

Work in Progress

DigEuLit – a European Framework for Digital Literacy: a Progress Report

Allan Martin
University of Glasgow

Introduction

The DigEuLit project was proposed as a response to a call for actions on “digital literacy” in the context of the eLearning Programme of the European Commission. The European Commissioner for Education and Culture states that,

The modernisation of Europe’s education and training systems is our goal, and through our proposed eLearning programme we believe we can help create a society of life-long learning and education for all. (European Commission, 2003: 1)

One of the four key strands of the programme is the promotion of “digital literacy”:

The ability to use ICT and the Internet becomes a new form of literacy – “digital literacy”. Digital literacy is fast becoming a prerequisite for creativity, innovation and entrepreneurship and without it citizens can neither participate fully in society nor acquire the skills and knowledge necessary to live in the 21st century. (ibid.: 3)

The goal of DigEuLit is to develop a European Framework for Digital Literacy (EFDL): a definition, generic structure, and set of tools which will enable educators, trainers and learners to share an understanding of what constitutes digital literacy and how it can be mapped into European educational practice.

Partners in the project are: University of Glasgow, Scotland (Lead Partner); Reid Kerr College, Paisley, Scotland; West Lothian College, Livingston, Scotland; Amtsentret for Undervisning – Sønderjylland, Aabenraa, Denmark; Centre for Videregående Uddannelser – Sønderjylland, Sønderborg, Denmark; Centre for Fleksibel Voksenuddannelse, Haderslev, Denmark; Business College Syd, Sønderborg, Denmark; Kainuun Ammattiopisto, Kajaani, Finland; Technical University of Łódź, Poland; Littérature, Idéologies, Représentations (LIRE), CNRS Lyon, France; and the University of Oslo, Norway. The project leader is Allan Martin, University of Glasgow.

The project website is at www.digeulit.ec

Background

Digital literacy is the ability to succeed in encounters with the electronic infrastructures and tools that make possible the world of the twenty-first century. Digital literacy has become a central enabling agent in the educational enterprise, as a result of a number of trends.

The most significant is simply that the world is becoming *e-permeated*. Electronic devices and facilities now underpin the practice of most sectors of society and most human activities. This does not mean that they have *changed* society; electronic facilities may only enhance existing practice or make it easier or quicker. Whether the cumulative effect of such changes will be to alter the nature of society is another question. But the fact that the world is e-permeated means that those who can understand and comfortably use e-facilities are significantly advantaged, in terms of educational success, employment prospects and other aspects of life.

Education, like other social sectors, is rapidly adopting electronic means. But the evolution of electronic tools for education has run alongside, and been to some extent fuelled by, a paradigm shift in approaches to learning and teaching. In moving towards student-centred and constructivist learning models, electronic tools are seen as key factors in realising learning environments. Mastery of the tools thus becomes an entitlement for the student if she is to learn successfully.

Education is also driven by processes of *outreach* and *globalisation*, the one driven by ideologies of inclusion, the other by ideologies of the market. The effect of both is to press forward the need for education at a distance, making remote the bond between student and teacher and between student and student. Digital tools are crucial in enabling the community of remote learners, students and teachers who are geographically distributed, yet function as a learning community. Mastery of the tools is central to the success of this enterprise.

Education has since the Middle Ages been based on the model of disciplines, uniting groups of scholars sharing an area of content and a methodology for studying it. But it has always been recognised that there are generic skills to which all scholars, and by extension all educated persons, should aspire. Some of these are simply expressed – reading, writing, counting – whilst others are harder to specify – analytical thinking, or the awareness of bias. The trend towards student-centred educational models, as well as the drive to involve more of the population in higher levels of education, has raised the importance of generic skills issues; and in the e-permeated world, the claim of digital literacy to be recognised as an essential generic skill must be addressed.

Many competing literacies confront educators, students and citizens in the digital era. Computer (IT) literacy has developed since the 1970s; information, media and visual literacy are as old, although initially not focused on digital areas; and more recently the *e* prefix has joined many neologisms. There is much action at the level of practice, but the landscape is unclear, especially beyond the basic IT skills addressed in schemes such as ECDL; teachers are not clear about what they could achieve in making students confident for digitally infused education and the e-world beyond. We need to clarify terms, indicate their full range and application, and develop a framework which will enable providers and consumers to locate their actions and

achievements within a landscape of intellectual development in the contexts of social and technological trends and of European awareness and mobility.

The EU has a key role to play in the transformation of Europe as a political, economic and social entity, and its educational structures and practices. EU programmes can aid transformation by presenting models to think about and tools to effect change. They do not always succeed, but one can argue that enough do to make it worthwhile. It is therefore natural that the eLearning Initiative should direct itself towards the digital enablement of students and teachers, through supporting the provision of a framework to address digital literacy. This offers major benefits to education, and through education to employment and other areas of life. Digital literacy is not merely an educational issue, but one that confronts all dimensions of the digitally-infused world.

Aims, Outcomes, Benefits

The aim of the Project is threefold: to map out the conceptual landscape surrounding digital literacy, in order to promote shared understanding throughout Europe; to develop a framework for digital literacy, applicable across Europe, onto which existing and planned programmes can be mapped, and which would enable portability of qualifications; and to specify the elements of a toolkit which support providers of digital literacy.

The framework should be applicable to any groups at whom digital literacy activity is directed, as well as providers of this activity, and those (e.g. employers) for whom acquisition of digital literacy is important. Work in this area is often fragmentary or focused on low-level skills at the expense of understanding. By locating digital literacy in a conceptual context, including social and cultural environments, and by providing a developmental framework, the project will enable those who acquire, provide, and rely upon digital literacy to understand its nature, value, progression, and relation to other provision. The steps towards a digital literacy toolkit will specify tools which will be of direct value to the target groups in shaping and sustaining digital literacy provision. The framework and sample tools will be piloted with a range of target groups including vocational students, community groups, adult learners and higher education students. Policymakers and administrators at local/regional/national level may also use the framework to harmonise curricula in terms of digital literacy content.

Intended outcomes are:

- i. To map the conceptual landscape of digital literacy and define concepts;
- ii. To identify previous and ongoing projects, actions, and research relevant to digital literacy, and to analyse the results of such projects and actions;
- iii. To prepare a framework for digital literacy, onto which existing and planned schemes and programmes can be mapped;
- iv. To specify a toolkit which will assist digital literacy providers in using the framework, and develop sample tools (taking forward existing tools where appropriate);
- v. To demonstrate successful use of the framework and the sample tools with a range of target groups;

- vi. To identify steps to sustain the framework and toolkit beyond the project life, and extend their use.

The assumption is made by the project partners that learning is a constructive, a reflective and a social activity. This perspective will influence the exploration of concepts, construction of the framework, and specification of the toolkit.

Actions

The project, which runs from 1 January 2005 to 31 August 2006, is divided into four phases:

Phase I. Mapping the Landscape

This phase will prepare the foundations for the core of the project's work by setting out the conceptual landscape of digital literacy. This will involve examining the existing literature in this area, identifying relevant EU and other projects, research and practical actions, analysing the results of this work and laying out the concepts and issues involved. This work will culminate in a clear and comprehensive working definition of digital literacy, which can form the basis for construction of the framework.

Phase II. Building the Framework

Beginning with the key concepts developed in Phase I, a framework for digital literacy will be constructed, appropriate to all users. The framework concepts will therefore be generic and not focused on students or any particular target group. A set of tools will be specified which will enable users to readily employ the framework on existing or proposed courses or other educational actions. Sample tools will be created, including, if appropriate, modification of existing tools. Strategic, training, resource and other implications will be identified and discussed.

Phase III: Testing the Framework

Successful actions in the digital literacy area, will be reported, focusing on examples of actions which demonstrate the application of the European Framework for Digital Literacy, and which show the use of the sample tools with a range of target groups. Trialling of the Framework with existing and proposed courses will be undertaken by the project partners.

Phase IV. Dissemination

Discussion about and use of the framework and sample tools will be encouraged through workshops, publications, and web activity. The Framework and tools, as well as the other project products, will be made available to potential users through the website. Experience gained through the project will be fed back to national and European levels. Issues and possibilities for sustainability of the Framework will be discussed, and recommendations made. External evaluation of the project will be undertaken. Reports will be submitted to the EC at appropriate points. Presentations regarding the project will be made at selected relevant conferences, and short reports or papers submitted to relevant publications.

Expected outputs are:

Phase I: Published (hardcopy and web) overview of digital literacy and associated concepts and issues; listing of relevant EU and other projects, research and practical actions; analysis of this work and identification of factors relevant to successful digital literacy actions.

Phase II: Published (hardcopy and web) framework for digital literacy, toolkit specification and sample tools.

Phase III: Published (hardcopy and web) examples of positive developments in digital literacy activities, and case studies demonstrating the use of the sample tools with a range of target groups.

Phase IV: Published papers and reports. Conference presentations. Project interim and final report. Website offering access to all project products. Awareness of the project's activity across Europe. Published recommendations on adoption and sustenance of the Framework.

Progress so far (December 2005)

Phase I. Mapping the Landscape

The project commenced at the beginning of January 2005. The kickoff meeting took place at the University of Glasgow on the 26-28 January 2005 to co-ordinate the project actions, and work proceeded apace on Phase I. Two overview papers have been prepared: "The Landscape of Digital Literacy" prepared by Allan Martin and "Digital Literacy: Challenges for Education" prepared by Bob Byiers (both at the University of Glasgow) and developed with ongoing online comment from partners. These papers will be available on the website in the New Year in late draft form, and final versions will be prepared for the Phase I publication. A third paper, on existing frameworks relevant to digital literacy, is in preparation at CNRS-LIRE (Lyon) and will be completed early in the New Year. Work is under way on a listing of relevant projects, which will be mounted on the website when ready. A publication representing the results of this Phase I activity will be launched in January or February when the work is complete. This will represent a valuable map of the field with pointers to main developments and sources.

Phase II. Building the Framework

The second project meeting took place at Sandbjerg's Estate, near Sønderborg, South Jutland, Denmark, on the 10-12 August 2005 to discuss the framework structure and the implementation of Phase II, the construction of the framework. Discussion on the nature of the framework was long and intense and consumed many flipchart pages, and we were able to map out the direction for further development. A paper presenting the definition of digital literacy and the structure of the digital literacy framework was prepared and has undergone three major revisions in the course of continuing online discussion; it is now undergoing final revision, and will be mounted on the website as soon as it is ready. Completion of this work will allow the toolkit specification to be speedily achieved, and work to proceed on sample tools.

Phase III. Testing the Framework

Phase III actions will get under way as soon as the framework document is finalised. This will involve partners taking courses they currently deliver and mapping them onto the framework structure, using the sample tools as soon as these are available. This activity will begin early in the New Year. Later, in March 2006, a third partners' meeting will be held at the Technical University of Łódź, Poland, to discuss progress of Phase III and Phase IV. The experiences of Phase III will be written up into a set of case studies and published on the website. As soon as robust enough online versions of the tools are available, they will be mounted on the website, and institutions outwith the project partners' group will be welcome to try them.

Phase IV. Dissemination

- ☞ The project website has been set up at www.digeulit.ec The .ec domain was chosen as the .eu domain was not yet available.
- ☞ A leaflet has been prepared which gives an outline of the project proposal. This will be available for download from the website.
- ☞ A presentation was given to the *eLit2005* conference, Strathclyde University, Glasgow, Scotland, 15-17 June 2005 by Allan Martin and Jan Grudziecki. The *Powerpoint* slides will be available on the website in the New Year.
- ☞ Dr Conor Galvin, University College, Dublin, has been appointed project evaluator.
- ☞ This report will also be available on the EC eLearning Programme website at www.elearningeuropa.info and on the project website.

Defining Digital Literacy

On the basis of the work in Phase I of the project, we proposed that the concept *digital literacy* would include several key elements:

- i. Digital literacy involves being able to carry out successful digital actions embedded within life situations, which may include work, learning, leisure, and other aspects of everyday life;
- ii. Digital literacy, for the individual, will therefore vary according to his/her particular life situation, and also be an ongoing lifelong process developing as the individual's life situation evolves;
- iii. Digital literacy is broader than ICT literacy and will include elements drawn from several related "literacies", such as information literacy, media literacy and visual literacy;
- iv. Digital literacy will involve acquiring and using knowledge, techniques, attitudes and personal qualities, and will include the ability to plan, execute and evaluate digital actions in the solution of life tasks, and the ability to reflect on one's own digital literacy development;

On the basis of this we have formulated the following brief definition:

Digital Literacy is the awareness, attitude and ability of individuals to appropriately use digital tools and facilities to identify, access, manage, integrate, evaluate, analyse and synthesize digital resources, construct new knowledge, create media

expressions, and communicate with others, in the context of specific life situations, in order to enable constructive social action; and to reflect upon this process.

This definition is elaborated in a paper “A Framework for Digital Literacy” which will shortly be published on the project website.

Feedback

Once the project products begin to appear on the website, we would welcome constructive comment and positive suggestions on any aspect of our work, including the position papers, the framework elements, and the tools.

References

European Commission (2003) *eLearning: Better eLearning for Europe* Directorate-General for Education and Culture. Luxembourg. Office for Official Publications of the European Communities

Address for Correspondence

Allan Martin
Director
IT Education Unit
University of Glasgow
St. Andrew's Building
11 Eldon Street
Glasgow G3 6NH
Scotland

Tel +44-(0)141-330-6471
Fax +44-(0)141-330-2602

Email me at: a.martin@educ.gla.ac.uk