Strategic Partnership for Creativity and Entrepreneurship – newsletter second edition

Introduction

Dear Sirs,

We are pleased to present you the second edition of our SP4CE Project newsletter. Newsletter contains information about solutions that will be used in the project, in particular: Using ICT for teaching and learning. We invite you to read.

Project "Strategic Partnership for Creativity and Entrepreneurship (acronym SP4CE)" has been funded with support from the European Commission under the ERASMUS+ Programme. Project started on 1 September 2015 and will end on 31 August 2017.

Project activities and events

SP4CE portal open for testing

As an implementation of the project a prototype of a multilingual learning portal was created and is available at:http://sp4ce.eu/. If you are interested please and test the working prototype. Access to the system requires online registration. For any comments, please notify the system administrator or contact persons whose addresses are available on the project website.
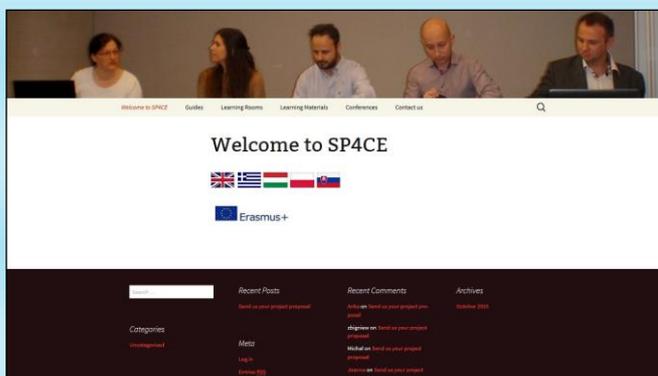

Figure: SP4CE learning portal - homepage

The Second Working Meeting in Warsaw

The Second Working Meeting was held in Warsaw on 15 October 2015. During this meeting the next phase of realization of the project and Completed Short Term Staff Training Events were summarized and the next steps were discussed.

First Working Meeting in Budapest

The First Working Meeting was held in Budapest on 17 April 2015. During this meeting, the realization of the first phase of the project was summarized and the next steps were discussed.

Coaching and collaboration with enterprises training in Budapest

The second of two short-term joint Staff training events with topics of collaboration with enterprises was held in Hungary between on 4-8 May 2015. During the training partners were trained about different methods and aspects of collaboration with enterprises as well as methods and approaches to coaching and also participated in a series of meetings and trainings to familiarize them with the different approaches encountered in this topic.

Using ICT for teaching and learning

New generation of learners is usually assigned as digital natives, NetGen or Google Generation. They are growing up surrounded by technology and it is typical for them to exploit ICT in different living situation, not excluding learning, in natural way. By young people, as more motivating learning is identified learning through experimentation and exploration, which uses:

- elements of play,
- exploring alternative approaches by thinking and looking about thing differently,
- imaginative thinking to achieve an objective,
- making connections with previous
- and new learning and thinking critically about ideas, actions and outcomes.

All of above present most of core indicators of creative thinking. And all of these activities could be supported by ICT

In the EU the majority of European educational institutions are equipped with traditional ICT (PCs, interactive whiteboards and Internet connection). Continuously increasing number of them also invests to other equipment like laptops, electronic microscopes, web-cams, etc. Various European schools use Moodle, wikis, blogs and also have their own homepage. Online platforms could provide parents access to learning materials and tasks, which would help them to understand new learning approaches and support their children at home with their schoolwork.

However, the main shortage of informatization of education process lies on teacher ICT capability. A good number of them use ICT just as an extension or replacement of traditional tools (interactive whiteboard as replacement for blackboard, PPT presentations as replacement for printed books) and Internet is used mostly for accessing new information for the teacher during his preparation for lessons.

ICT capability involves the appropriate selection, use and evaluation of ICT. It presents the ability to access appropriately, to use, develop, create and communicate information, to solve problems, develop ideas, create models and control devices, etc. using technological tools. ICT helps to develop an idea to particular outcome (for example a sequence of notes with a beat, a graph, spreadsheet model or web page, a graphic image treatment, video sequence or short animated sequence of action) that can be viewed, listened to and reflected upon in order to move forward creatively in short time. Learning via ICT is very playful and engaging this way. ICT permits autonomous learning model that promotes initiation, creativity and critical thinking with independent research, because learners are expected to collect, select, analyze, organize, extend, transform and present knowledge using ICT in authentic and active learning paradigm.

As crucial factor for capability using the appropriate ICT tool seems to be teaching students to use ICT before applying it to specific subject and problem solution.

ICT tools like interactive whiteboards, video projection units, and microscopes connected to computers, spreadsheets prepared to capture and model data, CD-ROMs, presentations with video could be use as just supportive technological tool but also tools for enhancing students' motivation, involvement and creativity within education process. It depends on way how it is used by teacher. Unfortunately, there is no general guidance on how to actually develop creativity in practice.

ICT and social computing tools can influence learning by:

- supporting different senses with multimedia visualisations and representations, both in materials developed by teachers and by providing new opportunities for creativity for the students;
- supporting collaboration with new online production, commenting and networking tools, improving both overall and individual performance;
- supporting differentiation and diversity by supplying teachers with a wide variety of didactical and methodological tools that can be fitted to the respective learning objectives;
- empowering learners to personalise their learning process in a supportive environment of mutual assistance, reflection and critique and in interaction with their teachers and peers, combining formal, non-formal and informal learning activities.

The influence of rapid changes in the field of ICT is also projected to the education. With inviting the smart technologies to out-school live, they are more commonly used also for education purposes. Students and teachers can interact (learn, discover, collaborate, create and share) in a safe, fun, engaging and supportive environment. Figure below presents a wide range of ideas how to use ICT in education.
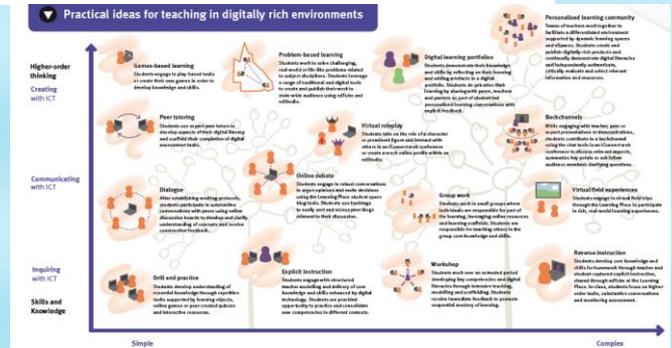

Figure: Practical ideas for teaching in digitally rich environments

ICT tools for enhancing creativity

Only replacing traditional tools with ICT does not lead to creativity and innovation. Combining them could result in more space for both sides of education process. Based on changes in the area of technologies as emergence and adoption Web 2.0 and cloud technologies, also nature of teaching and learning technologies becomes more social, collective and multimodal. Convergence of telecommunication with computers has created numerous possibilities to use a variety of new technology tools for teaching and learning system. ICT propose new space for access, extend, transform and share ideas in different styles and format. It helps the learner to share learning resources and spaces, promote learner centred and collaborative learning principles and enhance critical thinking, creative thinking and problem solving skills.

Tools like social networking sites (Facebook. My Space, Twitter), sharing bookmarks, multimedia (Flickr, YouTube), online gaming (Second Life) and blogging offer new opportunities for people to express their creativity, make it available to a large audience and get feedback. Innovation networks can be clusters, business ecosystems, and communities of practice, strategic alliances or living labs as well. Creativity could be enhanced by following tools:

- Blogs develops creative thinking and writing skills of students, because they can post whatever they want and comment upon or share each other's material, openly write on topics that intrigue them and give vent to their ideas without having to worry about grading or grammatical errors. Blogging makes students feel responsible for their own learning and they are encouraged to incorporate creativity in their learning through them, which they could not do before. Well known and used are Edublogs, Blogger, WordPress.
- Cartoon and Comic Strip Tools are great tools for education, because students love cartoons and comics. Using them in teaching, students automatically get engaged more than ever. Creation their own comic strips or cartoon animations give them a chance to let loose their creative powers and delve into the world of creativity without any hindrance. One of websites with such resources is 'Cartoons for the Classroom' website.

- Mind-Mapping and Brainstorming tools boost students' creativity and provide them with different ways to interconnect their thoughts. Brainstorming on topics is a great collaborative way in today's teaching practices, which encourages students to think out of the box and creatively. Using ICT students can use a set of easy and free tools to make fantastic mind-maps and visual graphs to illustrate a topic or a concept. Applications like Online Brainstorming, Mind Mapping software, Whiteboards for distributed collaboration, SpiderScribe, Wise Mapping, ChartTool, Creately and more help to facilitate the idea generation (ideation) and allow a group to participate in an ideation session without being physically together. More complex tools - Platforms for handling the creativity process and Crowdsourcing platforms – help to handle the creativity process itself.
- Infographics represent data in a colorful and catchy way. By using free tools for infographics, students can create awesome graphs, which make the interpretation of information easier and quicker. They can employ their creativity and imagination to create an infographic about a topic, concept or anything they want. They can share these infographics and also embed them into their classroom blog. Some free tools for creating infographics are Wordle, Tableau, Inkspace, and more.
- Video and Audio tools let the students to create their own videos/audio output and share them with their class on the class blog or school website. Some video-making tools for students and teachers are Jing, Camstudio, Screenr, etc. Some audio-recording tools are Vocaro, Audio Pal, Record MP3 and more.
- Digital storytelling tools presents a powerful way to communicate with others. It improves the creative skills of students and helps them explore the meaning of their own work and experience.

Students can create their own digital stories with many available free tools, namely, Story Bird, PicLits, Slidestory and more. In present there are available also application for their mobile phones, using which students can create their story anytime and anywhere.
- Games are one of the best ways of promoting co-operation and creativity. Educational games keep students engaged with their study, ignite the interactive and imaginative element in their thinking and mould it towards creativity. Some educational games freely available online are Capital Penguin, Grammar Gorillas, FunBrain.com and more.

Conclusion

As experience shows, students need a level of competency, which is less to do with functional skills as they use ICT naturally and without fear of failure. NetGen already think digitally but need to learn how to apply these powerful forms of technology, in ways that enable them to work creatively, to innovate and develop original outcomes, and using other sources ethically without plagiarising or meaning harm to others at the same time. [10]

Building a culture of open innovation requires rewarded teamwork and organizational changes that foster internal and external collaboration. Global innovation networks are forming. And it is key role of education to educate people able to collaborate and share their ideas with others without fear of failure.

Contact us

For further information about the project please visit the internet page: http://www.sp4ce.piap.pl/