
Arion Study Visit

06004,05 / SVK / ICT in primary and Secondary Education, Identifying and sharing good practice

Information and communication technologies

Bratislava Slovakia

December 2006



Preface

Facts

Theme:	4, Information and communication technologies
Title:	ICT in primary and secondary education, identifying and sharing good practice
Visit Number:	06004, 05
Venue:	Bratislava, Slovak Republic
Working Language:	English
Hosting organisation:	Viera Blahova Ministry of Education, Slovak Republic Stromova 1 SVK - Bratislava
Place:	Bratislava, Slovakia
Date:	December 4 – December 8, 2006
Group Reporter:	Malte von Sehested

Web log

During the visit a web log was setup and used for reporting from the different lectures and visits. Please visit our web log to read more about the study: www.maltematik.dk/arion.

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Aims and objectives

The focus of the ICT-TIPD study visit is the use of ICT in Primary and Secondary Education. The focus will be studied through the following two themes: informatics as a subject, ICT in subjects and projects in different schools by level (primary, lower and upper secondary, general and vocational) and by founder (state, church, private).

Key questions for the study visit are:

- What type of changes have occurred due to the use of ICT in the field of education?
- How is ICT in education introduced in Slovakia and in EU?
- The future of using digital equipment in education. What works locally/nationally/European wide?

Participants

Earleen Ellen Elliott, Turk and Caicos Islands

Eric Sanchez, France

Ingun Raastad, Norway

Lisa Holden Christensen, Denmark

Malgorzetta Chmurska, Poland

Malte von Sehested, Denmark

Peter Jaklin, Germany

Philippe Archinard, France

Sue Madgwick, United Kingdom

Timucin Beran, Turkey

Wendy Fairhurst, United Kingdom

Agenda

The final agenda for the Arion Study Visit. Minor changes were made to the agenda during the week. These changes are written into the agenda below.

Day 1 - Sunday, December 3, 2006

Day of arrival.

Free day, sightseeing in the City

Day 2 - Monday, December 4, 2006

Morning programme, please be prepared to show presentations or CD/DVD's with some examples of best practices in your country.

09.00 – 09.30 Introduction to the Programme and practical arrangements

09.30 – 10.00 Discussion and reflection: ICT - content

10.15 – 10.45 Discussion and reflection: ICT - staff

11.00 – 11.45 Discussion and reflection: ICT - infrastructure

12.00 – 13.00 Lunch break

Afternoon programme, we will present, please be prepared to give questions. It would be nice to have some in advance to prepare materials for you.

13.00 – 13.45 Education System and Information Society Programme in the Slovak Republic

14.00 – 14.45 ICT in Education – yesterday, today, tomorrow

15.00 – (17.30) Curriculum, pedagogical practices using ICT

DAY 3 - Tuesday, December 5, 2006

Visits to schools – three Primary schools (Primary and lower secondary) your group will be divided into three groups - each group will go to one school)

09.00 – 12.00 visit

12.00 – 13.00 Lunch at school

13.00 – 14.30 visit

14.30 – 15.00 Discussion, feedback of the day

19.30 Dinner in the Wine Cellar (hosted by The Ministry of Education)

DAY 4 - Wednesday, December 6, 2006

Visits to schools – three Secondary schools (Lower and Upper Secondary) your group will be divided into three groups - each group will go to one school)

09.00 – 12.00 visit

12.00 – 13.00 Lunch at school

13.00 – 14.30 visit

14.30 – 15.00 Discussion, feedback of the day

DAY 5 - Thursday, December 7, 2006

09.00 – 09.45 ICT activities

10.00 – 10.45 programming activities

11.00 – 11.45 programming contests

12.00 – 13.00 Lunch

13.00 – 14.30 visit to Visit of the School computing centre /Teacher training centre

14.30 – 14.45 Discussion, feedback of the day

15.00 – 17.00 Sightseeing in the old town of Bratislava with local tourist guide (optional)

DAY 6 - Friday, December 8, 2006

09.00 – 11.45 Evaluation

Suggested topics for evaluation:

- Relevance of the theme and focus of the study visit
- Synergies with ongoing initiatives in schools
- Information
- Perspectives for future
- Reporting
- Any other business

12.00 – 13.00 Lunch

13.00 – 15.30 Visit to the Publisher SPN

Day 7 - Saturday, December 9, 2006

Day of departure.

Theme of visit

The themes of the visit were both informatics as a subject and ICT in subjects and projects. Most of the lectures and visits were about informatics, and this part of the theme used most of the time. In Slovakia the focus is the subject of informatics. The pupils are taught programming and understanding of algorithms. Also ICT was used as a tool for presentations and word processing in other subjects.

The talk in the group revolved more around the use of ICT as a tool and an instrument of change, changing the nature of education, teaching and learning.

European dimension / comparison

Amongst the group we had different tools but a common purpose in our reason for using ICT and common difficulties, such as resistance to change.

One of the most important things is to have a vision of what you want to achieve in schools. With a development plan (European, nationally, regional and in every school) the aims are clearer for the teachers and management of schools. You understand how your actions fit into the plan.

Identify best practice

We looked at different use of ICT in our countries.

How to use ICT to develop learners and methods

Using ICT to research the effectiveness of different methodologies.

Using multimedia materials to demonstrate and evaluate and analyze lessons. This will be used in coaching by colleagues.

ICT has the potential to change the role of the teacher.

ICT as a catalyst for change in methods of teaching and learning. Teachers not only teaching facts but acting as a guide and facilitator of knowledge. Pupils becoming more active learners. The pupils explore, produce, publish and distribute information as part of their learning process, which makes them adaptable to change. There are some examples of courses being constructed by the pupils themselves. Enquiry based learning.

Learning Platforms

We looked at different learning platforms. Most platforms are mainly for communication between teachers and pupils, but we also saw examples of platforms with built in tools for the pupils' work. Also we saw examples of how a learning platform can be used in communication between schools and homes.

Learning platforms make it possible to access learning everywhere – mobile learning.

Learning platforms can also be a place where pupils share their results and findings with each other. The pupils themselves can publish materials made by them and in their own words and schools or classes can collaborate on the same themes.

Software as a tool for learning and teaching

In most of the examples we saw on ICT, the aim of the teaching was learning to use ICT. We also saw some examples of how ICT was used as a tool for presentations and word processing.

In the presentations and talks in the group we have heard about the use of ICT as a facilitator for change and also how it makes it possible to do things not possible without ICT thus making learning of certain subjects different. For example: we use ICT in word processing to learn and experiment with grammar. Because it is easier to experiment pupils tend to take risks and learn from their mistakes.

We saw a film from France where pupils were recording their observations during dissection of fish and insects. These recordings were digitized directly into the computer and they could analyze and share their findings on the computer.

ICT can make learning more active and thus helping pupils with different learning styles such as kinaesthetic learning

Using ICT involves less talk and chalk!

How to use ICT to share good practice

An obvious example is the web log we used as a tool for reporting our study visit.

Sharing of materials

We have seen some examples of websites used in competitions or projects where materials can be downloaded. In Denmark the use of a nationwide First Class platform makes it possible to share thoughts and materials. We talked about the fact that most teachers produce a lot of materials and like to collect vast amounts of materials but are not quite as keen with sharing materials unless asked.

In Germany we saw an example of a platform for sharing media content.

One thing is the possibility to download material, but it is important that materials can also be uploaded so that the teachers can bring in their own materials to the intranet of the school.

Teacher Training

Teacher training can be an important tool in achieving the aims of ICT use in schools. Teacher training is not focussed on learning how the computer works but how the computer changes the possibilities in the classroom – methodology, pedagogy and didactics.

Best examples of teacher training take place in a context where they can apply their skills immediately.

Sample materials on how to embed ICT into all subjects and all age groups as seen in England and some continental parts of Europe are good inspiration for teachers and their use of such concrete materials will help them to produce their own materials. The materials are more powerful if they are shown to teachers in their own classrooms.

Assessments of teachers is a way to ensure knowledge and skills in ICT use are sufficient.

Continuation of contact

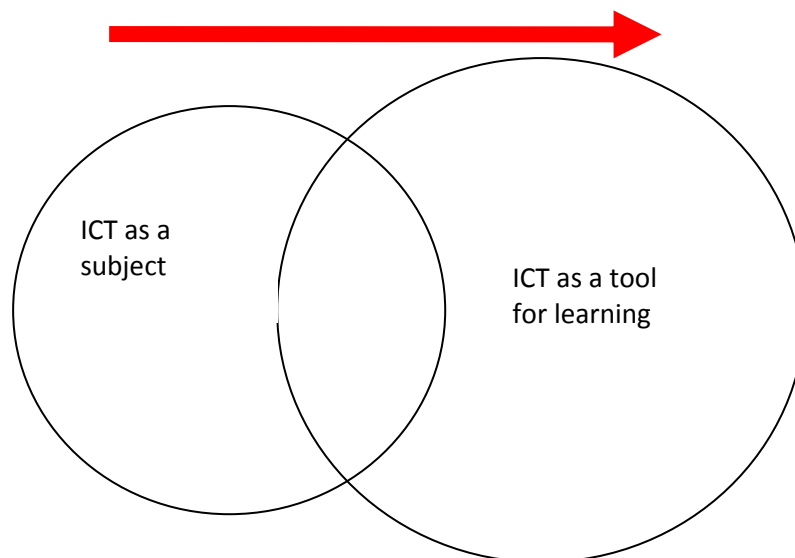
We have agreed on continued use of the web log as a platform for sharing of information about ICT in education.

Also all our contact details and links to our institutions are given in the web log.

Conclusion

Although we have talked a lot about ICT, the goal is not ICT but it is:

education for the future and adapting to the complexity of the changing world.



Special thanks

We would like to thank the different schools and institutions that invited us in and to the Slovak ministry of education.

ZŠ Sokolíkova 2

ZŠ Pri Kríži 11

ZŠ Košická, Spojená škola Novohradská

1. súkromné gymnázium Bajkalská 20

Gymnázium Matky Alexie Jesenskej 4/A