

Newsletter 1

February 2006

The Hands-on, Brains-on project.



Science centres and museums have been pioneering with hands-on learning and teaching in Europe during the last decades.

The multidisciplinary contents of modern science centre exhibitions are large and unique forming a reliable learning source. Now, a network of eight institutions between science centres and museums is developing their educational programmes for primary schools in co-operation with school authorities, teacher education institutes, and schools, to create a European network linking formal and informal learning with all-European organisations Ecsite and EUN and ESHA. The main target group is primary school teachers. The goal is to use modern, interactive science exhibitions combining the best practices of informal learning and formal education. The objective is to identify key elements within the curricula in different countries in order to teach pupils about the scientific research process using learning to make observations in science centres and teaching to make observations at

school. The science centres will use the pedagogical expertise of the teachers and teacher training institutes as well as the curriculum development input by the educational authorities. In addition, the latest research results related to the effect of informal learning sources to the career choices of young people – especially girls – are utilised and further developed in this project. The aim of hands-on-based methods is not only to produce more scientists and technologists; it is also to produce a new generation of citizens who are scientifically and technologically literate. Using ICT strategies is the main element for the development of European co-operation and for the dissemination of the results. The project is also directly linked to several other European projects (PENCIL, CONNECT, CELEBRATE) with the theme "Science is Primary" giving added value and synergy for formal and informal hands-on science learning clearly supporting the goals of the Lisbon Agenda.

A network of 8 science centers, three European organisations (Ecsite, EUN and ESHA) and two Universities (Sweden and Holland) is developing educational programmes for primary schools in formal and informal learning.

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Participants

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Sub-Contracting

European:

ESHA (European School Headmasters' Association)

Denmark:

University of Southern Denmark, Centre for Media Studies

Gentofte Community, The School Development Project

Estonia:

Tallinn Pedagogical University, Külli Rauk

Netherlands:

University of Amsterdam, AMSTEL-Insituut

University of Amsterdam, Faculty of the Education

Belgium:

Flanders Technology International Foundation

Greece:

Pedagogical Institute of the Greek Ministry of Education

Greek Physical Society / Network of Greek Schools

Hungary:

Ministry of Education and Informatics

Finland:

University of Helsinki, Department of Education

University of Helsinki, Department of Teacher education

City of Helsinki, Depart. of Schools

City of Vantaa, Department of Education

Italy:

Ufficio Regionale Scolastico per la Lombardia (regional research and school administration organisation)

Contact person: Marisa Valagussa



The first meeting was

Fri 13 th Jan 2006 in Heureka, Vantaa, Finland

Welcome & introduction

Lectures:

What do we know about learning results in Europe?

Prof. Patrik Scheinin, University of Helsinki, Finland

Teachers and science education: science centres as a tool for the curriculum

Mr. Aulis Pitkälä, Deputy Mayor, City of Vantaa, Finland

How to utilise informal learning settings in teacher education?

Dr. Jarkko Lampiselkä and Lecturer Liisa Suomela, University of Helsinki, Finland

Dissemination of the new educational ideas in Europe

Mr. Jorma Lempinen, General Secr. of ESHA – European School Headmasters Association

Meeting

Consortium structure, Funding principles, Time-tables, milestones, schedules

Prof. Hannu Salmi, Coordinator, Heureka



Sat 14th Jan 2006

Content seminar

each partner's project presented & discussed

- Heureka, Vantaa, Finland (Kati Tyystjärvi)
- Technopolis, Mechelen, Belgium (Steven Vols)
- Ellinogermaniki Agogi, Athens, Greece (Sofoklis Sotiriou)
- Energiakeskus, Tallinn, Estonia (Kristel Mõistus)
- NEMO, Amsterdam, Netherlands (Roos Franse)
- NMST, Milan, Italy (Maria Xanthoudaki)
- Experimentarium, Copenhagen, Denmark (Poul Kattler)
- Palace of Miracles, Budapest, Hungary (Lazlo Egyed)

Conclusions

Pedagogy, curriculum, and survey

Dr. Ernst von Groningen; University of Dalarna, Sweden

Dissemination of the results

Dr. Catherine France; Director of ECSITE

Validation and Sustainability of the results

Dr. Alexa Joyce, European Schoolnet - EUN

Role of the associated partners

Further actions planning