

Recommendations from the ICT cluster on Digital literacy and digital competence for lifelong learning¹

The ICT cluster set up under the Education and Training 2010 Work Programme and representing the Ministries of Education of several Member States met in October and again in December 2008 to discuss the key role of digital literacy / competence for lifelong learning. The ICT cluster would like to release the following important messages:

MAIN MESSAGE

Lifelong learning strategies need to answer to the growing need for advanced digital competence for all jobs and for all learners. Learning digital skills not only needs to be addressed as a separate subject but also embedded within teaching in all subjects. Building digital competence by embedding and learning ICT should start as early as possible, i.e. in primary education. This includes learning to use digital tools critically, confidently and creatively, with attention paid to security, safety, and privacy. Teachers need to be equipped with the digital competence themselves, in order to support this process.

The definition of digital competence needs to consider the development of users' critical thinking, social, cultural and creative skills and the ability to make 'one's voice heard'

Digital competence is one of the 8 key competences of the EU Recommendation on Key Competences (2006) and includes essential life skills enabling the social engagement of an individual in the society. The concept is not only about 'access' and 'use' but about 'quality of use', including 'critical understanding' and 'creative use'. This view is broader than 'e-skills' or 'digital literacy' definitions, as it consists of different digital skills such as the ability to access digital media and ICT, to understand and critically evaluate different aspects of digital media and to communicate effectively in a variety of contexts. It involves the confident and critical use of ICT for employment, learning, self-development and participation in society.

This broad definition has immediate implications for the way in which digital competence is evaluated and measured, not only as operational skills, but taking into account issues such as awareness, critical thinking and problem-solving with digital tools. This is in particular important for education & training, as a recommendation to put more emphasis on the critical use of digital tools and media than the functional IT component. The ICT cluster agrees in principle with a closer interaction between digital and media literacy as suggested by the Digital Literacy Expert Group (DG Information Society) and the European Parliament but not with a complete merger of digital and media literacy under one joint concept. These have different viewpoints than may need to be emphasized in different contexts, and, furthermore, information literacy is a third important component in the digital competence.

¹ Based on PLA discussions in Thessaloniki and Vienna , the recommendations on e-skills, the recommendations from the High level expert group on digital literacy and the policy brief prepared by IPTS on digital competence for these two PLA meetings

RECOMMENDATIONS

1. Enable pedagogical innovation with digital competence

1.1. Turn digital competence into a key priority in teacher training. Teacher training is central and can also be the core bottleneck to embedding of learning digital competence in education. Teacher training in all fields should include advanced digital competence, not concentrating only on ICT user skills of teachers. All the teachers should be involved from the earliest education levels and in-service training courses for advanced digital competence and eLearning didactics should be introduced. The training should consider aspects of using ICT both as a learning tool within subject teaching and a tool used by learners for their coursework outside school settings.

1.2. Learn 'critical' and 'quality' use of digital tools within context. Learning digital competence should include the development of a critical attitude to the digital media when using it. Teachers and trainers of all fields and disciplines should be confident and competent in these skills in order to encourage students to use ICT for their learning in a critical and creative way within different subjects, when searching for relevant information, evaluating the reliable online information, IPR aspects, critical attitude in publishing online content. Teacher training should engage teachers getting in touch with practice and hands-on experiences and resources that closely relate to their daily needs (for example, teachtoday.eu).

1.3. Encourage innovative learning approaches. Innovative teaching and learning approaches with ICT can be developed independent of the subject, in order to put learners at the centre and engage them actively in the learning process, promoting discovery and experiential learning, problem solving skills, etc. At the same time these aspects bring forward skills relating to digital competence, such as online collaboration with confident and critical use of the digital tools. Initial and in-service teacher training should disseminate insights and encourage teachers to experiment with new tools as well as to participate in teacher networks and follow innovative developments in their field.

2. Support digital competence in organisational strategies

2.1. Embed digital competence in all curricula and institutional strategies. Digital competence should be included in educational curricula across all levels and disciplines, building digital skills already from primary education through learning to use digital tools confidently, critically and creatively. The importance of advanced digital competence needs to be emphasized for all stakeholders (such as teachers, headmasters and managers of schools, learners as well as for parents, trainers; human resource managers, ngo's etc.). A strategic approach for personnel training and skills updating should be established, engaging teachers in continuous regular in-service training through 'real' incentives. Institutions should embed digital tools in the institutional environment, and provide simple, easy to use platforms and support services for both teachers and students. Next to the ICT user skills, emphasis should also be given to embed more advanced e-skills in curricula for ICT practitioners and professionals².

2.2 Enable networking between and within institutions. Learning networks between educational and training institutions can support the emergence and sharing of new practices and encourage teachers to try new approaches with digital tools. Furthermore, nurturing bottom-up developments and networking within institution stimulates engagement and involvement. Institutions should support free courseware development and sharing by the teachers, allowing and encouraging blended learning resources. Setting up collaborative peer learning networks with coaches and buddies can support teachers and through them the organizational development towards new learning and teaching approaches.

² Communication on e-skills

2.3. Develop targeted and flexible strategies for different contexts. Digital competence needs to be a priority in lifelong learning strategies, as ICT is an increasingly important tool for leisure, learning and work in all fields and a key condition for social inclusion in the information society. However, the approaches need to take into account different contexts. For example, digitally illiterate youngsters or the slow learners are difficult to integrate and need specific measures. Successful and sustainable practices for older workers show the importance of intermediaries and the informal learning aspect of the initiative.

3. Acknowledge and benefit from technological innovations

3.1. Revisit regularly digital competence strategies. Technologies and their usages evolve, and new skills and competences arise with them. Digital competence approaches should therefore be dynamic and regularly revisited. Currently, the concept of digital competence is re-shaped by the emergence and use of new social computing tools, which give rise to new skills related to collaboration, sharing, openness, reflection, identity formation and also to challenges such as quality of information, trust, liability, privacy and security.

3.2. Recognize and support informal learning of digital skills. Social computing tools are developing fast and continuously creating new online communities for learning, socializing and sharing practices. These form important places for learning ICT skills as well, as they both motivate people to learn ICT in order to participate and provide peer support for learning relevant digital skills for participation (Ala-Mutka et al, 2008b; Punie & Ala-Mutka, 2007). Supporting openly available educational resources on digital competence can further promote awareness and digital skills for these learners and communities. Approaches need to be developed to recognize digital skills acquired in informal ways.

3.3. Support research on the impact of ICT for learning. More research is needed for finding evidence on how technology can enhance learning and which challenges it may raise for the skills of teachers and learners. Teachers should be encouraged to document and share the practices they have developed, as well as challenges and impacts they have encountered. Incentives for the objective assessment of enabling and disabling factors for using digital tools for learning should be implemented. This would provide institutions and teachers with proven practical models, helping teachers to learn in particular how to use innovatively but critically ICT for different kinds of subjects and the added-value of ICT as a teaching tool.

Documents and websites related to this topic

DG Information Society/ e-inclusion/ e-competences

http://ec.europa.eu/information_society/activities/einclusion/policy/competences/index_en.htm

European Commission, Joint Research Center, Institute for Prospective Technological Studies. <http://www.jrc.es/publications/pub.cfm?id=1819>

Knowledge Lifelong Learning website ..(complete)

