OTeacher

a European project on

teachers' professional profile in ICT for education



- > Introduction
- > A European network of experts
- > The week-long seminar
- > An overview of European teachers' profiles in ICT for education
- > The uTeacher event in Palermo
- > A Common European Framework for Teachers' Professional Profile in ICT for Education
- > Synoptic table of the uTeacher activities and outputs
- > Appendix



Excerpts from CALL FOR PROPOSALS Preparatory and Innovative Actions 2003/b - eLearning DG EAC/61/03 (2003/C 170/10)

"The European Commission launched the eLearning Initiative and Action Plan to foster the adaptation of the European Union's education and training systems to the knowledge society, through the effective and relevant use of information and communication technologies and the Internet for learning.

The eLearning Initiative and Action Plan aim to provide the basis for a wide debate at European level, and to encourage increased coordination of related actions within and between Member States.

Peer reviewing aims at facilitating cross-examination (or study) of elearning practices or policies by persons directly involved in education and training.

The outcome of the peer review process should be a better understanding of how to develop good practice throughout Europe, providing a basis for the exchange and transfer of experience among education and training actors".

The uTeacher project

The **uTeacher** project addresses the following issues of the eLearning initiative.

Foster the adaptation of the European Union's education and training systems to the knowledge society.

Teachers can be key players in the adaptation of European school systems to the knowledge society, provided that they are able to make effective and relevant use of Information and Communication Technologies (ICT) and the Internet in their practice. **uTeacher** aims to understand and define the professional profile of a teacher who is faced with the issues that the knowledge society poses to schools. This profile is captured in a "Common European Framework" which can be seen as a means of harmonising Initial Teacher Education (ITE) and Continuing Professional Development (CPD) across Europe.

Cross-examination (or study) of elearning practices or policies by persons directly involved in education and training to get a better understanding of how to develop good practice throughout Europe.

Clear understanding of the actual professional profile currently assumed as a basis for ITE and CPD across Europe is a prerequisite for defining the Common European Framework. Such understanding can only be achieved through a participative process involving field experts from all European countries. **uTeacher** has created a network of National Investigators who worked together to produce an overview of teachers' professional profile pertaining to ICT for education that is assumed as a basis for benchmarking in-service and preservice training and accreditation in the various European countries. This network, which can be considered a real community of practice, has worked cooperatively with the **uTeacher** partnership (see Appendix) to produce the Common European Framework.

To encourage increased coordination of related actions within and between Member States.

The Common European Framework describing teachers' professional profile in ICT for the school of the knowledge society is a means for educational administrators, course designers, teachers, examining bodies, etc. to reflect on their current practice, with a view to situating and coordinating their efforts and to ensuring that they meet the real needs of school in the knowledge society.

Phases and outcomes of uTeacher

uTeacher has involved two main phases.

Phase 1: production of an overview of teachers' professional profile in ICT for education that underpins national teacher training programs in Europe. This overview was published in a book entitled *European Teachers Towards the Knowledge Society*, written cooperatively by the **uTeacher** partnership, along with the nineteen European National Investigators.

Phase 2: production of a common framework for teachers' professional development as a tool for improving teacher training in ICT for education across Europe.

This framework was published in a book entitled *A Common European Framework for Teachers' Professional Profile in ICT for Education.* A hypermedia version was also produced. This Framework is the result of a cooperative process involving the **uTeacher** partnership and the network of National Investigators.

A feasibility study has defined the conditions for developing a European organisation responsible for maintaining the Framework, providing a reference for the development of learning materials, and administering quality assurance. The project saw the formation of a European network of experts composed of National Investigators (NIs) working in conjunction with the partnership throughout the various phases of the project.

Identifying national Information Sources

The partnership identified an authoritative national source in each European country (representative of the Ministry of Education, national body responsible for teacher education, academic expert, etc.), who helped the partnership appoint a suitable NI.

Contacting the National Investigators

Following the suggestions of the National Sources, the partnership contacted and appointed the NIs.

- Writing national reports NIs produced national reports following guidelines provided by the partnership. Each national report deals with ITE and CPD related to ICT for Education in the given country.
- Processing of national reports in preparation for the week-long seminar

The partnership identified key aspects that emerged from the national reports and drafted a preliminary document entitled *Teachers' Competencies in ICT for Education within a Knowledge Society* to serve as a guide for discussion and comparison at the Venice Seminar.

- Week-long seminar (Venice, 4th-9th October 2004) The NIs shared and explored national viewpoints and experiences, and identified key aspects and issues at trans-national level.
- Editing and publication of the book *European Teachers Towards* the Knowledge Society
- Forming the board of authors responsible for populating the Framework structure, and the board of reviewers, responsible for

A EUROPEAN NETWORK OF EXPERTS



providing the writers with feedback.

- Producing guidelines for the writers and reviewers
- Exploratory population of some of the Framework sections
- **Meeting in Palermo** (8th-11st March 2005) to co-ordinate the writing and reviewing procedures.
- Populating the Framework sections
- Producing the book *The Common European Framework for Teachers' Professional Profile in ICT for Education* and implementing the Hypermedia
- Preparing a feasibility study into future development of the Framework.

The national information sources

Û

Nineteen people who play a key role in major teacher education institutions were identified as primary information sources in each country (see Appendix). These contacts were asked to appoint a "National Investigator" responsible for providing accurate and complete information to be used in the context of a comparative analysis at European level.

Figure 2. A map of the countries involved in uTeacher

@Teacher Network

(U)

The National Investigators

Nineteen National Investigators were appointed to describe the explicit or implicit competence profile pertaining to ICT in teachers' practice that is assumed as a reference for in-service and pre-service programs/initiatives/courses in their country (see Appendix). The contributions produced by the

National Investigators served as a basis for an analysis of teachers' competencies in ICT assumed in the different European countries. Specifically, the investigators' tasks were to:

- produce a short national report in line with guidelines provided by the partnership;
- participate in a week-long seminar in Venice (4th-9th October 2004), where a draft of the Common European Framework would be produced;
- participate in the Framework production.

The National reports

To gain a clear picture of teachers' profile related to ICT for education across Europe, it was necessary to adopt a uniform structure for the national reports so as to guarantee consistency and ensure that the information provided was suitable for comparative purposes.

This requirement was considered in preparing the guidelines for drafting the national reports: reporting procedures were harmonized by making use of a template to be filled in and an example of filled template. Each of the headings was explained and recommendations on how to compile the template were provided.

Drawing on guidelines produced by the **uTeacher** partnership, each National Investigator wrote a report on the situation in his/her country concerning teachers' ICT profile underlying Initial Training and Continuing Professional Development. The national reports focus on a number of major issues, as follows.

Initial and in-service teacher training: objectives, subject areas

and bodies setting out the objectives and the areas of such training processes related to all aspects of teachers' practice involving ICT: these include the pedagogical uses of ICT in the classroom, the use of ICT for improving school organisation, in professional development, for improving personal productivity, for cooperation and networking, etc.

Curricular framework of ICT for education in teacher training (both in initial and in-service training)

describing the explicit or implicit curricular framework of teacher training initiatives, mainly addressing the uses of ICT in the context of:

- the classroom, to improve students' learning;
- the teachers' community, to improve their cooperation;
- school organisation, to improve school effectiveness;
- teachers' professional development, to extend learning opportunities.

How teacher training is carried out (both in initial and in-service

training) explaining the ways in which initial and in-service training are accomplished (using ICT tools or not, working online or not, working collaboratively or not, etc).

Teachers actual competencies and tasks in using ICT reporting studies or statistical surveys concerning actual teacher uses of ICT in education.

Problems that teachers face in using ICT in their practice reporting studies or statistical surveys concerning problems faced by teachers in using ICT in education (e.g. lack of access to computers and a data projector, lack of educational materials at school, lack of knowledge in using computers, etc.).



Content areas involved in teachers' competence profile in ICT for

education listing broad topics related to teachers' competence in ICT for education. These topics have been drawn from major national teacher training initiatives and programs, from initial training courses, or from NIs' experience as experts involved in the field.

During the project, the NIs worked together at a distance using an open source platform (MOODLE) configured and administered jointly by the Glasgow and Venice partners. http://macdui.educ.gla.ac.uk/uteacher/

THE WEEK-LONG SEMINAR San Servolo Island, Venice



Figure 4. Island of San Servolo.

The seminar was intended to bring together national investigators in order to begin the process of constructing a European Framework for Teachers' Professional Profile in ICT in Education. The meeting was attended by National Investigators from Italy, Scotland, France, Denmark, Finland, Sweden, The Netherlands, Germany, Belgium, Austria, Spain, Portugal, Ireland and Iceland.

Investigators from Norway, Hungary, the Czech Republic, Greece and England, also involved in this project, were unable to attend. Staff were also present from the three project partners, and the meeting was observed by the external evaluator.



The activities and products

The meeting opened with an introduction to the **uTeacher** project and to the week's activities by the project leader, Vittorio Midoro. Activities for the next four days were divided into three phases:

PHASE 1. Outline of the Framework

Participants were first asked to identify the aims or purposes of a framework. This was not an easy task, but its open-ended character enabled participants to engage with it from their own perspectives, and this activity represented a valuable calibration of the level of discourse at the seminar. Discussions were intense and wideranging, and in the end produced not only an agreed list of aims, but also an agreed *list of characteristics of the Framework*.

Participants were offered a number of framework models to consider, including national models from Scotland and The Netherlands, and the Common European Framework for Languages. They then split into two working groups and, starting from the aims and characteristics already generated, set about defining a structure for the Framework. In the subsequent plenary session, the groups presented two proposals for approaching the draft structure; a strong impression emerged from discussion that defining a framework structure was a highly complex task which also needed to take account of the type of references that would be used to populate that Framework. Consequently, participants decided to form two working groups dedicated to either aspect.

After much hard work, a draft model and list of reference points were drawn up and proposed ("The Common European Framework for Teachers' Professional Profile in ICT for Education").

Characteristics of the Common European Framework

Aims

- To inspire change
- To provide a set of references for teachers and other educational actors
- To enable comparison and sharing of programmes and practices
- To build upon existing expertise (including other frameworks)
- To facilitate mobility of teachers across Europe

Characteristics

- Open (protect diversity)
- An instrument for all educational actors
- Built on teachers' professional values
- Consonant with other generic frameworks
- Contains contextualised case studies and inspirational practices
- Focused on higher order capabilities rather than specific skills
- Contains substantive elements
- For all teachers



Figure 6. Developing the Framework



Figure 7. A group at work

PHASE 2. Preparation of Position Papers and trial population of Framework

Participants were divided into three groups. Members of the groups presented overviews of the pre-service and in-service provision with respect of ICT for teachers in their country, and reactions were requested regarding similarities, differences, and emergent issues.

This again stimulated much discussion. The groups then began preparing position papers which examined the key issues, taking into account the nature, structure and implementation of the Framework proposed in Phase 1. In plenary session, participants were then asked to try populating the previously negotiated model of the Framework, in order to gain clearer understanding of how this process might best be carried out and to test the validity of the model. Three working groups were formed for this purpose, each dedicated to a different area of the Framework. The results were presented and discussed in plenary session.

PHASE 3.

Next steps, feasibility and reporting

Plenary discussion examined the structure and organisation of the publications which would emerge from the event and the timescale required to achieve the outputs. Participants were then invited to express their opinions on the prospects for Framework implementation in their countries and on suitable strategies for enhancing its adoption: their written responses were then collated and analysed, and a thematic overview presented. Finally, feedback on the success of the seminar was requested from participants. It was recognised that producing a draft European Framework in this area is an extremely demanding task, one that necessarily entails a long term process calling for sustained commitment. It was generally felt that much had been achieved and that the basis for future development had been constructed: the National Investigators' preparatory work and the opportunity for comparing national contexts and achievements during the seminar were central to this effort. The view was also expressed that a more tangible outcome could have been achieved had the partners adopted a more guided approach to the activities and had there been more intensive focus on populating the Framework itself. Nevertheless, many of the participants were keen to participate in further development of the Framework carried out online. Finally, all appreciated the excellent organisation of the seminar and the pleasant surroundings, which helped to create a friendly and constructive working environment.

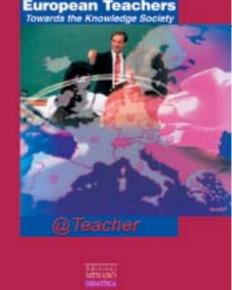
AN OVERVIEW OF EUROPEAN TEACHERS' **PROFILES IN ICT** FOR EDUCATION

European Teachers

An overview of current teacher profiles in ICT for Education underlying Initial Teacher Education (ITE) and teachers' **Continuing Professional Development** (CPD) was the first output of the project and resulted in the book European Teachers Towards a Knowledge Society, written by the **uTeacher** partnership in close collaboration with the nineteen National Investigators.

Focusing on the European situation regarding the teacher competencies in ICT for Education that emerge from teacher training processes, the book provides a view of the differences between national practices. Specifically, the book aims to:

- provide insight into teacher
- competencies in ICT for Education across Europe. This represents a starting point for defining a shared framework for teachers' professional development, starting from the present situation:
- detect the main trends:
- learn from one another:
- share interesting ideas and approaches;
- avoid "reinventing the wheel".



Midoro V. (ed.) (2005), *European Teachers Towards a Knowledge Society*, Ed. Menabò, Ortona

The book is structured into three sections. The first presents an overview of ITE and CPD pertaining to ICT in Education across Europe. The second part sketches teachers' profile related to ICT for Education. The third section summarizes views of NIs groups regarding the European situation.

THE UTEACHER EVENT IN PALERMO





The **uTeacher** event in Palermo was held within the context of the ICMTL conference (International Conference on Methods and Technologies for Learning). The aim was two-fold: a) to start disseminating project ideas

- a) to start disseminating project ideas and results;
- b) to co-ordinate and commence the process of writing the Common European Framework.

The keynotes

The keynote speech opening the conference was given by Ms. Maruja Gutiérrez Díaz, Head of Multimedia Unit in the European Commission's DG Education and Culture.

This was followed by a second keynote from Vittorio Midoro, project manager of **uTeacher**, who presented the project in plenary session.

The uTeacher panel session

A panel session was held involving the **uTeacher** partners and some National Investigators. The speakers described how the Common European Framework might be useful in their own countries and how it would bring added European value.

Working session on the uTeacher Framework

This meeting was attended by the authors' board, bringing together national investigators from Denmark, Italy, Finland, Germany, Hungary, Ireland, Scotland, Sweden and The Netherlands.

- The aims of the working session were to:
- harmonise and streamline Framework writing procedures;
- examine and discuss the Framework contents produced so far.

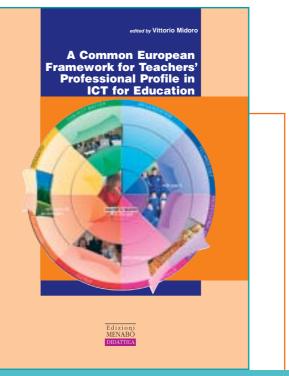
A COMMON EUROPEAN FRAMEWORK FOR TEACHERS' PROFESSIONAL PROFILE IN ICT FOR EDUCATION

The Common European Framework (CEF) for Teacher's Professional Profile in ICT for Education contributes towards *raising the quality of educational and training systems in Europe* by offering a shared basis for the definition of content domains, syllabuses and curricula in the field of ICT for education, both in Initial Teacher Education (ITE) and teachers' Continuing Professional Development (CPD).

This book centres on an element that is absolutely crucial to the quality of European educational and training systems: teachers. The work presented in this book can be placed in the mainstream of the strategy described in the *Education & Training 2010 programme*, published by the European Commission, Directorate for Education and Culture. More precisely, it aims to describe the teacher's professional profile in ICT for education within a changing education system, one which faces issues and challenges posed by the knowledge society.

The CEF is intended to function at the European level, where it may serve to harmonise national initiatives, and to offer parameters within which differences between national and regional policies, emphases and cultures may be expressed. The CEF allows the development of mutual trust between stakeholders in national ITE and CPD systems, and encourages cooperation between these systems. It addresses education and in-service training providers, teachers, trainers and learners, within and beyond national frontiers.

The CEF is also a tool for teachers who want to take personal initiative in developing their professionalism in ICT for education by



Midoro V. (ed.) (2005), A Common European Framework for Teachers' Professional Profile in ICT for Education, Ed. Menabò, Ortona

creating and following individual learning pathways, that is, the legitimate business and ambition of the ICT pioneer teacher. It helps these teachers understand the skills and knowledge they possess and/or lack, and to find suitable means to develop aspects of their professionalism in ICT for education.

The teacher's professional profile aims to capture the identity of a teacher capable of functioning successfully in the changing world of school education: the CEF focuses on a specific area of that profile, namely, those aspects that are in some way related to ICT and its adoption for education within the knowledge society.

The CEF was originally conceived in the form of a matrix. The columns of the matrix represented the areas of social action of the teacher, that is the dimensions of action in which the teacher participates, and defines him/herself and the vision of educational praxis. The rows of the matrix represented the various contexts of the vision and action of the innovative teacher, the spheres of activity within which the teacher orients him/herself and constructs relationships with the various actors within the educational field.

INTERACTION WITH SECTORS	SELF Continuous personal construction of professional identity	PUPILS Facilitation of students' learning and development	COLLEAGUES Cooperation at school level and within teacher' community of practice	ENVIRONMENT Interaction with the external environment
PEDAGOGY	Becoming aware of the constant impact of ICT on learning, school and society, and constructing a personal vision/philosophy of learning and pedagogy suitable for a knowledge society.	Developing and managing learning environments consonant both with one's personal vision of learning/pedagogy and with the demands and challenges of the knowledge society.	Sharing practice, repertoire, and learning/pedagogy visions. Collaborating in interdisciplinary educational activities.	Considering and using the local and global environment as a resource and as an arena for school and learning.
CURRICULUM/ SUBJECT MATTER	Given the rapid growth in knowledge, reflecting on the key areas and topics to address within the subject area; understanding the impact of ICT on the didactics of the discipline.	Designing and managing learning environments which take into account the opportunities and limits of ICT in the didactics of a given subject area.	Sharing practice, repertoire, and "know how" in uses of ICT in the subject area, both with colleagues and inside the teaching community.	Using local and global resources to foster learning in a given subject area.
ORGANISATION	Constructing a personal vision of school organisation that responds to the demands and challenges of the knowledge society.	Within the limits of context constrains, implementing an organisation of the school/classroom that responds to the demands and challenges of the knowledge society.	Sharing practice, repertoire, and organisational visions and cooperating with colleagues on classroom and school organisation.	Contributing to build a school organisation linked to the local and global environment.
TECHNOLOGY	Constantly pursuing technical and cognitive proficiency.	Exploiting ICT to facilitate students' learning.	Exploiting ICT capabilities to interact with colleagues and teachers' communities of practice.	Exploiting ICT to create learning networks, bringing added value to school and society (locally and globally).
PROFESSIONAL Development	Becoming aware of the increasing need for continuous professional development and the means to achieve it.	Planning and taking actions to develop one's professionalism regarding the education and welfare of students.	Learning to exploit ICT to cooperate with colleagues and the teaching community.	Identifying and exploiting the opportunities offered by the local and global environment to develop one's professionalism.
ETHICS	Making one's prime responsibility the education and welfare of all the students in one's care and accepting ICT as important for creating a knowledge society.	Gearing one's practice to the principle that the education and welfare of all the students in one's care is one's prime responsibility.	Playing a positive and active role in cooperating with colleagues and interacting inside teachers' communities of practice using ICT tools and resources in an appropriate way.	Recognising responsibility to prepare citizens able to live in harmony with the social and physical environment
POLICY	Critically reflecting on ICT policies and strategies pertaining to the school- ICT-knowledge society relationship and constructing one's personal vision.	Given context constrains and policy/strategy requirements, implementing actions that respond to the demands and challenges of the ICT policies of school and environment.	Critically reflecting with colleagues on policies and strategies pertaining to the impact of ICT on the school system and cooperating to implement and evaluate them.	Given the limits of one's action, contributing to the development of policies and strategies related to the construction of a school strictly linked to the environment.
INNOVATION	Critically engage with the need for ICT-led innovation and the transformative power of positive change.	Shaping and re-shaping ICT-led change in terms of the learning & teaching we provide.	Working with colleagues to introduce and develop innovative uses of ICT in schools and teachers' wider practice communities.	Contributing to building a culture of informed education change beyond the school; at regional, national and supranational level.

Figure 10. Matrix model of the Common European Framework and section abstracts.

Figure 11. Iris model of the Common European Framework

The underlying assumption is that in his/her practice, the teacher interacts with different classes of individuals (pupils, colleagues and entities in the external environment – be they individuals or bodies) as well as engaging in self-reflective activity. This interaction takes place within different, but interdependent, domains: pedagogy, curriculum/subject matter, organisation, technology, professional development, ethics, policies and innovation.

Each of the cells in the resulting grid (Figure 10) contains a brief and (necessarily) highly abstract description of teacher practice related to the specific context of relationships and the given domain of educational action.

The form of the iris (Figure 11) emphasises the layers of social orientation and action extending outwards from the individual and also extending inwards from the broadest environment. This representation captures the never-ending tension between social forces influencing the individual and the creative contribution of the individual to the ongoing recreation of the social order. One of the arenas in which this tension is played out is the educational system. In this perspective, the innovating teacher operates within cultural parameters but can make a transformative input to the structure and functioning of the social order.

External

olleagues

Pupils

Self

The Framework Hypermedia

Along with the book, the Common European Framework for Teachers' Professional Profile in ICT for Education is available as a hypermedia, a dynamic object through which the CEF can be easily and constantly updated. Besides providing easy online access to the Framework contents, the Hypermedia includes a series of case studies and references that may be general in nature or more strictly related to regional/national contexts.

For each cell of the CEF, the brief abstract becomes a gateway to analytical content addressing a number of different areas:

- the context of the actions related to the practice described in the abstract
- the actions related to this practice
- the knowledge areas related to the activities involved
- references
- issues and case studies.

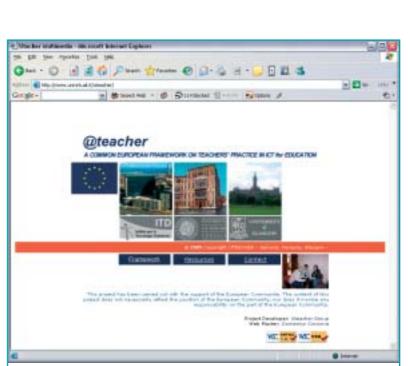
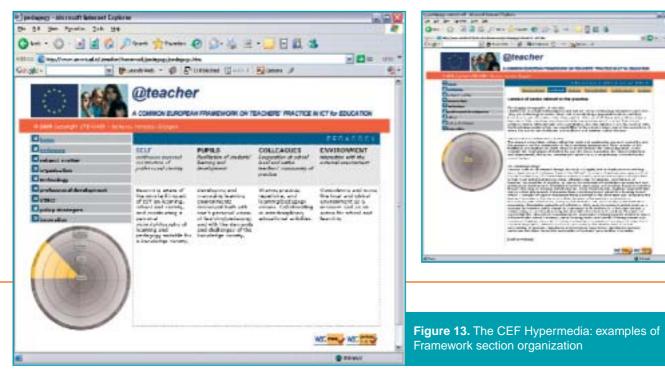


Figure 12. The CEF Hypermedia homepage

http://www.univirtual.it/uteacher/



The future

To keep pace with the development of the knowledge society, the CEF needs to be maintained and extended over time. Moreover, the systematic certification of learning processes for ITE and CPD based on the CEF will also be required, an activity to be conducted in association with the quality certification working groups acting in the context of the Bologna process. This will help to promote European cooperation in quality assurance, with a view to developing comparable criteria and methodologies, as well as necessary European dimensions in higher education, particularly with regards to curricular development, inter-institutional co-operation, mobility schemes and integrated programmes of study, training and research related to ICT for education in ITE and CPD.

To accomplish these tasks, a proposal has been submitted to the European Commission to create the conditions for establishing an institution which should perform CEF maintenance and development, as well as certification of the learning processes based on it. The network of experts created during **uTeacher** will be involved, as well as all the organisations which have manifested an interest in the CEF and which can potentially support the establishment of this initiative.

Another proposal has been submitted to the European Commission for the creation of a European area of Teacher Education in ICT for Education through the design and implementation of a virtual campus.

This virtual campus will involve a network of European Universities (Higher Education Institutions) in charge of Initial Teacher Education (ITE) and Continuing Professional Development (CPD) and will promote mobility both for student-teachers and teachers through the definition of a system of credits based on the ECTS system.

uTeacher activities and outputs (Synoptic Table)				
es ies	List of national information/project sources			
untri	Guidelines and template for the national reports			
al p J Co	List of national investigators (NIs)			
Analysis of teachers' professional profiles related to ICT for education in EU Countries (02.01.2004-31.12.2004)	Organizing the work of NIs Contacting NIs, delivering guidelines and templates for the national reports, assisting NIs during compilation, gathering reports, providing feedback			
	National reports			
	"Teachers competencies in ICT for education within a knowledge society" Preparatory document for the week-long seminar			
	Activity booklet for the week-long seminar			
	"European Teachers Towards the Knowledge Society" Book providing an overview of the current teacher profile in ICT for education underlying initial teacher training and continuing professional development initiatives across Europe			
Week-long seminar in Venice (04-09.10.2004)	Venice International Seminar, October 4 th – 9 th 2004 Target: 14 National Investigators			
	Outline of the Common European Framework Definition of the structure of a Common European Framework pertaining to expertise in ICT for education			
European Framework (01.11.2004-30.06.2005)	"A Common European Framework for Teachers' Professional Profile in ICT for Education" Book and Hypermedia on the Common European Framework			
	Feasibility study defining the conditions for developing a European organisation to maintain the Framework			
uTeacher event in Palermo (09-11.03.2005)	uTeacher event in Palermo, March 9 th and 11 th 2005 Plenary and roundtable session on uTeacher at the International Conference on Methods and Technologies for Learning in Palermo (Italy). Target: Framework authors' board			
	Working session on the Common European Framework in Palermo, March $8^{th} - 11^{th} 2005$ A meeting attended by the Framework authors' board to harmonise and improve the writing procedures of the Framework			
Dissemination	uTeacher project website (since January 2004) http://ulearn.itd.ge.cnr.it/uteacher/			
	Flier (February 2004)			
	First Booklet (December 2004)			
Diss	Final Booklet (June 2005)			
	Special issue of TD journal, published by ITD-CNR			
International Evaluation				
	First Evaluation Report (December 2004)			
	Second Evaluation Report (June 2005)			
Reports 1	Interim Report (December 2004)			
	Final Report (July 2005)			

uTeacher partnership



Istituto Tecnologie Didattiche is the only institute of Italy's National Research Council (CNR) exclusively devoted to research in the field of educational

technology. It is based in Genoa and has a branch in Palermo. The Genoa headquarters derives from the former Istituto Tecnologie Didattiche (founded in 1970) and the Palermo branch originated from the Istituto Tecnologie Didattiche e Formative (founded in 1993). The institute features both basic and applied research, technological development and transfer, in the following areas:

- Study of teaching/learning processes and of systems devoted to their realisation.
- Development of innovative solutions for educational and training problems based on a systematic approach to design, management and evaluation of learning environments.
- Study of ICT as a factor determining new cognitive needs and as resources for the learning/teaching activity.



The University of Glasgow is one of the longest established Universities in the UK, with a very high research rating awarded by the UK Government organisation charged with assessing research effort in Higher Education.

Its Education Faculty has been formed from the joining of the University Education Department, the Department of Adult and Continuing Education, the Teaching and Learning Service, and St. Andrew's College of Education which itself has given over 100 years service to the education sector. The University confers Education degrees, Doctorates, diplomas and teaching certificates, enabling candidates to become fully qualified teachers in the Primary, Secondary and Tertiary sectors, promoting the continual professional development of practising teachers, and enhancing the University's education research activities.

Information sources

examination with qualifying value.

APPENDIX

UNIVERSITA

CA' FOSCARI

Ca' Foscari - Università di Venezia was founded in 1868 as a High School of

Business, first in Italy. Its learning offer is

degree offer that concerns 9 masters, 18

The SSIS is a post-graduate school for

for University, Research and Education in

Phds and a postgraduate school for

secondary school teachers (SSIS).

regional level and is supported by a

Veneto located in Venice, Padova and

today articulated in 32 three year degrees

and 37 two year degrees in addition to post-

secondary teachers, instituted by the Ministry

1998, according to the European plan for the

educational harmonization. The school is at a

consortium of the Universities of the Region

Verona. Specific objective of the SSIS is the

professional training of secondary teachers.

The School lasts two years and has a final

AUSTRIA

Helmut Stemmer Austrian Federal Ministry of Education, Science and Culture

BELGIUM Herman Coene Karel de Grote-Hogeschool, Department of Education

CZECH REPUBLIC Zdena Lustigova Charles University Prague

DENMARK Peter Bollerslev IFIP Denmark

ENGLAND Debra Myhill University of Exeter

FINLAND

Jouni Kangasniemi Ministry of Education

FRANCE Odile de Chalendar Ministère de la Jeunesse, de l'Éducation Nationale et de la Recherche

GERMANY Dietlind Fischer Comenius-Institut

GREECE Louisa Anastopoulos Ministry of National Education & Religious Affairs

HUNGARY Kovács Emese Tempus Public Foundation ICELAND

Arnor Gudmundsson Ministry of Education, Science and Culture

IRELAND Mary Shine Thompson St Patrick's College

ITALY

Vittorio Midoro Istituto Tecnologie Didattiche, CNR

NORWAY

Morten Soby Norwegian Network for IT -Research and Competence in Education, University of Oslo

PORTUGAL Ida Brandao

Ministéio da Educacao, Departamento de Avaliacao Prospectiva e Planeamento

SCOTLAND

Allan Martin University of Glasgow

SPAIN Juana M. Sancho Universitat de Barcelona

SWEDEN

Carl HOLMBERG Swedish Agency for Flexible Learning

THE NETHERLANDS

Lejo Swachten Hogeschool van Utrecht-Faculty of education

National Investigators



AUSTRIA • Hubert Egger / PIB – bmbwk

Hubert Egger works at the Pedagogical Institute in Feldkirch/Vorarlberg/Austria teaching mathematics, physics and ICT in upper secondary school; elearning-coordinator and project-manager for the 'ILIAS open source learning management system' in Vorarlberg/Austria.

BELGIUM • Armand Greefs / Karel de Grote Hogeschool Since 2002 Armand Greefs has been teaching ICT at the Karel de Grote Hogeschool in Antwerp, Belgium, in initial teacher training for primary and secondary school teachers.

Previously he taught ICT-related courses in secondary school for 18 years.





CZECH REPUBLIC • Zdena Lustigova / Charles University Prague

Zdena Lustigova's educational and research work has concentrated on computer aided science education, especially on computer based laboratory work, on telecommunications technologies in education and computer based distance education. She focuses mainly on in-service teacher training, international online education and communication projects, and remote laboratories.

DENMARK • Ulla Gjørling / UNI-C

Ulla Gjørling is a chief consultant in UNI•C, The Danish IT Centre for Education and Research. She is responsible for a series of Pedagogical ICT Licences – a concept of teachers' professional development in the pedagogical application of ICT in teaching and learning. She is also involved in a number of European collaboration activities, among which the international uptake of the Pedagogical ICT Licences in the eContent project EPICT, see www.epict.org.





ENGLAND • Kate Watson / School of Education and Lifelong Learning, University of Exeter Kate Watson has extensive experience in the field of ICT and e-learning with a specific focus on the teaching of ICT and its use in the classroom. This is an active research area within the school, with participation in the teaching of the course from throughout ICT team.

FINLAND • Jouni Kangasniemi / Senior Adviser, Ministry of Education Jouni Kangasniemi is currently working for the Finnish Ministry of Education. He is the chairman of a working group preparing the national guidelines for in-service training of teachers. He has also been involved in the development of the Finnish Programme for Education, Training and Research in the Information Society. Currently he is one of the secretaries for the executive group for the programme.



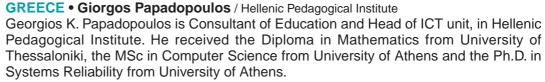


FRANCE • Georges-Louis Baron / Laboratoire EDA, Université René Descartes Georges-Louis Baron is professor of education at the French Institute for Pedagogical Research (INRP), where he has been in charge of a research department. He has been working on ICT in education for many years, with a special interest in the study of social contexts.

21

GERMANY • Edwin Stiller / State Institute for schools, RSD (Regierungsschuldirektor) Responsible for the section "Initial teacher training (First and second phase)" in the "State Institute for School", Soest, NorthRhine-Westphalia.

Editor and author of school books and teaching publications in the social and educational sciences.



GREECE • Michail Karamanis / Information Society SA Michalis Karamanis is an Instructional Designer and Project Manager in Information Society SA, a government organisation responsible for the design and implementation of ICT projects under EU funding for the Greek public sector. He holds a BSc in Physics and an MSc in Learning Systems Design.

HUNGARY • Andrea Kárpáti / Eötvös University

Andrea Kárpáti is an educational researcher and UNESCO Chair for ICT in Education at Eötvös Loránd University, Faculty of Sciences. She is Chief Editor for a series of textbooks entitled "Teaching with ICT" and has been the Hungarian senior investigator of several EU and OECD projects on ICT competencies and educational programmes aimed at creating equity through ICT.

ICELAND • Kristín Helga Gudmundsdóttir

/ Department of Continuing Education, Iceland University of Education Kristín Helga Gudmundsdóttir is Project Manager in Continuing Education at the Department of Continuing Education of Iceland University of Education. At present she is manager of NERA (Nordic Educational Research Association).

IRELAND • Conor Galvin / University College Dublin

Conor Galvin is an academic researcher based at University College Dublin, Ireland. He has extensive experience in education policy; education ICT; school-based curriculum action; continuity & change in education; and teachers' knowledge. His research interests include understanding how Information and Communication Technologies (ICT) can support research activity and in relation to teachers' / student teachers' professional preparation and development.

ITALY • Vittorio Midoro / Istituto Tecnologie Didattiche, CNR Project manager of uTeacher, Midoro is senior research fellow at Istituto Tecnologie Didattiche (National Research Council, Italy). His present research activity pertains to on line education, co-operative learning and e-learning for lifelong elarning.













NORWAY • Morten Soby

/ Norwegian Network for IT - Research and Competence in Education, University of Oslo Morten Søby is Director for the Norwegian Network for IT-Research and Competence in Education (1997-). He has been a Consultant for NKS Distance Education (87-91), Research Fellow at the Institute for Educational Research, University of Oslo (91-96) and Director of 6th International Conference on Cyberspace (97). Member of the Nordic Council of Ministers IT-policy group (99-00).

PORTUGAL • Cristina Novo / Escola Superior de Educação de Santarém Cristina Novo is a teacher at the Escola Superior de Educação de Santarém. She's involved in a number of projects on teacher training in ICT for education. Specialized in Education for Children with Special Needs, and continued with a post-graduation in Organization and Evaluation - Distance Education, presently she is in her way to terminate her mastering studies in Education and Multimedia. Her professional areas of interest are: opened and distant learning, software evaluation, ICT and special needs and on-line educational contents, specially in Portuguese.





SCOTLAND • John Dixon / University of Glasgow

John Dixon works in the Department of Educational Studies at the University of Glasgow. His main tasks revolve around preparing undergraduate and post-graduate students for entry into the teaching profession, and in this context he has been involved in research and teaching in the uses of ICT in education for over 20 years.

SPAIN • Juana M. Sancho / Universitat de Barcelona Professor of Educational Technology at University of Barcelona. Co-ordinator of the Quality Research Group FINT (Formación, Innovación y Nuevas Tecnologías). Co-director of the Centre for Studies of Change in Culture and Education (Parc Científic de Barcelona). Co-ordinator of the European project "School +: More than a platform to build the school of tomorrow".





SWEDEN • Carl Holmberg / Swedish Agency for Flexible Learning Carl Holmberg has many years of experience of research and development work in distance education and flexible learning. Currently he is Senior Adviser in the Swedish Agency for Flexible Learning (CFL). CFL is a change agent in education systems in

Agency for Flexible Learning (CFL). CFL is a change agent in education systems in Sweden. He is also Chair of European Experts' Network for Education and Technology (EENet) and a Member of the Executive Committee of the European Distance and E-Learning Network (EDEN).

THE NETHERLANDS • **Pieter Hogenbirk** / Inspectorate of Education Pieter Hogenbirk has been project manager of more than 100 projects on ict in education. In 1997 he became process manager for integrating ICT in primary, secondary and tertiary education on behalf of the Dutch government. From 2000 on he is working as a educational inspector, with special duties in the field of ICT in education. He is vice-chair of the IFIP-Working Group on secondary education and involved in a number of Dutch, European and Unesco ict-projects.



This document reflects the work done in uTeacher by all the partners of the project listed in alphabetical order:

Monica Banzato, Italy Stefania Bocconi, Italy Irene Brown, Scotland Bob Byiers, Scotland Domenico Corcione, Italy John Dixon, Scotland Jeffrey Earp, Italy Alida Favaretto, Italy Umberto Margiotta, Italy Allan Martin, Scotland Vittorio Midoro, Italy - *uTeacher project manager* Francesca Pozzi, Italy Manuela Repetto, Italy Caterina Roseo, Italy

Grafic design **Moby Dick** Ortona, Italy

Printed by **Litografia Botolini** Rocca San Giovanni, Italy

June 2005



CAT FOSCAIL

VENT

UNIVERSITY

GLASGOW

Istituto per le Tecnologie Didattiche, CNR, Italy - Prime contractor

SSIS Veneto University of Venice, Italy

The University of Glasgow, Scotland



This project has been carried out with the support of the European Community. The content of this project does not necessarily reflect the position of the European Community, nor does it involve any responsibility on the part of the European Community.

OTeacher

a European project on

teachers' professional profile in ICT for education