ICT and digital media for key competences

EU projects at work

ICT and digital media for key competences

The economic downturn has provoked a renewed emphasis on the importance of education and training to equip people with the skills they need to keep pace with the knowledge society we live in.

New media, social technologies and online communities offer exciting opportunities for both young and old to learn, collaborate and work on-line.

Digital competence is becoming increasingly important as a skill in its own right but also in developing essential life skills, such as working in teams, learning to learn and intercultural dialogue. Technology not only stimulates creativity and innovation, it also contributes to intercultural dialogue and plays an important role in helping us all overcome our own individual learning challenges.

The European Union supports the development of skills for new jobs and personal well being in a digital age, notably through the Lifelong Learning Programme (LLP). This brochure presents some examples of EU funded projects using digital media to develop key competences.

Gordon CLARK
European Commission
Head of Unit
Lifelong Learning:
Contribution to the Lisbon process

Brian HOLMES
EACEA
Head of Department
Lifelong Learning Programme

Bazaar - Virtual market for mature entrepreneurs

Aim

E-Bazaar aims to make older workers more attractive to perspective employers and also to increase their desire to work. It focuses on removing barriers such as age discrimination, on helping older people learn new skills as well as on finding creative solutions for employers and employees alike.

Target

- Unemployed and retired people 50+
- Employers

Contribution to key competences in a digital world

Targeting unemployed and retired people of 50 years and over, E-Bazaar encourages and trains them to provide services and/or goods, either using existing skills and experience, such as teaching, web design, accounting, hairdressing, massage, cooking, gardening, or using creative hobbies such as photography, painting, sewing and woodwork. To enhance the sense of initiative and entrepreneurship, Bazaar will create a pool of entrepreneurs in the form of an e-market by using the internet to sell goods and services. The project establishes a virtual bazaar http://shop.eu-bazaar.biz with several individual shops (entrepreneurs) categorised into different sectors for local and/or international customers. The web shop owners, the 'entrepreneurs', can get support and help (collective entrepreneurship) from the management unit of the web-bazaar, which will be responsible for general issues such as maintenance, training, marketing and administration. The project is about entrepreneurship and using e-commerce, although not everyone will be able to prepare a web shop on their own. The collective element (bazaar), as the e-commerce provider will support the "web shop owner" even if they have only basic knowledge about e-commerce.

It is like using a PC without understanding the software behind it.

Expected results

- Initial training course
- e-market (pool of web shops for selling and buying goods)
- Management team of the web bazaar to support the ''entrepreneurs'' and foster collective entrepreneurship

Programme: LLP Grundtvig
Project website: www.eu-bazaar.biz
Contact person: Hümeyra Baykan

Comble - Community of Integrated Blended Learning in Europe

Aim

To improve the quality of Blended Learning

Target

Educators from higher and further education as well as businesses

Contribution to key competences in a digital world

Recently developed learning technologies based on collaboration and social interaction can improve the quality of learning. However, this potential will only unfold if institutions implement suitable methodologies and learning cultures, and if instructors become able to integrate active learning by choosing suitable activities.

One important step in supporting pedagogical innovations is to combine learning technologies with collaborative and learner-centred learning activities: group work; learning in projects; working on real problems or in complex learning settings like tandem learning, open spaces, web quests, video casts or expert learning.

Training and education will be innovative and foster digital competence if it focuses on both ICT and methodological competences. Through the wiki based community Methopedia (www.methopedia. eu) we support the improvement of educators'/trainers' competences for interactive, elaborated and collaborative learning.

Expected results

A Blended Learning Readiness Wiki to support strategic planning, change management and the evaluation of blended learning scenarios at the institutional level: http://blr.comble-project.eu

The European wiki-based community Methopedia for Blended Learning experts to share relevant knowledge and experience. Methopedia is available in four languages and contains about 100 different learning activities and an interactive seminar planer: http://www.methopedia.eu

The Methopedia Learning Designer: an online flash tool to design seminars. It is available on the Methopedia website and via: http://designer.methopedia.eu

"There will be no separation between real and digital life: staying in online contact with friends and colleagues, working virtually on international projects, writing an online text or getting recommendations for a interesting locations nearby: digital communication enriches the real world"

Programme: LLP Key Activity 3 ICT
Project website: www.comble-project.eu
Contact person: Christian Niemczik

DYS 2.0 - Train your senses

Aim

To support the development of vocational skills and opportunities for young dyslexic adults and to provide a new kind of resource.

Target

Young dyslexic adults aged from 16 to 26, their parents and trainers specialised in dyslexia.

Contribution to key competences in a digital world

Many people see dyslexia only as difficulties in reading and writing but these difficulties also impact on many other life skills. Internet-based exercises can help to train specific skills of dyslexic persons. Such exercises are available, but most target children, and do not address the specific needs of young adults. In parallel young dyslexic adults often find such exercises too childish or simply irrelevant.

DYS 2.0 offers a motivating and stimulating learning environment for a carefully selected range of skills that are important for young dyslexic adults. Targeted learning games are being developed in collaboration with young dyslexic adults as well as those who train them. The games address seven areas of particular importance for vocational skills development: Auditory Discrimination; Auditory Memory; Auditory Sequence; Visual Discrimination; Visual Memory; Visual Sequence and Spatial Position

These areas are targeted through direct and indirect stimulation. The principles behind the learning games are not specific to any given language and so can work for all individuals across Europe.

Expected results

275 learning games and a game configurator will be available free of charge in 6 languages (English, German, Bulgarian, Greek, Czech, Lithuanian)

"Competence is

Knowledge: understanding of organisation of digital processes.

Skills: computer and networking skills.

Behaviour: mutual appreciation, recognition and respect of different views, obligation to ethical principles."

Programme: LLP Grundtvig
Project website: www.dys2.org
Contact person: Petra Rietsch

eCHEM - Systematization, Valorisation & Dissemination of e-Learning Courses in Conservation Science

Aim

The project aims to raise awareness about, and the take up of, the possibilities offered by EChemTest. EChem test is a computer-based multilingual test of European standard, developed by the European Chemistry Thematic Network, to evaluate knowledge and skills in chemistry.

Target

Secondary, vocational and tertiary education students, as well as adult learners.

Contribution to key competences in a digital world

EChemTest will be an electronic on-line test, a high-quality self-assessment or controlled examination tool. Its contents and computer based presentation will cover all of Europe. It will be available to a variety of learners for as long and as often they consider necessary before they enter into mainstream lifelong educational schemes.

Expected results

The project seeks to raise the profile of EChem Test and to promote its importance and value. It aims to accredit EChemTest, and upgrade it into a widely recognised qualification for people studying chemical subjects or employed in chemistry related jobs. The project is working to give testing centres the potential to expand their influence by creating further examination units with full European coverage. It seeks to turn EChemTest into a prerequisite for student mobility and to incorporate EChemTest into the education curricula. This would allow vocational trainees and adult learners to have their chemical knowledge and skills examined and formally certified and recognised.

Programme: LLP Erasmus
Website: www.eChemTC.eu (from July 2010)
Contact person: E.A. Varella

eCOTOOL - eCOmpetences TOOLs

Aim

By harmonizing Europass with other European instruments (EQF, ECVET) and e-competences eCOTOOL aims to:

- provide a standardized competence description and structure of VET certificates
- improve the development, exchange and maintenance of VET certificates and their accessibility and transparency.

Target

- HR professionals
- Chambers of commerce, employers, employees and trainees,
- European Commission
- National Europass Centres and VET Ministries, and
- VET public authorities

Contribution to key competences in a digital world

eCOTOOL is developing new Europass Certificate Supplement (CS) eco-tools that can be adapted to any branch or business sector and will be tested and evaluated in the agricultural sector. These Europass CS eco-tools will consist of a standardized model to integrate and describe competences covered by European policies (such as Europass, EQAVET, EQF, ECVET), VET certificates, and technical tools for the practical application and implementation of these competence descriptions.

The eCOTOOL results will be submitted to the European Standardization Committees (CEN TC 353) to achieve a European consensus and standard for VET competences.

Expected results

Advanced and sustainable instruments and tools for the Europass CS. Europass CS eco-tools will be based on European policies, EQF, ECVET, and PAS 1093.

eCOTOOL will provide (1) a generic and adaptable competence model for any VET certificates and in particular (2) the Europass CS eco-tools.

"Critical thinking will be the most important competence required to succeed in a digital world that is becoming more complex and challenging".

Programme: LLP Leonardo
Website: http://www.ecompetence.eu
Contact person: Christian M. Stracke

e-KNOWNET - Network for ICT-enabled non-formal science learning

Aim

To develop a network supported by information and communication technologies (ICT) which will promote fast and efficient sharing of new scientific knowledge, among larger, non-expert segments of society.

Target

- Lifelong learners
- Secondary school students
- Science centre
- Staff/educators
- Researchers, are considered as "providers" of the scientific content of the project

Contribution to key competences in a digital world

The user finds interesting new knowledge directly from the research lab, in the form of engaging information and digital materials suitable for non-formal learning. It offers opportunities to experiment with ICT, to personalise interaction preferences, and to create and upload new digital materials that could "tell a story". The project platform also offers tools for communication and exchange between learning communities and interested users.

Expected results

The "show case" of this project is an e-platform focusing on Photochemistry. It functions as a virtual depository and a redistributing hub for the dissemination of new scientific knowledge. The platform provides three work environments tailored to the needs of the three target groups (students, lifelong learners, and science centre staff) as part of the community building process. The project developed an easy to use ICT tool enabling the development of self-contained learning units ("digital exhibits").

"The ability to work collaboratively with other people to produce new knowledge via the Internet is a key competence in this digital age. Beyond its practical importance (cheap, fast, and free flow of ideas), contact with other people may provide the extra motivation that spurs creativity and innovation".

Programme: LLP Key Activity 3 ICT
Project website: www.e-knownet.eu
Contact person: Christina Troumpetari

ELE 55+ - 55+ Employability Learning Environment

Aim

To improve the employability of people of 55 years and over by providing both face to face and Internet-based learning (key competences) in ICT, English language, social competences, physical activities and nutrition, as well as on-line employment consultancy services and job search databases.

To raise the awareness, through on-line learning, of the benefits of employing older people and to provide a variety of related on-line tools (employment consultancy services, databases of qualified 55+ job seekers and job advertisements) supporting prospective employers and job seekers alike.

Target

- 55 + employees
- SME managers and human resources staff

Contribution to key competences in a digital world

This project provides blended learning for older employees and job seekers to help them acquire and/or improve some key competences - computers, foreign languages, social competence, physical activities and healthy nutrition. The training aims to enable them to meet and adapt to the demands of a changing labour market: intensive use of ICT and foreign languages, multi-tasking, high level of interpersonal/ communication skills and activity. On-line tools, including employment consultancy, a discussion forum and databases will give these employees the chance to practise their newly acquired or enhanced competences.

Expected results

The main result of the project is the creation of a 55+ employability learning environment comprising:

- Learning materials (printed and internet-based) in ICT, English language, social competence, physical activities and healthy nutrition, age management
- National employment legislation repositories
- On-line employment consultancy
- Links to European employment legislation
- Employment discussion forum
- Two databases - one for 55+ employees and one for SMEs

Programme: LLP Leonardo
Project website: www.ele-55plus.eu
Contact person: Irena Rashkova

e-VITA - European Life Experiences

Aim

e-VITA aims to promote intercultural understanding, and an increased awareness of the European integration process, through intergenerational learning enabled by the combined use of Serious Games and Storytelling.

Target

Young adults, schools, teachers, public administration, and all citizens interested in European cultural topics.

Contribution to key competences in a digital world

e-VITA promotes the development of digital competences for lifelong learning via the use of different digital inter-cultural games. These games allow younger users to experience the cross-border experiences of older Europeans who grew up in a time when travelling and migration and the present economic and monetary systems were not the norm. e-VITA develops and tests four different games based on four diverse pedagogic approaches. The games support the development of critical thinking. Social and cultural skills are developed as players become aware of the historical cultural variations in Europe and relate it to their experiences of the present. The games motivate and help the player/learner to develop key lifelong learning skills and strategies, such as locating information, critically evaluating and analysing information, which are absolutely essential in today's learning and working environment. To play the games players need to be able to use the digital tools critically, with confidence and creativity, paying close attention to the accuracy of the information and cross-referencing.

Expected results

A comparative study of four different pedagogic approaches underlying the games as well as the first introduction of Serious Games as an aid to developing key lifelong learning skills in a digital world.

Programme: LLP Key Activity 3 ICT
Project website: http://www.evitaproject.eu
Contact person: Lucia Pannese

FTA - Free Technology Academy

Aim

To encourage the take up of Free Software and Open Source by IT professionals, students, teachers and decision makers to help these groups upgrade their knowledge and acquire relevant skills on free technologies.

Target

- IT Specialists
- Educators
- Free technologies advocates.

Contribution to key competences in a digital world

The expansion of Free Software has brought together a continually growing global community of developers, by offering quality products of interest to business, government and academic circles. Global companies now include Free Software into their business models and many SMEs provide professional services developed around Free Software. Several national, regional and local governments have started adopting open standards and often prefer to use Free Software to meet their IT needs.

Despite this growing interest in free technologies, far too few IT professionals, teachers and decision makers have sufficient knowledge and expertise in these fields. This is particularly problematic as these are crucial actors in promoting and implementing free technologies.

To tackle this problem, the FTA is being set up as a distance learning programme. It offers specific course modules to enable IT professionals, students, teachers and decision makers to upgrade their knowledge and acquire relevant skills on free technologies. The FTA consists of an advanced virtual campus with course modules that can be followed entirely on-line and from any country or timezone. The courses go up to and include masters' level. Learning materials are Open Educational Resources that can be studied freely, but learners enrolled in the FTA will be guided by professional teaching staff from participating universities and resulting qualifications are recognised by the universities.

Expected results

A strong network of educational institutions that support learning about free technologies

The establishment of the FTA as a reference project for the production and use of Open Educational Resources

The establishment of the FTA Virtual Campus as a reference project for a campus based on the best available Free Software applications for effective distance education

Economic sustainability through tuition fees and efficient cooperation

The use, reuse and translation of FTA course books by teachers and learners around the globe

Programme: LLP Erasmus Virtual Campuses
Project website: http://ftacademy.org/
Contact person: Wouter Tebbens

intTT - An INTegral Teacher Training for developing digital & communicative competences & subject content learning at schools

Aim

The project aims to train student teachers using a methodology that fosters pupils' subject content knowledge, digital competence and communicative competence concurrently. This integrated teacher training, where these competences are combined with content learning, changes the approach and attitude of student teachers.

Target

There are three target groups with different involvement levels in the project:

- High: (student teachers, tutors, mentors, teachers)
- Medium: (pupils, teachers, schools, educational community and authorities)
- Low: (other universities, schools, authorities and long life learning teachers).

Contribution to key competences in a digital world

This project designs a methodology using digital competences to develop pupils' communicative ability and subject content learning, and creates materials for use at schools.

It also elaborates a "framework" to design and develop intTT materials including criteria for selecting sources (to work with), designing material and activities, and using digital tools.

Expected results

- The elaboration of CDs with didactic activities and suggestions for student teachers to develop digital competences, communicative competences and subject content learning in pupils
- A mobility action with student teachers

"Informational competences are the most relevant competences in the digital world as they are demanded by both the scientific world and the labour market. The level of their acquisition positively influences the personal and professional development of pupils and students."

An INTegral Teacher Training

Programme: LLP Comenius
Project website: www.helsinki.fi/integralteacher
Contact person: Martín Pérez M. Piedad

KEYTTT - Teamwork, training and technology for development of key competencies

Aim

The project aims to support the development of key competencies for lifelong learning in the context of the teaching of science subjects in lower secondary education. The project seeks to create a common methodology base for teachers, to support students' acquisition of key competences. Good practice examples and activities, based on existing practices, are developed for use in the classroom. ICT, being popular among youngsters, can be an important tool in boosting their interest in science topics taught at school.

Target

Science and maths teachers, particularly in lower secondary education.

Contribution to key competences in a digital world

The KeyTTT project steps on the concept that the development of all key competences is interrelated and could not be addressed separately. Though focusing on science subjects at school, the project is not confined to digital, mathematical and science competences.

Expected results

The project will produce an integrated teaching aid which will consist of a methodology and a book of guidelines for teachers (available in digital format) and a Qualification Teacher Course for teachers in mathematics and natural sciences.

KeyTTT
Teamwork, Training and Technology
for development of Key Competences Project

Programme: LLP Comenius
Project website: keyttt.cct.bg
Contact person: Reni Dimova

METASCHOOL - Towards Teacher Competence on Metadata and Online Resources

Aim

The METASCHOOL project aims to improve teachers' professional development, combining ICT and learning design skills with innovative approaches in the area of pedagogy, curriculum, and school organizations. Teachers will gradually gain digital competence and thus make effective, critical use of technology for creativity and innovation.

Target

- School teachers
- School ICT support staff

Contribution to key competences in a digital world

METASCHOOL raises teachers' digital competence by developing skills in using computers to retrieve, assess, store, produce and exchange digital learning resources. To this end trainees are engaged in learning to learn activities through the development of a training scheme that improves the uptake, sharing and reuse of digital learning resources in schools. Through the training teachers participate in a series of activities using digital content in foreign languages to improve their communication skills in foreign languages.

Expected results

An innovative training programme on the suggested methodological approaches for integrating innovative digital educational content available in digital repositories, thus increasing students` interest and participation in classroom activities.

The project facilitates teachers' professional development in:

- Finding educational resources on the web differentiated instruction in grouping students of similar abilities and providing them with the most appropriate learning activities

- Collaboration – community building between teachers, students, parents, and the community

- Classroom management and curriculum organisation

"We focus on four areas of competencies, competencies constituting digital literacy, social skills, learning to learn and communication in foreign languages"

Programme: LLP Comenius
Project website: www.ea.gr/ep/metaschool
contact person: Argiris Tzikopoulos

NIFLAR - Networked Interaction in Foreign Language Acquisition and Research

Aim

The NIFLAR project aims to develop and improve the teaching of foreign languages and the training of language teachers by focusing on digital literacy and intercultural awareness. The project seeks to create opportunities for students of foreign languages and trainee teachers to speak to each other online through two innovative digital environments, videocommunication and 3D virtual worlds.

Target

- Teachers
- Teacher trainers and researchers,
- Educational policy makers.

Contribution to key competences in a digital world

Teacher training programmes are developed around three sets of interrelated competences: digital, intercultural and pedagogical. The target groups reflect on and analyse their own digital, cultural and pedagogic knowledge, skills and habits. Participants learn to explore virtual environments and become familiar with videocommunication and/or 3D virtual worlds and the possibilities they offer. Digital anxiety is addressed through tutorials, face-to-face contact, and the specific technical skills required for the project's digital environments (such as installing software, creating an avatar, navigating, chatting etc.). Participants learn to be aware of cultural differences, respect them, build bridges in cross-cultural encounters, act as culture mediators and finally, they learn how to use digital and intercultural supports to enhance foreign language learning.

Expected results

The project will offer hands-on experience of online collaborative language learning activities and immersive environments. It will thus support the development of competences to address intercultural concerns and successfully integrate second-generation web technologies into language education.

"A digital world has the potential to bring individuals and groups from very different social and cultural backgrounds together. In this sense, being digitally competent involves far more complex skills than solely the technical ones; it involves acquiring technical, social and intercultural knowledge and skills to be able to understand properly and respect differences in creating and sharing networked meaning"

Signs2Go
British Sign Language for Foreign Signers

Aim

To enable deaf sign language users to learn British Sign Language as a foreign language

Target

Deaf people in the project countries

Contribution to key competences in a digital world

Many deaf people use a sign language as their preferred language. Sign languages are recognized as equal languages in the community and are an important part of Europe's multilingual diversity.

Many deaf signers would like to learn a foreign sign language to travel, study, or work abroad. In the Signs2Go project, we are developing a website where deaf sign language users can learn British Sign Language as a foreign language.

The website is for deaf people in our countries. All information is in sign language, no reading/writing is required. We immerse students in video interviews of deaf sign language users from the UK. We add video-explanations 'on-demand' to help learners understand. They can test their understanding and practice their active signing skills in on-line exercises, using a webcam.

There is no writing system for sign language. Before we had video, sign language users could only communicate in the here-and-now. Video and television have enabled us to record and broadcast in sign language. Now, fast internet and video technology enable us to communicate, entertain and teach on-line in sign language, even across borders.

The Signs2Go website demonstrates how the remaining barriers in education and on the internet can be removed by and for deaf sign language users in the EU, by combining the strengths of sign languages, sign language users and ICT.

Expected results

A website where deaf sign language users can learn British Sign Language as a foreign language: www.signs2go.eu

*"ICT in itself is neutral:
it can create barriers that make it
difficult or even impossible
for people with disabilities to
participate, just as easily
as it can remove barriers.
The choice is ours".*

Programme: LLP Key Activity 2 Languages
Project website: www.signs2go.eu
Contact person: Liesbeth Pyfers

Viducate - Digital video as a support for lifelong learning

Aim

To promote video production in the world of education

Target

- (Media) educators
- Media activists
- Decision makers

Contribution to key competences in a digital world

Focusing more on production than analysis or simple consumption the Viducate approach allows all people to explore issues in a structured and creative way – through creativity, active citizenship and intercultural communication. In Viducate this also involves advanced digital literacy and critical thinking, using motivation as a key learning-to-learn competence, pointing out the importance of civil participation and operating across the curriculum.

The project collects and promotes best practice video education examples and disseminates these through online networking and face to face meetings. We also link up with other (EU) projects, ministry actions, competitions, community media initiatives and bring our ideas into existing and new training events.

Expected results

A sustainable European network with an annual European Forum for Video Education

A video gallery documenting best practice, media documentation, a viducate DVD and publication.

"It is important to be able to create meaning through audiovisual media, to participate actively in society and to be able to critically evaluate the (media) world"
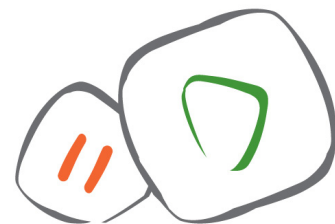
Programme: LLP Key Activity 2, ICT
Project website: http://viducate.net
Contact person: Armin Hottmann

Education and Culture DG

Lifelong Learning Programme

The European Commission, Directorate General Education and Culture (EAC) is responsible for the support, development and implementation of the lifelong learning policy and funding programme. For more information visit http://ec.europa.eu/education/index_en.htm

EACEA

Education, Audiovisual & Culture
Executive Agency

The Education, Audiovisual and Culture Executive Agency (EACEA) is responsible for the management of certain parts of EU programmes in the fields of education, culture and audiovisual. For more information visit http://eacea.ec.europa.eu/llp/index_en.php