
DESCRIPTION	Ikanos is a project developed by the Basque Government to contribute to the development of a society that is: Competent, Highly participative and co-responsible, User of advanced and high-impact digital services. More specifically, the IKANOS Test is an online tool that helps members of the public to make an approximate self-diagnosis of their digital profile, based on the assessment of the following parameters: Their potential for developing digital competences, measured through the availability of equipment and an Internet connection, as well as habits with regard to the use they make of the Internet, Their training experience in the field of ICTs, with regard to their technological knowledge and certifications held and, Their level of digital competence, as a result of measuring the sum of knowledge, skills and attitudes concerning different key components of digital competence. The questionnaire is based on the European framework of digital competences DIGCOMP and filling it out will only take twenty-five minutes. This tool provides a personalized appraisal of your digital profile as a citizen based on your responses to the questionnaire you are going to complete now. The questionnaire is structured in 3 theme blocks in which you must self-assess your current personal status with regard to a series of aspects relating to the Information and Communications Technologies (ICTs).
MAIN AFFORDANCES	o Promote the digital empowerment of members of the public and, as a result, the advancement of the digital society in the Basque Country.

	o Make the people in the Basque Country aware of the importance of developing digital competences, by giving them an approximate idea of their digital profile. o Contribute to fostering the dissemination and adoption of the European framework of digital competences. o Provide a basic element for the future development of a certification tool of digital competences. o Channel the information gathered in order to determine in an approximate manner the aggregate digital profile of the inhabitants of the Basque Country. o Publicize the offer of public services (resources, programmes, etc.) to promote the digital competences of the inhabitants of the Basque Country (KZ gunea – network of telecentres, Enpresa Digitala, IT txartela, Barnetegi Teknologiko, etc.).
EXAMPLES	http://www.ikanos.eus/en/
NOTES	N/A

ZEEKO Academy's Internet Safety Guide for Parents and Care-givers

TOPIC	Safety
RESEARCH/TOOL	Online/Internet safety guidelines
AUTHOR(S)	ZEEKO Academy
DATE	2017
SOURCE	https://zeeko.ie/wp-content/uploads/2018/07/Zeeko-Internet-Safety-Guide-FINAL1.pdf
DESCRIPTION	The Internet Safety Guidelines developed by experts from 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 their personal education on 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 how to be responsible Internet users to their children and pupils.
MAIN AFFORDANCES	The Guidelines provide support to parents and teachers in the form of useful information, tips and advice, which cover the following topics: • 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 The benefit of using these Guidelines is that they can support parents and teachers to better understand some of the pitfalls and dangers 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.
EXAMPLES	A copy of these Guidelines can be found at: http://zeeko.ie/wp-content/uploads/2016/02/Zeeko-Internet-Safety-Guide.pdf Further information and activities to accompany these guidelines can be found at the link: https://zeeko.ie/internet_safety_guide/
NOTES	N/A

41

Cybersafe Ireland hosts a 'Kid's Corner' on their website, providing a space where young digital citizens can promote Internet Safety with their peers

TOPIC	Safety
RESEARCH/TOOL	Online repository of digital resources created by young learners
AUTHOR(S)	Cybersafe Ireland
DATE	2018
SOURCE	http://cybersafeireland.org/index.php/kids-corner/
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.
MAIN AFFORDANCES	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. 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 project similar to the ones profiled.

EXAMPLES	Examples of how to use the Kid's Corner and other activities that can be used with primary school pupils to promote online safety in the classroom can be found at these links: • http://cybersafeireland.org/index.php/kids-corner/ • http://cybersafeireland.org/index.php/cyberbullying/
NOTES	N/A

Consciously intelligent: an explorative investigation on the use of the social networks in the primary school

TOPIC	Social Media
RESEARCH/TOOL	Consapevolmente intelligenti: un'indagine esplorativa sull'uso dei social network nella scuola primaria / *Consciously intelligent: an explorative investigation on the use of the social networks in the primary school*
AUTHOR(S)	Giuseppa Cappuccio - Francesca Pedone
DATE	2017
SOURCE	"Annali online della Didattica e della Formazione Docente" Vol. 9, n. 13/2017, pp. 141-163 ISSN 2038 - 1034 http://annali.unife.it/adfd/article/download/1426/1214
DESCRIPTION	The present work documents an exploratory survey on the critical and conscious use of Social Networks in the school. The survey, carried out during the scholastic year 2016-2017, involved 2239 pupils, 100 teachers and 50 Head Teachers of 50 Primary schools in Sicily. The research aimed to explore whether and how students actually use social networks; it explored how future teachers and educators can guide the youth towards a conscious and critical use of Social Networks. The tools used for the study consist of a strategical questionnaire and a semi-structured interview. The investigation explored the role of the social media in the life of the children from primary school, the potential that they face and the most opportune ways to sustain the processes of innovation in the educational circle. The qualitative data show the value of the use of the mixed methods, to understand better the phenomena.
MAIN AFFORDANCES	The results reveal new paths of research and interesting application areas and showed that: • Social Networks are an opportunity to build a more caring and responsible society, a practice assimilated by learning to use the Web in a conscious way; • Media competence takes the form of expertise in both active participation and the Web and society;

	• The focus is on the need to acquire the know-how to exploit the media, with particular reference to social networks, in a clever way so as to make them intelli-gent instruments; • Social Networks offer a different potential for educational activities because they are able to support the functions of socialization, of sharing and of coordination, to encourage dialogue, promote resources sharing and improve the development of communication skills, to support learning by facilitating peer support in the performance of tasks. Main critical issues are • the contrast between the patterns of use of social networks in formal educational settings, and their use in informal educational settings; • there is an urgent need to use them to increase intelligence as well as to find the most effective solutions to complex problems; • it is necessary to learn how to do so consciously, critically, with respect and responsibility.
EXAMPLES	The study was conducted using the ICRTDIG (Digital Critical Thinking and Intelligence) questionnaire that provides a valid tool of analysis based on 5 main dimensions: 1. Attention 2. Problem solving 3. Security 4. Critical and aware use
NOTES	N/A

MAking Games In CollaborAtion for Learning (MAGICAL)

TOPIC	GAMES
RESEARCH/TOOL	MAking Games In CollaborAtion for Learning (MAGICAL)
AUTHOR(S)	Francesca Maria Dagnino - Jeffrey Earp - Michela Ott from Institute for Didactical Technologies (ITD) of National Council for Researches (CNR) – Coordinator of the project Partners: The Manchester Metropolitan University (UK) - Katholieke Universiteit Leuven (BEL) - TTY - Tampereen Teknillinen Yliopisto (FIN)
DATE	2012-2014
SOURCE	MAking Games In CollaborAtion for Learning (MAGICAL) Project website https://docs.google.com/document/d/1g7yrdsEALmvKHpW4KtKoDp-W0o6H3uMsPHdoFS6exb8/pub Final Report https://www.itd.cnr.it/download/MagicalDeliverables/D1_3-FinalReportPublicVersion/3a%20-%20D1.3%20Final%20Report%20PUBLIC.pdf
DESCRIPTION	Making Games in Collaboration for Learning (MAGICAL) is a European project that investigated a student-driven form of Game Based Learning - Collaborative Digital Game Making (CDGM). Partners from Belgium, Finland, Italy and the UK set out to establish the viability and added value of CDGM by challenging teams of young learners to design, create, play-test and peer review their own digital games. The partners were especially interested in how CDGM can support learners' transversal skills such as collaboration, creativity, problem solving and ICT literacy. As well as gaining a better understanding of how CDGM works, MAGICAL has generated resources and tools for implementing the approach in teacher education, practitioner training, and classroom practice, especially in primary and lower secondary school. The project's main research objective was to investigate the viability and added value of CDGM for learning, particularly regarding the impact on transversal skills such as collaboration, creativity, problem solving and ICT literacy. To pursue this, MAGICAL ran training initiatives and classroom experiments in five European countries (partner countries plus Greece),

	generating 37 classroom cases that involved 560 students and 143 hours of classroom activity. In the effort to support the uptake of Collaborative Digital Game Making (CDGM), MAGICAL naturally addressed the formation and training of educators, both through Initial Teacher Education and Continuing Professional Development. Training actions run during the project involved around 650 practitioners in five countries. These were not just preparation for subsequent classroom experiments, but also an endeavour to establish how CDGM fits into the teacher education/training panorama, and how that process may be best supported. These efforts have generated an adaptable training kit, that can be used for preparing practitioners to take up CDGM. In 2016, the European Commission listed the MAGICAL (Making Games In Collaboration for Learning) project among the Success Stories and Good Practices of the Erasmus+ program. Besides the use of available tools for the creation of digital games, the project has seen the development and the experimentation of a platform conceived to be usable for Children over eight years old, that does not require any particular technological familiarity.
MAIN AFFORDANCES	Positive indications have also emerged regarding: the activation of the transversal abilities of the students, especially collaboration; use of 'game making' as an effective tool for working in groups in the planning and realization of digital game tools. For the research group involved in MAGICAL, this experience represents a particularly interesting result that deserves further investigation. In the meantime, different schools in Italy and Europe have started to experiment game making, thanks to the products and the know-how produced by the project.
EXAMPLES	https://docs.google.com/document/d/1_NVbLqLgfyy90RHdE6khVh5-uslmaLD_E1NS1QGpJkQ/pub Magos Classic Guide https://www.itd.cnr.it/download/MagicalDeliverables/D1_3-FinalReportPublicVersion/Magos%20Classic%20guide.pdf

	https://www.itd.cnr.it/download/MagicalDeliverables/D1_3-FinalReportPublicVersion/Magos%20Classic%20interface%20description.pdf Magos Lite App http://magos.pori.tut.fi/ Magos Lite App - Guide https://www.itd.cnr.it/download/MagicalDeliverables/D1_3-FinalReportPublicVersion/Magos%20Lite%20guide.pdf Pedagogical plans https://www.itd.cnr.it/download/MagicalDeliverables/D4_3-PedagogicalPlans/10a%20-%20D4.3%20pedagogical%20plans%20-%20addendum.pdf
NOTES	N/A

MySelfie Digital Tools - an Anti-Cyberbullying Resource for Primary School Learners

TOPIC	Safety
RESEARCH/TOOL	Digital resources and lesson plans for teachers
AUTHOR(S)	Webwise, the Irish Safer Internet Centre
DATE	2016
SOURCE	https://www.webwise.ie/myselfie-wider-world/
DESCRIPTION	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.
MAIN AFFORDANCES	The MySelfie program 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. • 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.
EXAMPLES	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. The following is an overview of the methodology for each lesson: • 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. Further information on these activities can be found at this link: https://www.webwise.ie/myselfie-wider-world/
NOTES	N/A

Pedagogical application of multimedia courseware CourseLab in elementary school

TOPIC	Use of ICT e-learning
RESEARCH/TOOL	CourseLab
AUTHOR(S)	Dalari, A. University of Aegean Sea CourseLab / WebSoft Ltd Moscow
DATE	November 2017
SOURCE	https://eproceedings.epublishing.ekt.gr/index.php/openedu/article/view/1097/1253
DESCRIPTION	The effectiveness of e-learning relies heavily on instructional design and development of e-courses with authoring tools. Through the use of the CourseLab tool and by following the principles of SCROM, researchers implemented a teaching scenario entitled "The importance of olives in ancient Greece", addressed to 6th grade primary school pupils. The presentation of the module consists of 3 chapters and 3 individual tests. In the end, there is a final evaluation test for the participants. The teaching scenario is based on the ADDIE instructional design model and follows the educational theories of behaviorism and cognitive constructivism.
MAIN AFFORDANCES	The teaching scenario developed with the CourseLab tool: o encourages active participation and autonomy of pupils in the learning process because they can decide when and how they want to learn; o offers open access to digital educational content and learning activities; o pupils gain knowledge and understanding in an efficient and effective way; o is based on the learning theory of constructivism and is completed within 30 minutes.
EXAMPLES	http://www.courselab.com
NOTES	N/A

Pilot Action DigCompOrg scuole in Italy – Selfie Italia

TOPIC	Use of ICT
RESEARCH/TOOL	Pilot Action DigCompOrg scuole in Italy – Selfie Italia
AUTHOR(S)	Institute for Didactical Technologies (ITD) of National Council for Researches (CNR) – Coordinator of the project Fondazione per la Scuola Compagnia San Paolo Indire Scholastic Office Region Umbria Scholastic Office Region Calabria Docenti Web – Polo Formazione docenti iprase – Apprendimento Ricerca Innovazione
DATE	
SOURCE	https://docs.google.com/presentation/d/e/2PACX-1vTK2nFrMjaY5PU_il7QmWKQQuIHVYe3OKKr63Ed-rDn8hSGxOE-nYN_-jHMth1aXneM2fwrF8UjGTjw/pub?start=true&loop=true&delayms=3000#slide=id.g24c5f35d1d_0_3 http://tiny.cc/digcomporgITA https://www.itd.cnr.it/Progetti_Rispo1.php?PROGETTO=1167 Final Report (video) https://www.youtube.com/watch?v=X-o8VUYPiFM
DESCRIPTION	The European Commission launched the "DigCompOrg for the schools" initiave in various Member States, aiming to make DigCompOrg effective and operational. CNR-ITD coordinated and edited the Italian translation of the project, and adapted it to the national context creating the online tool of self-evaluation "SELFIE", and collecting all the materials in support of the schools. The trial in Italy foresaw 4 principal phases: • Identification, involvement and coordination of a group of primary schools distributed on the national territory;

53

	• Experimentation of the SELFIE tool in the selected schools involving the whole scholastic community (scholastic executive, teachers and students); • Management of some case-studies with a qualitative in-depth analysis, in order to understand the practices of use of the technologies and the potentiality of the experimental SELFIE tool to capture and show such specificities. The main objective of the use of the tool of self-evaluation SELFIE, was to create a picture of the practices of use of the digital technologies by school managers, teachers and students in various circumstances (i.e. in the curriculum, in the evaluation process, in learning etc.), in order to show them this result and to use the emerging results to plan future actions of development.
MAIN AFFORDANCES	Why a framework of reference of the digital competences of the scholastic institutions? • Scholastic institutions that can integrate and use the new technologies effectively are in the condition to better respond to the needs of learning typical of the digital era and of the present society. • The effective use of the technologies improves the experience and the results of learning processes and practices. What does the SELFIE initiative offer to the scholastic institutions? • An online tool to capture "an instant image" of practices of use in the didactics of the new technologies (as in a selfie!), giving to the institutions a tool that reflects the state of the art, and to address the areas of development toward a better integration and a more effective use of the new technologies. • The last goal is to encourage and to stimulate a wide reflection on the systemic level inside the scholastic institutions.
EXAMPLES	In the initial phase, 23 schools distributed on the national territory (specifically Emilia Romagna, Tuscany and Puglia) were involved. Under indication of the European Commission and following numerous requests to participate in the initiative, the second phase was addressed to more interested schools (70 in total experimenting the SELFIE tool).

	Data from the meetings with referent teachers for the experimentation of SELFIE in Italy (pilot schools in the second phase) https://drive.google.com/file/d/0B3G_xTfrUAGpVUpLeTVrNUxwSms/view Starting webinar of the experimentation of SELFIE Italia with the schools of the Autonomous Province of Trento https://www.youtube.com/watch?v=ujJ2NYBU6uM&feature=youtu.be Guidelines for referent teacher https://docs.google.com/presentation/d/e/2PACX-1vTK2nFrMjaY5PU_il7QmWKQQuIHVYe3OKKr63Ed-rDn8hSGxOE-nYN_-jHMth1aXneM2fwrF8UjGTjw/pub?start=true&loop=true&delayms=3000#slide=id.g24c5f35d1d_0_3
NOTES	N/A

Pupil's ePortofolio and its implementation in primary school

TOPIC	Use of ICT
RESEARCH/TOOL	Pupil's ePortofolio and its implementation in primary school
AUTHOR(S)	Martzali, M.
DATE	2017
SOURCE	https://bit.ly/2JimgzH
DESCRIPTION	The present study attempts to explore the experiences of elementary school pupils regarding the integration of the ePortfolio in the learning process. The survey was designed in response to the current needs for reforms in the area of education for innovation at all levels, the consolidation of modern pedagogical approaches and the infusion of digital technologies in all aspects of educational work. The digital Student Achievement Folder in the primary school can be conceptualized both as a "product" and as a personal "place", in which the student collects digital files demonstrating the course of learning. At the same time, it can be conceived as a "process" of personal learning, since the student reflects about their skills development, recognizes the learning experiences and presents the evidence of his learning to others. Research findings indicate that the ePortfolio is considered a dynamic tool, with the potential for continuous content updating, a tool for promoting self-evaluation, for fostering metacognitive skills, for strengthening students' digital skills and for contributing to the overall educational efforts.
MAIN AFFORDANCES	ePortofolio is a dynamic tool with the possibility for continuous updating of content, highlighting positive and important individual data and removing less important ones. It can promote self-evaluation skills and strengthening of metacognitive skills. The inclusion of the ePortfolio in the school context is generally a feasible process, although there are some minor obstacles.
EXAMPLES	Panhellenic School Network (http://e-learning.sch.gr/) Creation and management of ePortfolio by pupils Creation of digital learning communities with mahara software
NOTES	N/A

Online Learning Program for Teachers – 'Scratch for Learning'

TOPIC	Information and data literacy
RESEARCH/TOOL	Online training programme for teachers
AUTHOR(S)	PDST Technology in Education
DATE	2017
SOURCE	https://www.pdsttechnologyineducation.ie/en/Training/Courses/Scratch-for-Learning-online-.html
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: • 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.
MAIN AFFORDANCES	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 an advanced digital skill in relation to the primary school curriculum in Ireland. 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.

EXAMPLES	The programme for teachers is delivered through a 10-hour online course which provides teachers with learning content across three modules. These modules are described as follows: • Module 1 – Introduction to Scratch Coding This module introduces 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. • Module 2 – Scratch in the Classroom 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. •Module 3 – Planning for Scratch 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. More information on these activities can be found at this link: https://www.pdsttechnologyineducation.ie/en/Training/Courses/Scratch-for-Learning-online-.html
NOTES	N/A

SELFIE

TOPIC	Use of ICT
RESEARCH/TOOL	SELFIE tool
AUTHOR(S)	European Commission, Joint Research Centre (JRC)
DATE	2017
SOURCE	https://ec.europa.eu/education/tools/selfie_sv https://ec.europa.eu/jrc/en/digcomporg/selfie-tool
DESCRIPTION	SELFIE is based on the Digitally-Competent Educational Organizations (DigCompOrg) conceptual framework. A fine-grained description of what it takes to educational organizations to be digitally capable. 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. Schools in Europe will soon receive help in understanding how they can effectively use digital technologies in the classroom. SELFIE, a self-assessment tool for schools, is being developed by Joint Research Centre of the European Commission, in collaboration with experts across Europe and 600 schools. 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. SELFIE will "allow schools to reflect on the use of digital technologies for learning and plan for improvement." The DigCompOrg framework describes what digital competency means for educational institutions. The SELFIE tool will quiz teachers, school administrations, and students to find out how digital technology is being used in the classroom, focusing on learning. The results can then be used to help the school improve their use of technology, with the aim to achieve a better learning environment.
MAIN AFFORDANCES	Self-reflection Are schools exploiting the opportunities that digital technologies offer? Can they transform digital technologies into better teaching and learning? To help school communities to understand where they stand in their use of digital technologies, the European

Commission has developed, in collaboration with an international team of experts, an online easy-to-use self-reflection tool for schools in Europe: SELFIE: Self-reflection on Effective Learning by Fostering Innovation through Educational Technologies.

Improvement opportunities
SELFIE asks questions to school leaders, teachers and students and based on the feedback it provides a picture, that is a SELFIE: a snapshot of school's strengths and weaknesses in their use of digital technologies for learning. You can see where your school is, and, from there, decide what you want to improve, and build your own strategy.

Key premises
Learning
SELFIE focuses on learning rather than technology. As such, it considers all dimensions: school strategies, teaching, learning and assessment practices, infrastructure, curricula, student experience.

Community
It involves all key actors in the learning process: school leaders, teachers and, of course, students. A ´digitally-capable school´ that promotes digital-age learning follows both top-down and bottom-up innovation and it is responsive and supportive of the development of its members. That's why SELFIE involves the whole school community.

Progress
The focus is on progress, so SELFIE can be used by any school, not only the ones that are digital 'champions' or highly innovative.

Confidentiality
All data is anonymous and cannot be tracked to individual schools, students or teachers.

EXAMPLES	https://www.youtube.com/watch?v=n_Ma0-2f_1w
NOTES	N/A

Smart Future

TOPIC	Social Media
RESEARCH/TOOL	Smart Future
AUTHOR(S)	Centro di Ricerca sull'Educazione ai Media all'Informazione e alla Tecnologia dell'Università cattolica di Milano / Centre for Research on Media, Information and Technology Education from the Catholic University of Milan
DATE	2013-2015
SOURCE	http://www.cremit.it/smart-future/ Pier Cesare Rivoltella (eds.), Smart future. Didattica, media digitali e inclusione, Franco Angeli, Milano 2015
DESCRIPTION	Future Samsung Smart is a project aimed to favour the digitization of education through the supply of technologies. Through the provision of e-boards and tablet, the training is addressed primarily to the teachers and, in subsequent phases to the students and their families. The ambition is to contribute to a school that stimulates the production and sharing of digital contents, and that renovates the process of formal learning, widening its horizons and strengthen its ability to form competitive workers. It is articulated in three phases: 1) creation of an Advisory Board formed by teachers and professionals in the involved schools 2) a Roadshow that touched the principal Italian cities 3) a national Observatory on the Digital Media to school, created together with the CREMIT from the Catholic University in Milan. Smart Future has interested 37 Primary and Secondary School Institutes in Italy. The Ministry of Education, University and Research (MIUR) defined Smart Future as a facilitator for the process of digitization of the Italian schools. Thanks to this recognition, Smart Future signed a Protocol of Agreement with MIUR, with the objective to select the schools where to implement the project, starting from the scholastic year 2014/2015 and implementing the project for following three years, involving a total of 54 classes of primary and first grade of secondary school spread out on the whole national territory.
MAIN AFFORDANCES	The first results of the research-intervention are very positive:

	- thanks to this approach, technology is not perceived as substitutive of the traditional didactics, but as an element that can accompany and support the lessons; - teachers can use technology concretely to make the students more responsible and have a to positive influence on their performances and collaborative learning activities; - useful for the inclusion of foreign students and pupils with a handicap; - the use of new devices, in particular tablets, is able to produce tools and materials for innovative didactics, to increase the level of motivation and to improve the focus level in class.
EXAMPLES	From the research emerged what follows: a) Observatory for the Digital Media for Schools, that developed an investigation on the Italian school good practices on digitization, and monitors the whole process of technological endowment and training of the teachers and intervention in the classes. b) Scuola Ospedale project, a project that aims to create a special "hospital classroom" in schools, to show how the use of technology in the didactics can give effective help in the case of hospitalization of a student. The digitalization of didactics is able indeed to offer to the hospitalized pupil the tools to allow them to participate in class life, and to ensure to them safety and identity in the execution of the work. c) Smart Family Project: this project, promoted by the Movimento Italiano Genitori (Moige) together with Samsung, intends to favour a safe and aware navigation of the internet, and to sensitize families and teachers to the importance of a responsible fruition of the new technologies by the youngers, turning them into safe navigators and aware users of the digital world. The main objective is to transmit to the parents, families and teachers the importance of a responsible fruition of the new technologies, to give them the tools necessary to sit side by side with the young ones, to

| | make children/students the main character of the navigation and of the learning with the new technologies.

d)   In the involved institutes, the operators of the MOIGE - with the support of employees from Samsung, voluntarily organize meetings, with the aim to compare experiences, hear the opinions of experts in pedagogy and psychologists, and sensitize those present to the safe and responsible use of the new technologies. |

PARTNERS

Surfwise – The digital toolbox of resources that aims to support primary school pupils to 'Surf the Web Safely'

TOPIC	Safety
RESEARCH/TOOL	Digital toolbox of Resources for Educators
AUTHOR(S)	Webwise, the Irish Safer Internet Centre
DATE	2018
SOURCE	https://www.webwise.ie/sphe/
DESCRIPTION	This Programme was specifically designed for primary school teachers who wish to introduce internet safety into their teaching of the SPHE curriculum. 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.
MAIN AFFORDANCES	The 'Surf the Web Safely' digital resources provide primary school teachers with access to a series of 8 interactive lessons on the following topics: 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 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. These interactive cartoons are designed to be used as a whole-class activity using a white board or digital projector. The activities may

	also be set up for a pair, an individual, or a small group to use at a classroom computer.
EXAMPLES	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.
	The first part of the Webwise programme (Chapters 2, 3, and 4 in 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.
	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. This resource will help to advance young people's use of new media from initial enthusiasm towards empowerment and community participation. More information on these activities can be found at these links: • https://www.webwise.ie/sphe/ • https://www.webwise.ie/teachers/resources/
NOTES	N/A

Teaching and learning with tablet devices in primary education

TOPIC	Mobile devices
RESEARCH/TOOL	Teaching and learning with tablet devices in primary education
AUTHOR(S)	Polydoros G.
DATE	2017
SOURCE	https://eproceedings.epublishing.ekt.gr/index.php/openedu/article/view/1075
DESCRIPTION	This paper investigates teachers' and students' perceptions concerning the impact of using tablet devices for teaching and learning purposes. A focus group study was conducted with teachers (n = 10) and 8th grade students (n = 30) in a private school that has implemented the use of tablet devices since 2013. The general finding of this study shows that the use of tablet devices in the classroom setting has a positive impact on both teaching and learning practices. The results suggest that teachers can be divided into two categories: the innovative teachers and the traditional teachers. Innovative teachers attempt to shift from a teacher-centered approach to a learning-centered one. They have changed their teaching style by transforming lessons in accordance with the advantages the tablet can offer. Meanwhile, traditional teachers don't want to use the device for pedagogical purposes. In general, the introduction of tablets entails a positive shift in the way students learn, as the tablet devices provide interactive, media-rich, and exciting new environments.
MAIN AFFORDANCES	This work confirms that the perceptions of any educational innovation will influence its integration in education and that teachers are key factors for the successful implementation of technology in schools. Also, the findings on the second research question of this paper confirm the educational potential of these devices, such as Web browsing, spontaneous collaboration and multimedia usage for a better understanding of the content of the course. In other words, the results confirm that tablets include learning activities that were not possible before, a feature that makes them a key tool in the process of learning. Finally, pupils in this survey reported that innovative teachers use tablet providing

	authentic learning experiences and that they are able to create and share knowledge in a digital environment.
EXAMPLES	N/A
NOTES	N/A

Establishing a Charter of Online Rights of the Child

TOPIC	Information and Data Literacy
RESEARCH/ TOOL	Online resource that helps to establish online rights of the child
AUTHOR(S)	Webwise
DATE	2012
SOURCE	file:///Users/sarahland/Downloads/TB4UC_WEBWISE_CRC.pdf
DESCRIPTION	This Webwise Charter was drafted by Webwise with the aim to stimulate 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.
MAIN AFFORDANCES	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.

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. |
| EXAMPLES | 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: 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. 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. More information on how to use this activity in the classroom and other relevant resources can be accessed at these links: • https://www.webwise.ie/thinkb4uclick/ • https://www.webwise.ie/teachers/resources/ • https://developmenteducation.ie/media/documents/TB4UC_WEBWISE_CRC.pdf
NOTES	N/A

Digital resource that aims to promote digital responsibility and autonomy among young learners – 'Think B4 U Click'

TOPIC	Safety
RESEARCH/TOOL	Digital resources aimed to promote digital responsibility
AUTHOR(S)	Webwise
DATE	2012
SOURCE	http://cybersafeireland.org/index.php/cybersafeschools
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.
MAIN AFFORDANCES	As well as lesson plans, these digital resources also include a range of different scenarios for role play activities as 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. 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.
EXAMPLES	The lesson plans and templates for the poster activity are freely available to download through the Webwise portal. To access these materials, visit these links: • https://www.webwise.ie/teachers/back-to-school-internet-safety-resources-for-teachers-2/ • https://www.webwise.ie/teachers/thinkb4uclick-2/

	• https://www.webwise.ie/teachers/resources/

TRIS project

TOPIC	Mobile devices
RESEARCH/TOOL	TRIS project
AUTHOR(S)	Vincenza Benigno, Giovanni Caruso, Marina Ottavia Epifania, Chiara Fante, Fabrizio Ravicchio, Guglielmo Trentin
DATE	2013-2018
SOURCE	Do BYOD (Bring-Your-Own-Device) technologies support inclusive virtual classrooms? https://www.itd.cnr.it/download/0-ICERI-2014.pdf Portability, Feasibility, Collaboration: Teachers and Perception of Tablet Use for an inclusive education https://www.itd.cnr.it/download/Iceri17.pdf The TRIS Project and the socio-educational inclusion of homebound students https://www.itd.cnr.it/download/2015%20-%20TRIS%20x%20IJTIE%203.pdf
DESCRIPTION	Thanks to their peculiar features and their employability in collaborative activities, Tablets can be especially helpful in fostering the inclusion of children who cannot attend school for medical reasons. Within the context of TRIS project (Tecnologie per l'Inclusione Socio-educativa - Technologies for socio-educational inclusion), a pilot study was carried out, where the class of a homebound student was equipped with Tablets (each student in school, the teacher and the homebound pupil were given a device). Data from both questionnaires and semi– structured interviews were collected in order to investigate on one side, the change in teachers' competencies in Tablet use and the inclusive activities done with the tool, and on the other side, to understand their perception of Tablet use in everyday class activities. The echo-systemic model proposed by Three of a kind has as its central nucleus the Inclusive Hybrid Class, a didactic space between reality and the digital dimension, finalized to recreate what could be a "normal" school day, that alternates didactic moments (explanations, discussions, group work, tests, etc.) with moments of homework (individually, in couples or in group).

	The hybrid class suggested in the model leans on three pillars: the technological axe, that combines the scholastic and domiciliary physical spaces; the methodological-didactic axe, centred on active pedagogic and participative approaches; the organizational axe, for the general management of the hybrid class.
MAIN AFFORDANCES	The results show that teachers do recognize the use of Tablets as an important tool for the inclusion of the homebound student, but do not use this tool in other activities, as it is still perceived as too demanding in terms of efforts and time. The main affordances of this model are: (a) the acceptance and full insertion of the homebound student into the class social life (social inclusion); (b) the working out of collaborative learning methods through which the homebound student can be actively involved in the lessons and study with their peers (educational inclusion).
EXAMPLES	Examples of application can be found in the dedicated section of the website of the TRIS project https://www.progetto-tris.it/index.php/tris-stories/ TRIS I-MOOC The TRIS I-MOOC is a platform that converges the Interactive Digital Storytelling and the Massive Online Open Course to share the TRIS model with whoever find themselves to deal with a student that cannot physically attend the lessons: teachers, parents, executives, etc.

	The objective is to conduct an action on wide scale finalized to transfer knowledges and competences on the formalities of application of the TRIS model, using an approach to the massive formation online integrated with an activity of specialized counselling on specific cases.
	Through interviews, histories, multimedia and interactive videos it is possible to explore all the components that belong to the TRIS model.
	TRIS I-MOOC will be on line by 2019
NOTES	N/A

Digital toolkit for teachers to promote the - UP2US Campaign – with primary school learners

TOPIC	Safety
RESEARCH/TOOL	Teacher's handbook and suite of digital resources
AUTHOR(S)	Webwise
DATE	2016
SOURCE	https://www.webwise.ie/up2us-2/
DESCRIPTION	The Up2Us 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).
MAIN AFFORDANCES	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 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. 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.

EXAMPLES	The teacher's handbook contains a set of lesson plans which provide instruction and activities on each of the following topics: 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) For more information or advice on using these resources, visit the following links: • https://www.webwise.ie/teachers/resources/ • https://www.webwise.ie/up2us-2/ • https://www.webwise.ie/news/youth/up2us-campaign-inspiration/
NOTES	N/A