Study visit group report

Group No	
Title of the visit	Logon 2 Education
Topic	ICT in Education
City, country	Cordoba, Spain
Type of visit	Transversal Study Visit
Dates of visit	7-11 May 2012
Group reporter	Karl Donert (ILN Ltd), UK

Dear participants,

The purpose of a study visit is to generate an exchange of experience and good practice between the country you visit and the countries you all come from. Thus, participating in a study visit can be an exciting experience and an important learning tool for you.

During the visit you are invited to prepare a group report summarising your discussions and learning. This will help Cedefop disseminate what you have learnt to others, who share your interest but did not participate in this particular study visit.

On the first day of the visit, you are to select a reporter who will be responsible for preparing the final report and submitting it to Cedefop. Everybody should contribute to the report by sharing their views, knowledge, and practices in their respective countries. Please start working on the report from the first day of the visit.

You will, of course, be taking your own notes during presentations and field visits; but the group report should highlight the result of the group's reflections on what was seen and learnt during the entire visit and the different perspectives brought by the different countries and participants. The report should **NOT** read as a travel diary, describing every day and every session or visit.

Cedefop will publish extracts of your reports on its website and make them available to experts in education and vocational training. When writing the report, please keep this readership in mind: make your report clear, interesting, and detailed enough to be useful to colleagues throughout Europe.

By attaching any photos to the report, you agree to Cedefop's right to use them in its publications on study visits and on its website.

Please prepare the report in the working language of the group.

Please do not include the programme or list of participants.

The reporter should submit the report to Cedefop (studyvisits@cedefop.europa.eu) within ONE month of the visit.

I FINDINGS

This section summarises the findings of the group while visiting host institutions, discussing issues with the hosts and within the group. You will be reflecting on what you learnt every day. But to put them together and give an overall picture, you need to devote a special session to prepare the final report on the last day of the visit.

In this section, it is important that you describe not only things you learnt about the host country but also what you learnt about the countries represented by group members.

1. One of the objectives of the study visits programme is to exchange examples of good practice among hosts and participants. Cedefop will select well-described projects/programmes/initiatives and disseminate them to former participants and a wider public, including potential partners for future projects. Therefore it is important that you identify and describe all aspects that, in your view, make these projects/programmes/initiatives successful and worth exploring.

The Logon 2 Education study visit took place in Cordoba, Spain. There were 18 participants from 14 countries. The visit was organised by the Teacher training centre in Cordoba. The activities were all based within the city region.

The host introduced the context of the study visit and the ICT schools (Integrated ICT) programme. Comment was made on other initiatives for education, including:

- Plurilingualism programme,
- "adapt in order to adopt" adapting an ICT programme to meet the local needs of the school,
- the ICT teacher, based on an 'ecology of effort' model.

In Spain, there has been a move from behaviourism to communicativity, using a range of tools, increasingly Web 2.0 based, i.e. concerned with interaction and communication. The role of different standard products and tools was presented – for example syndicating with rss, podcasting and vodcasting, blogging and wikis, Google docs and Wordpress. Andalusian educators prefer to use already created material available on the web. It is "the ecology of effort"- if the material is already there, use it. Teachers, especially the older ones, do not think they have time to indulge in ICT.

There followed discussion associated with issues of closed and open learning environments, freedom of access, ethics and Netiquette which rarely are introduced to teachers and security issues. Free Web sites are developed by teachers for example through Google sites and Weebly.

The group had a short discussion of competences and assessment issues, whether to use competences or 'capacities'. There was debate on whether we should avoid assessing / evaluating based on competences as teachers tend to mainly focus on the test / assessment rather than on the education needs of the pupils / students.

There was a discussion about justifying the use of Internet by pupils in schools, the need for critical ways of considering information.

There is no certification on ICT, provided by CEP to teachers, after training, but during the training teachers develop lesson plans on ICT. The number of these lesson plans matters later, if teachers want to change school.

Available funding must be taken into account, before designing any

infrastructure changes. There is strong debate in Spain (because of economic issues), whether it is better to have a few classes fully equipped, instead of having ICT equipment in every classroom.

The group had two organised school visits:

1. Visit to"Salvador Vinuesa Primary school

The parents association is strong in the school which has 680 students, 3-12 years old, 41 teachers with different subject specialities, including Sport, languages and music. Have special cases department. Extra-curricular activities are done in afternoon. The school is working on a number of different projects including ICT 2.0, bilingual school, Sport School, library and reading. They also have an open school project linking to the community, other initiatives concern equality and health.
The school has a focus on continuous professional development for its staff. The SENICA portal is provided for schools by the Ministry in Andalucia. Management of all schools is through this portal, including admission, evaluation, classes etc. The teachers commented positively in terms of time savings and efficiency over time. There is also a portal linking schools with parents.

The school approach is a positive use of ICT for management and administration. It is an open source development from the region. Linux based system, more secure than Windows, and free. We were introduced to the ICT 2.0 Project, that provided equipment - whiteboards and laptops – to schools. There were many positive aspects, but had some disadvantages, some teachers not yet trained well enough. There is no technical support provided in the Primary school. The economic crisis threatens these positive developments. Schools are still obliged to follow course (paper-based) books in curriculum. ICT is perhaps seen as an add-on to the existing curriculum. The goal is to provide ICT support for all subjects. The school has a fast, reliable Internet service. We saw two classes where pupils demonstrated their work.

2. Secondary school visit IES Alhaken II

A typical, comprehensive, bilingual school, with 950 students and 80 teachers. It is a 12-18 school and has a special education unit. There is no streaming and no vocational courses. In 2005-6 the new school building was wired and many computers and laptops were provided by the Ministry. There are 10 rooms with Smartboards. Students keep the laptops given to them in Primary School by the Ministry of Education as part of Web 2.0 project.
The school has developed a new ICT 2.0 plan in 2010-11. The parents are contributing to the school equipment and offer support. The school developed its ICT in a series of stages, for example many older teachers left and there were ICT training initiatives.

The school uses SENECA (administration) and PASEN (parent access) portals, it includes the adoption of free Linux software rather than Windows – due to costs. They are preparing for an ICT 2.0 generation of teachers. The students are in some cases pushing the teachers and school to change. Student-led activities becoming important, but not demonstrated. The school is developing faster than expected. The parents group is active with

own web site coordinating parent activities. The school uses the HELVIA platform, an e-learning environment, which is Joomla based.

The teacher training centre provides the Colabora training system to support teachers and training materials are available there. Teachers are using Smartboards, multimedia, blogs and wikis. They comment it is hard to keep up to date. Need to develop, for example the use of an electronic language portfolio in the future. This is a big challenge for teachers, struggling to implement. The group saw three lessons with varied use / non-use of ICT in social studies, Mathematics and science.

The discussion on the visits led to issues on traditional teaching styles with modern ICT that was not really integrated at all into the class. We also saw CAL packages where students were undertaken fixed exercises. The main question posed concerned whether teachers are ready to really embrace technology in their classrooms? At the moment mainly used as an information source and demonstration tool. The teacher rather than the learner remains in control of learning.

It appeared that teachers of the Primary and Secondary schools were not communicating with one another concerning the ICT 2.0 school project. Pupils move between schools (Primary-Secondary), but there is no communication between the teachers. Training in ICT can feel threatening for teachers, creating peer group developments with clusters of teachers, connected locally, would be a non-threatening way to develop and improve confidence in using ICT. Local/regional clusters should

We shared and discussed many useful tools and technologies being used in education, for example the following:

- Poll Everywhere – polling with mobile phones http://www.polleverywhere.com
- Sticky board - Wallwisher - http://wallwisher.com/
- Tagexdo - http://www.tagxedo.com/
- Facebook pages for classes
- Nanogong - live feedback - external plugin - recording responses
- Podcasting and videocasting in Moodle
- Symbaloo gallery
- Anobi – a social network sharing books
- e-Books – like didapages
- Glogster – blog (vertical writing)
- dipity – timeline (horizontal) writing
- Visual Understanding Environment – mind mapping
- Freemind – open source mind mapping software
- Calameo – free online magazine publishing http://www.calameo.com/
- Didapages http://www.didapages.com/
- Using classfronter: http://webfronter.com/askimgs/korsgard/
- U-stream (live TV)

The social programme was diverse and very well organised. It included an orientation walk, visit to main tourist attractions (mosque), son et lumiere animation, flamenco recital, equestrian show and so on. We followed a typical Spanish daily routine (without siesta time!).

Successful projects shared were:

Digital-earth.eu (http://www.digital-earth.eu)is a Comenius network that attempts to connect teachers and educators using geographic media and geoinformation in schools and teacher training. The goals include lobbying for the inclusion of Digital Earth tools in education and establishing a network of expert centres around Europe tasked to support education stakeholders in the area. The network has 76 partners from 24 countries.

Smartschool, a digital school environment for all schools and groups of schools within GO!, education of the Flemish Community. The schools use this for their administrative, communication, education and technical applications, student files, grade book, class councils, school reports, school diary, record of absences, learning paths, educational information, exercises and a lot more ...

iGuess (http://www.iguess.eu) was a Comenius multilateral project to develop a Spatial Thinking (GIS training) course in several subjects. He project finished in 2010 and the training courses are still being offered to teachers through the Comenius database (). These courses are supported by the GIS software industry and teachers who complete the course get a one-year free school licence.

Tablet-project - First the schools have to decide their pedagogical goal, and if there is an extra value using tablets or smartphones, they can integrate it

HERODOT Project - a network of department of Geography, to improve the quality of learning and teaching in higher education, Bologna Process (www.herodot.net)
Spatial citizenship is a new Comenius project that plans to develop a teacher training course connecting digital citizenship to location-based, geographic issues.

Describe each of the good practices you learnt about during the visit (both from the hosts and from one another) indicating the following:

title of the project/programme/initiative	country	name of the institution that implements it (website)	contact person who presented to the group	whom the project/ programme/ initiative addresses	what features of the project/programme/initiative make it an example of good practice
Digital-earth.eu Comenius network	UK, Austria	University of Salzburg – http://www.digital-earth.eu	Karl Donert kdonert@yahoo.com	Policy makers, schools, teachers, teacher educators, NGOs, associations	Innovation in new concept of geo-media (location-based media) for use in all subjects. Creates network of Excellence to support teachers
iGuess course: using GIS in several subjects	Belgium, UK	EUROGEO http://www.iguess.eu and http://www.eurogeography.eu/iguess.html	Karl Donert, kdonert@yahoo.com	Secondary school teachers, teacher trainers	Training to use and integrate state-of-the-art ICT (GIS) professional software into several subjects in schools. Run several successful Comenius courses, planning to update for new version if Accompanying Measures application approved. Software company provides free software for schools.
Spatial Citizenship	Austria, UK	http://www.spacit.eu	Karl Donert, kdonert@yahoo.com	Secondary school teachers, teacher trainers	To confirm the Spatial Citizenship concept and create a teacher training course for secondary teachers to examine the role and place of young people in their environment.
Laptop classes	Germany	Johann-Beckmann-Gymnasium http://jbg-schule.de	Andreas Blasche-Hesse	secondary schools	Concept of laptop classes: Pupils use their own laptops for work at school in lessons and study groups and at home, strategies are discussed and problems are modelled to be worked out with the help of computers.
Sprint Study in informatics	Germany	Niedersächsisches Kultusministerium http://www.mk.ni	Andreas Blasche-Hesse	High School Teachers in Lower Saxony	Concept of teacher training in informatics technology called “Sprint Study”, creates opportunity for teachers to get a university

		edersachsen.de			degree equivalent to Bachelor or Master in informatics without interrupting school work.
Apollo 13 - internet challenge	Germany	Leibniz-Universität Hannover http://www.unikik.uni-hannver.de/apollo13.html	Andreas Blasche-Hesse	Pupils in class 9 to class 13	Concept to bring pupils into contact with interesting problems on university level in mathematics, natural sciences and engineering. Cooperation between school advisers and the Leibniz-Universität, Hannover.
Organizing support to headmasters and teachers of implementing ICT in education	Belgium	http://www.schollengroepbrussel.be Gemeenschapsonderwijs http://www.g-o.be	Sofie De Cupere sofiedecupere@gmail.com +32473-95 73 63	headmasters and teachers of primary and secondary schools.	ICT implemented in the classroom, as a way to achieve educational learning goals. Other projects: KidSmart, Tablet-project, interactive whiteboard, ... ICT implemented in school organization: Smartschool: a digital school environment
Formaform	Belgium	Le Forem, Ifapme, Bruxelles formation	Yves Magnan Technical director yves.magnan@forem.be	Trainers and teachers	Building a training offer (initial and continuous) for trainers in order to develop their pedagogical, methodological skills as well as their communication skills to interact efficiently with trainees
Factor-e, l'usine hypermoderne qui révèle de vrais professionnels	Belgium	Le FOREM http://www.leforem.be/factore.html http://www.scoop.it/t/factor-e	Yves Magnan Technical director yves.magnan@forem.be	Unemployed people following vocational training - workers	Factor-e is a "blended training environment" mixing practical case studies on a production chain and ICT resources (simulators, e-learning courses, LMS, virtual tools, …).
Moving training classes	France	Rectorat de Montpellier http://www.ac-montpellier.fr/cas	Jean-Paul Bianchi jean-paul.bianchi@	Primary and secondary teachers in charge of schooling	Implementing the use of interactive boards during the training sessions. Means that the trainers show that new technologies can represent a value in a pedagogical act, in

		nav +33 6 42 90 52 00	ac-montpellier.fr	inmigrantes and gypsies	training sessions.
organize courses for teachers in a city where I work	Poland	Public Secondary School	Izabela Trawinska izabella5@wp.pl	teachers from elementary and secondary schools	sharing experience between teachers; creating strategies and teaching materials; developing cooperation and partnership
European Programmes and projects	Italy	- LSCPI (Italian project at national and European level in collaboration with the Council of Europe)	Cinzia Colaiuda http://www.istruzione.it/web/istruzione/lscpi +39 334 93 66 273	Teachers/pupils at all school levels -stakeholders/head teachers/teachers -pre-primary, primary and lower secondary schools	integrated use of ICT foreign languages to learn other subjects, cooperative learning environments, online teacher training sessions, language curricula in Europe; - plurilingual and intercultural integration of all pupils according to the main policies of the Council of Europe, ICT as a "bridge" among European countries, schools and cultures.
introduction of IC Assisi 3 Italy, activities and ICTs projects	Italy	Istituto Comprensivo Assisi 3, School blog : www.noieilmondo.blogspot.com school website: http://www.istitutocomprensivoassisi3.gov.it personal website: https://sites.google.com/site/simonardikids/	Leonardi Simonetta simonardi@gmail.com	Primary school teachers, Cl@sse 2.0 all pupils of the school and their parents	using IWB, eBook, blog in primary school as tools to create and share knowledge "Innovascoula Primaria" to introduce the interactive white board in teaching, won the European Language Label for the year 2009. Cl@ssroom 2.0- practice that characterizes our 2 Cl@ssroom 2.0 is the use of the eBook texts in addition to the traditional hard copy books, providing the added value of interactivity. School blog www.noieilmondo.blogspot.com It allows a partnership with an American class in Brandon, South Dakota project called "Beyond the classroom" - assisting American and Italian students learn about each other's

					cultures and habits. Winner of the European Language Label 2007.
ICT in Umbria		Presentation: http://www.glogster.com/elisnan/log-on-to-education/g-6ligeh70pg6f6ihb45tira0, Webmix: http://www.symbaloo.com/mix/duepuntozeroumbria1	Elisabetta Nanni	teachers of primary, lower secondary and secondary schools	Classe 2.0: Using Web2.0's tools for a digital citizen: such as Blog, Wikispaces, Anobii Library, Google map, Mindmap, Dipity Timeline, Teachers training to use web2.0 tools Open Source Software: to collaborate and to educate to legal aspects of ICT Wiild Project - Teachers training
WIKAMP a course management system created with the use of Moodle technology	Poland	Technical University of Lodz	Krzysztof Myszkorowski	Students and academic teachers	WIKAMP (a virtual campus) is a platform integrating different service systems which were created for students and academics. Connects 4 types of users: students, academics, administration, secondary schools (teachers and pupils)
LehrplanPLUS	Germany	ISB (Institut für Schulqualität und Bildungsforschung)	Sebastian Eisele	teachers, parents and the general public	syllabuses presented online and added with extra functionaliy: corresponding material, exercises, media content
Activity leading in ICT & ICT teacher-training in a french primary schools district	France	Inspection de l'Éducation Nationale (http://www.ac-nice.fr/ia83/ienhyeres/)	Yann Le Bastard yle-bastard1@ac-nice.fr	Hyères District Teachers - Primary schools teachers.	Initiate projects and challenges using ICT for teachers to involve their students Tool for monitor and validate ICT skills in the french ICT certificate (B2i - Gibii) validation on request platform for kids.
1:1 Computing (1 laptop per	Greece	Doukas School	Mr. Panos Papoutsis	School Students from 4th Grade of	Tablet PC is an Electronic Notebook, General Use Tool, Electronic Book, Multimedia

student)			Project Manager Doukas School S.A. Websites: www.doukas.gr Web: www.schooloftthefuture.gr Email: panos.papoutsis@doukas.gr Tel: +30 210 6186000 (ext. 0556)	Primary School to 3rd Grade of Secondary School	Material Source, Assessment Tool, Offline Interactive Educational Applications created by Doukas School teachers source. Desktop for Student (DfS) environment enables all students/parents to use the same user-friendly, non-changeable, easy to use, adjusted environment. It includes 52 GB of e-books, educational multimedia applications, interactive applications created by Doukas School teachers. Parents (more than 1200 so far are trained at the beginning of each year on the use of Tablet PC (6h training), so they can also provide support to their children. Working Groups operate on a parallel basis within school (e.g. School of the Future WG, Quality Assurance WG, Tablet PC Team, Communications Team). This is necessary for having better results, more effective work. 360 degrees Assessment Approach (educators and educative process are assessed regularly by students, teachers, parents & school administration)
Using ICT in Primary Mathematics Teacher Training	TURKEY	Necmettin Erbakan University, Education Faculty, Department of Primary Mathematics	Dr. Mustafa Dogan mudogan@selcuk.edu.tr mdogan69@hotmail.com	Necmettin Erbakan University Education Faculty, Department of Primary Mathematics Education	GeoGebra and Cabri 2D and 3D) for courses. (www.ide.konya.edu.tr/ossi). Other open platforms that anybody can upload, download and share their works and prepared activities in mathematics. (www.geocebir.org and www.dinamikgeometri.com).

		Education www.konya.edu.tr www.akef.konya.edu.tr		Meram/ Konya Turkey	
AcTour: Active Tourism for Sustainable Development	Bulgaria	http://www.activetourism.org/	Todor Totev	- young unemployed; - young and senior entrepreneurs in rural areas	e-Newsletters on-line Training Curriculum on-line Training Guide
AKTOS: Transfer dissemination of good practice models for professional training in the rural areas	Bulgaria	http://www.aktos.org/	Todor Totev	- Rural women. - Non-qualified young people. -Marginal groups. - Disabled people. - Social agents - Educational authorities.	Interactive Good Practices Guide
HERODOT Project	UK	EUROGEO www.eurogeography.eu	Karl Donert, kdonert@yahoo.com	Higher education geographers, teacher trainers in Geography	Improvig the quality of learning and teaching, set up EUROGEO associaiton, two online journals and professional body operating at European level.

** You can describe as many good practices as you find necessary. You can add rows to the table.*

2. The study visits programme aims to promote and support policy development and cooperation in lifelong learning. That is why it is important to know what you learnt about such policies and their implementation during your visit. You are invited to describe your findings concerning the following:

2.1 Approaches taken by participating countries (both host and participants') regarding the theme of the visit. Are there any similar approaches/measures in participating countries? What aspects are similar and why? What aspects are different and why?

A range of common tools and technologies are being used – and adapted locally, for example the administration of schools. The testing and evaluation systems of students were demonstrated. Course learning environments were similar in most countries for example Moodle was widely being used. Web 2.0 tools are available and many programmes are focusing on integrating them into learning and teaching.

Some differences in tools and materials were demonstrated by participants and explained, some of the main ones are described in section 1. Some personal commentaries of participants are provided here

> *"As a headmaster from Norway it is interesting to listen to delegates from different parts of Europe and how they work with ICT. The debate in many countries is: Is ICT a good tool for teaching the students the best way in the classroom? The teachers have in most of the countries different views of this, and for me as headmaster it is interesting to establish that teachers in Norway and for example France are having the same discussions about using ICT.*
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> *My use of ICT is more in terms of management and the way I follow up the teachers work through assessment for learning and the student results from national tests. In my school the teachers and students are well equipped with ICT, such as smartboards, projectors, lap tops. In my school one teacher is working 60% to follow up equipments, the learning platform classfronter and help teachers in using ICT."* Nikolai Aas (Norway)
>
> *"Every school should have its own concept how to use media in education considering the (competence orientated) curricula for all subjects. ICT is only one, but a today very important aspect of the media concept ….. (it) must include traditional media and must be open for further technological development. It is the task of a responsibly acting school, i.e. responsibly acting teachers, to develop and advance the media concept and to keep it open for technological development. …. Teacher training has to focus on electronic communication."* Andreas Blasche-Hesse (Germany)

"The study visit allowed us to discover how ICT is used in the different countries for teaching and training. We can say that most of the countries represented feel actively concerned by integrating ICT tools in their common teaching/training practices. It goes from using laptops in classrooms to connecting on LMS on the Internet but also using tools such as virtual simulators, e-learning applications, serious games, … some countries, for instance Spain, do give students a laptop that they can use at school and at home. One of the problem is the maintenance of the IT device. Purchase is financed by the state but in case of problem, the school (mainly the teachers) or the user must find the solution him/her-self." Yves Magnan (Belgium)

"ICT plays an important role among the actions undertaken by the Italian Ministry of Education in order to improve the national education system….. findings from a recent iTEC survey shows that "teachers who report confidence and competence at using digital technologies may not be as confident or skilled at using new technologies for educational purposes, or to promote learning". Cinzia Colaiuda (Italy)

2.2 Challenges faced by participating countries (including host) in their efforts to implement policies related to the theme of the visit. What are the challenges? Are they common challenges? If so, why? If not, why not?

Many issues were touched upon during the study visit. Some of these are shared below:

"Experiences developed and shared during the study visit point out he following questions and challenges regarding the use of ICT:
- a basic concern is equipment/infrastructure: to finance it, allow maximum access to tools, to guarantee maintenance of devices. …
- sharing information and pedagogical resources to allow actors (teachers, trainers, students, trainees) to access relevant resources, information and content that is correct and free to use.
- promoting collaborative work is a common concern. The question remains how to use it and what for?
- integrating ICT tools in common teaching practices remain a serious challenge. How can we help them acquire basic responsible ICT skills …. and to feel secure … as students/trainees are in advance in their uses of the new technologies and devices.
- assessing training/teaching performances on the use of ICT. How to measure training efficiency of ICT use? Is there any economic model showing ICT can reduce costs without impacting quality of teaching/training?
- use of ICT tools and specific solutions (software, simulators, e-courses) requires to re-think training/teaching paths, sequences, lessons. Need to adapt pedagogical and methodological approaches in order to integrate into teaching/training and learning practices. Basic questions such as : Why should we use that tool ? When should we use it? What for? What are the training objectives? What are the expected results as far as

knowledge and skills of students and trainees are concerned? Are these tools inclusive? Is there risk to lose learners?" Yves Magnan, Belgium

Connecting policy for the future with those who practise. It is very hard to talk to policy makers about the real barriers to ICT use and needs for education of young people –at European, national and regional levels

"……despite trying to engage with policy makers for the past year via digital-earth.eu project and the 'so-called' requirement to engage with stakeholders, European policy development does not appear to do this and as a result it does not focus on real needs (for industry and society) and is not up-to-date with the future needs of ICT in schools or the employability of young people. Thus I believe we (ICT experts) need to have some better channels so we can advise politicians - for example in the use of geospatial media and geoinformation, which is so far ignored in the Digital Agenda and 'New Skills for New Jobs'. Education and Training 2020 needs more grass roots involvement.' Karl Donert (UK)

There seem to be few M-learning developments: this is despite the almost ubiquitous availability of mobiles and 3G-enabled tablets. The development use of apps for education needs to be examined and researched – for example Citizen Scientist initiatives.

There was a common issue of keeping up to date. However, only a few participants were using Twitter and / or LinkedIn. Need to have social networking courses/guidance – including for experts / inspectors / advisors / Commissioners.

How to transfer innovation was an important issue: showcase or experimental schools were discussed, as well as projects with the goal to network lots of teachers and trainers in 'classroom of the future' approaches. Do we also need to build an expert network to share 'good and bad' state-of-the-art activities. How do expert teachers and trainers continue to interact to do this?

Linking with industry, employment and entrepreneurship: a theme in several presentations demonstrating the importance of maintaining specialised ICT courses, and programmes to meet the needs of industry, but also connecting ICT and entrepreneurial activities, for example problem solving.

"ICT plans in institutions seem to concentrated on hardware and software issues than on how the technology can enhance teaching and learning." Niamh Amstrong (Ireland)

"One challenge, when teaching adults, is the place of VET centers in this process. The main problem at the moment in Bulgaria in adult education is the motivation of people, especially the unemployed." Todor Totev (Bulgaria)

"Three major challenges can be identified:

At a classroom level there is the need to develop teaching and learning from an input oriented process to an outcome-oriented process. On a systematic level there is the question how a new culture of outcome orientation can be built and how teachers can be encouraged to develop their own thinking, planning and acting in the classroom. Apart from that there is a need to react on a world that continues to turn "faster".
…… On limits and dangers: It also become obvious that in many projects the focus of attention is on buying, installing and running the equipment. What often lacks are other aspects of media competence, both with teachers and students: Teachers often do "old things in new ways" rather than doing "new things in new ways", i.e. they don't explore the full potential of what is possible with new media. Their lesson plans sometimes lack solid didactics.
Students on the other hand mainly learn what they can do with ICT. Other aspects of media competence such as reflecting on the limits and dangers of media use are often not very much talked about." Sebastian Eisele (Germany)

"….. we have to consider:
1. The main concern seems to be to provide equipment (hardware, software and internet connection, this mostly depends on money, but even if you provide it, that does not mean they are going to be used efficiently and effectively in education.
2. pedagogical concerns have to be taken as the main concern
3. Accessing resources is an important challenge …. but the information provided must be relevant, correct and in most cases free to use.
4. Integrating ICT tools in teaching and learning still remains a challenge for most of the teachers and students (individually).
5. Teacher training (in service teacher training is another issue) that has to be taken into consideration." Dr. Mustafa Dogan (Turkey)

2.3 NAME AND DESCRIBE EFFECTIVE AND INNOVATIVE SOLUTIONS YOU HAVE IDENTIFIED THAT PARTICIPATING COUNTRIES (BOTH HOST AND PARTICIPANTS) APPLY TO ADDRESS THE CHALLENGES MENTIONED IN QUESTION 2.2. PLEASE MENTION SPECIFIC COUNTRY EXAMPLES.

a) "School of the future" discussion

We discussed the role of these types of initiative in transferring innovation. The schools and colleges require modern infrastructure and design, but the mindset of the teachers and trainers also needs to be in tune with the philosophy, mission and goals of the school. There was extended discussion on the importance of networking teachers and trainers, so they can share and learn from one another. This activity is vital for the regeneration of our schools, but time is not allocated to it. This needs to change. The solution is not innovative – space and time for professional development needs to be made in the work of teachers and educators.

" (we should be) …. recording, evaluating and certifying the 8 Key Competences set by the European Commission. …. With the support of knowledge, skills and values comprising Digital Competence should analytically described and recorded. … More schools should have this goal." Panos Papoutsis (Greece)

"An official evaluation system of digital competences should be introduced in schools in all European countries, in order to find a standard evaluation system in the EU." Cinzia Colaiuda (Italy)

b) ICT Teacher / trainer as a professional

The teaching profession needs to be more respected in society. Programmes need to be developed not only in leadership, but in teaching as a profession. That is to say not just as civil servants but as professionals who maintain their profession. The idea of e-portfolios for teacher and trainer and inspector development should be explored. Existing ICT solutions can easily be used – the challenge is to share what is being in this area in different countries and to establish a European professional profile for teachers and trainers. This should be based from benchmarks similar to those developed under academic (Thematic Networks like Engineering) and professional (approaches to language learning) Bologna programmes. Offering European recognition for teachers and trainers who demonstrate outstanding professional approaches needs to be developed – for example – European teacher trainer of the year. Involving European teacher and professional associations in this would be a good idea. It would add a high profile moment for European teaching and training.

"…. in Bavaria the following has been discussed:
1. Currently there is a new generation of syllabuses is being planned. The project is called "LehrplanPLUS" and the syllabuses for the respective types of school are primarily presented on the Internet. ….
2. Teacher training in Bavaria is traditionally offered in schools or in a training centre. …
3. Individual schools are encouraged to develop their own media plan." Sebastian Eisele (Germany)

c) The importance of digital citizenship, not literacy!

This theme emerged as the importance to develop responsible 'personal' use of ICT – for teachers, trainers, pupils and students and parents. This area needs special consideration in policy terms and funding should be provided to examine this in the future. It embraces literacy, security and legality.

"We should try to encourage students to think creatively. They should be able not only to solve different tasks, but also to formulate new ones. …. problems should simulate real situations and enable students to make different decisions … We need to set students problems without unique solutions." Krzysztof Myszkorowski (Poland)

d) **Uses of geo-media and geoinformation integrated in schools**.
Geo-media embraces innovative modern technologies that are used widely in the world of work and also by citizens with realising it (eg through Facebook, Twtter, Flikr etc.). It is used for problem solving, decision-making and the analysis of complex situations. 80% of all information produced has a geographic perspective. Courses are needed for teachers and trainers to go beyond traditional ICT as many (nearly all) pupils and students already can use by the time they go to secondary school. Thus more practical examples of real world ICT need to be integrated into schooling.

"An education for Digital Earth is essential to encourage young people to understand our world and respect it. The project www.digital-earth.eu was presented. It operates in bottom-up and top-down activities. It aims to create a (grassroots) network of Centres of Excellence across Europe to support teachers. The project is also active lobbying European Commissioners, in partnership with all major geospatial industry partners and active NGOs to do this." Karl Donert (UK)

2.4 Assessment of the transferability of policies and practices. Could any examples of good practice presented in this report be applied and transferred to other countries? If so, why? If not, why not?

Most of the issues raised above and solutions discussed are applicable across all European countries – there are few borders when ICT in education is concerned. The dependence on national education policy (i.e. subsidiarity) needs to be transcended in the case of several key aspects.

We recommend the Commission and respective Commissions should address the following:

1. Involving experts, such as this group, in stakeholder events and meetings
2. Focusing on communications – i.e. Web 2.0 and not ICT in education
3. Addressing the need for digital/spatial citizenship (an active concept) rather than digital literacy, which is passive activity
4. Establish a priority for teaching as a profession, rather than just examining innovation and millions of initiatives (i.e. get to the heart of the issue which limits innovation and change - with teacher training and teacher education)
5. Develop academic pedagogical research on personalised learning

"Personalization can be enabled by ICT. In order to improve the organization of the teaching process we should try to apply personalization of education according to learning styles.
There is a model containing 8 mutually exclusive properties: active or reflexive, sensual or intuitive, visual or verbal, sequential or global. The levels of these are determined basing on special questionnaires. Groups of students can be established based on these properties by means of data mining algorithms (clustering methods, cluster analysis). Teaching paths

as well as layouts are adjusted to groups of students according to their learning styles and usability preferences. Finding students with similar preferences enables us to adjust e-learning systems according to their needs. Building models for each group can help in suggesting teaching paths and materials according to member requirements." Krzysztof Myszkorowski (Poland)

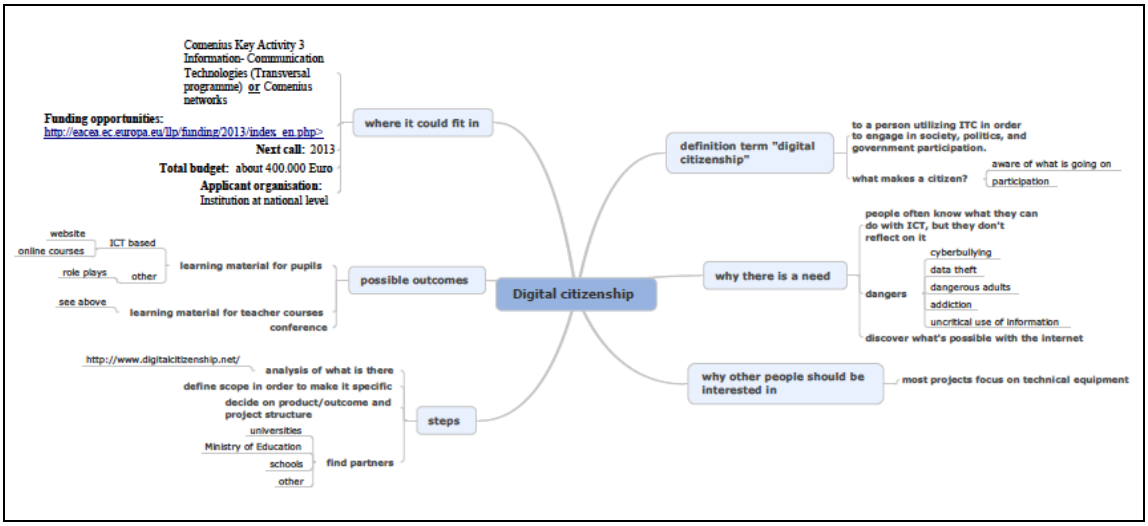
3. Creating networks of experts, building partnerships for future projects is another important objective of the study visit programme.

The study group identified and discussed the development of 6 possible projects for future collaboration.

1. A network of teacher trainers, educators
2. Open source, open content project
3. Digital citizenship
4. Future schools network
5. Training for leadership in ICT
6. A school bilateral partnership project

Discussion on these projects:

1. **Teacher training network on ICT in education (urgently needed)**
   Scope: Integration and use of ICT in daily training practices as pedagogical/methodological added value in order to enhance training and learning efficiency of both teachers/trainers and learners.
   Step 1: sharing experiences, best practices, difficulties encountered. Self-reflection on the job of teacher/trainer between peers
   Step 2: Develop identified initiative in terms of pedagogical engineering.
   Step 3: Train the teachers/trainers
   Step 4: Evaluate results
2. **Open source, open content**
   The aim is to provide an information sharing network for educators on open source tools and resources for primary, secondary and third level teachers and trainers. We will look at what open source resources are used at the moment. Then analyze best practice in the tools and resources shared and encourage a community of sharing resources and best practices. Design and develop a community cloud for educators, an online community platform to provide educators to share best practice according to individualisation and class activities.
3. **Digital citizenship**



4. **Future schools network**
   We wish to share Best Practices from partner countries innovative schools ("future schools") on ICT implementation in primary school classes. The plan is apply for a preliminary visit in Norway in Autumn 2012.
5. **Training for leadership in ICT**
   A teacher training development exploring issues of educational and technical advice, organizational skills, personal skills, vision, leadership skills, job description, leaders have to have education skills (technical skills are less important, we have to work on the behaviour, organizing, launch project, …)
6. **School partnership** – school partnership projects are being planned from school teachers/head teachers

What partnerships?
A number of partnerships evolved which the participants intend to take forward. Communicatiuon is enabled/enhanced through:

- The hashtag #logoneducationcordoba on Twitter was used to share news and items.
- An open access Moodle course was established for the group (*by Niamh Armstrong, Ireland)* so that materials, research, publications and project ideas can be shared. **Log on 2 Education.** http://www.vle.mic.ul.ie
- Email groups were started for the 6 possible projects above

Participants also suggested the following:

"we need to provide future teachers, trainers and lecturers at all levels with the skills to effectively use ICT in teaching and foster a culture of collaboration using ICT in their work. Educators need to liaise with other schools, primary, secondary, third level, industry share good practice. Our education systems need to incorporate mobile technology into our student's teaching and learning environment." Niamh Amstrong (Ireland)

"…. underline the following key words in teaching and leaning with ICT:
-Consciousness: all teachers and pupils are training to become conscious using ICT. …

-Sharing: all teachers should collaborate and share their works to evaluate not the final product but learning processes
-Digital Citizenship: teachers must educate children to acquire European key competences to lifelong learning" Elisabetta Nanni (Italy)

"… we are still in the process of identifying new directions as we deal with a situation that is not uniform. The data on the diffusion of technologies for teaching show us national projects and major investment is "patchy". …. We need centers of excellence to help innovation in schools. ... We need national ICT policy and a common national assessment system to provide indicators." Simonetta Leonardi (Italy)

TO SUM UP

4. What is the most interesting/useful information that the group believes should be communicated to others? To whom, do you think, this information will be of most interest?

Addressed to policy makers

1. Create / make transparent links to policy makers – open communication channels between study visit experts and the Commission.
2. Ensure innovation is not clouded by technology matters
3. Focus on digital citizenship not literacy, capabilities not competences
4. Consider how to scale up successful pilot projects
5. Offer sustainability options to successful projects

> *"……. we are all aware of the arrival and the power of ICT in teaching and training but we may not underestimate the way we integrate these tools and systems in the teaching/training and learning practices of both teachers/trainers and learners. It's mainly a matter of change that requires "change management" through training the trainers and convinced them that these changes help them in their daily practises but above all can improve learning curves of pupils, students and trainees."* Yves Magnan, Belgium

> *"… All participants reported the commitment to dealing with new digital competences, evaluation systems and curricula. … there is a heterogeneous situation in Europe, the added value of ICT should not remain a privilege of a few schools, few teachers and few children and that the plan of innovation becomes the prerogative of all European schools."* Simonetta Leonardi (Italy)

II Organisation of the visit

This part of the report will not be published but it will be made available to the organiser and will be used by national agencies and Cedefop to monitor and improve implementation of the study visits programme.

We recognise the value of ongoing feedback as a way of ensuring that the programme is at all times a responsive and dynamic initiative, meeting the needs of its various participants and target audiences. In this section you are invited to give us your feedback on several factors that, in our opinion, contribute to an effective visit.

1. Discuss within the group and check if you agree or disagree with the following statements. Please mark only one box (☑) that expresses most closely the opinion of the entire group. Please use Question 2 of this section to elaborate on your responses, if needed.

		All agree	Most agree	Most disagree	All disagree	Not applicable
e.g.	The size of the group was good.	x	☐	☐	☐	☐
1.1.	The programme of the visit followed the description in the catalogue.	x	☐	☐	☐	☐
1.2.	There was a balance between theoretical and practical sessions.	x	☐	☐	☐	☐
1.3.	Presentations and field visits were linked in a coherent and complementary manner.	☐	x	☐	☐	☐
1.4.	The topic was presented from the perspectives of the following actors of the education and training system in the host country:					
1.4.1.	government and policy-makers	☐	☐	☐	☐	x
1.4.2.	social partners	☐	☐	☐	☐	x
1.4.3.	heads of institutions	☐	x	☐	☐	☐
1.4.4.	teachers and trainers	x	☐	☐	☐	☐
1.4.5.	students/trainees	☐	☐	☐	☐	x

		All agree	Most agree	Most disagree	All disagree	Not applicable
1.4.6.	users of services	☐	☐	☐	☐	x
1.5.	There was enough time allocated to participants' presentations.	☐	x	☐	☐	☐
1.6.	The background documentation on the theme provided before the visit helped to prepare for the visit.	x	☐	☐	☐	☐
1.7.	Most of the group received a programme well in advance.	x	☐	☐	☐	☐
1.8.	The information provided before the visit about transportation and accommodation was useful.	x	☐	☐	☐	☐
1.9.	The organiser accompanied the group during the entire programme.	☐	x	☐	☐	☐
1.10.	The size of the group was appropriate.	x	☐	☐	☐	☐
1.11.	The group comprised a good mixture of participants with diverse professional backgrounds.	x	☐	☐	☐	☐
1.12.	There were enough opportunities for interaction with representatives of the host organisations.	☐	x	☐	☐	☐
1.13.	There was enough time allocated for discussion within the group.	x	☐	☐	☐	☐
1.14.	The Cedefop study visits website	☐	x	☐	☐	☐

		All agree	Most agree	Most disagree	All disagree	Not applicable
	provided information that helped to prepare for the visit.					

2. If you have any comments on the items 1.1. - 1.14 above, please write them in the box below.

III Summary

1. Having summarised all your reflections and impressions, please indicate how satisfied you are with your participation in the study visit. Indicate the number of participants for each category, e.g.

Very satisfied	16	Satisfied	2	Somewhat satisfied	0	Not satisfied	0	Neither satisfied nor dissatisfied	0

2. What elements and aspects of the study visits do you think could be changed or improved?

- To be able to attend such meetings more frequently. Once every four years is not often enough especially if we have multiple responsibilities.
- Facilitate interaction between these expert groups and policy makers e.g. through stakeholder events.
- Continue to reduce bureaucracy.

3. If there is anything else you would like to write about that is not included in the above questions, please feel free to write below or attach a separate sheet.

The length and detail of this report indicates the engagement of the group with very significant and critical issues in the use of ICT in education.

THANK YOU!

Please submit the report to Cedefop (studyvisits@cedefop.europa.eu) **within one month** of the visit.