



Socrates



# External Evaluation report

Comenius 2.1. Project  
No. 128989-CP-1-2006-1-RO-COMENIUS-C21

**VccSse - Virtual Community**  
**Collaborating Space for Science Education**

**External Evaluators:**

University College of Education  
DMRG – Digital Media Research Group  
Mag. Knierzinger Anton, Prof. (PH)  
Wieser Claudia, BEd  
Salesianumweg 3  
4020 Linz  
Austria  
Tel.: +43 (0)732 / 77 26 66 – 4375  
Fax.: +43 (0)732 / 79 73 06  
Email: a.knierzinger@ph-linz.at

Linz, 30. September 2009



Socrates



## **Executive summary**

---

The goal of this project was to improve science education by providing schools of the participating countries with low cost educational virtual experiments which can be adapted by teachers according to the curriculum in their countries.

The partners have fulfilled all requirements which they promised in the contract to the European Commission.

Under the efficient coordination of the contractor a living and fruitful partnership has been developed which allows a perspective of future cooperation among the partners.

The list of outcomes of this project is outstanding. There are 55 virtual experiments, over 200 learning objects and documented experiments in science teacher training.

We especially point at the long list of dissemination activities which document the sustainability of the project.



Socrates



## Introduction

---

The present report is based on the following information:

- Contract between Contractor and European Commission
- Reports of the contractor
- Information provided by the contractor via Internet  
(<http://www.vccsse.ssai.valahia.ro/main/index?lang=en>)
- Discussion with all partners during the final meeting in Cluj Napoca

It has to be seen as an external and post-project evaluation. The evaluators refer to the report of the project coordinator, which contains all information about an intensive evaluations scheme running in parallel to the project.

## Quality of Cooperation

---

### ***Quality of Partnership***

We charge the quality of partnership by the following performance indicators:

#### ***Commitment of the partners***

We notice that all partners were prepared to commit time and resources to an outstanding intensity to the success of the project. In a slight extent we had the feeling that some partners underestimated the amount of resources, which they had to allocate to the project. But the enthusiasm within the partnership minimized that problem.

#### ***Fitting selection of partners***

Partners of this project have been well selected. There are partners from Rumania, Spain, Poland, Finland and Greece. We appreciate that especially institutions coming from new member states of the European Union have been invited to participate. On the other hand the partnership was strong, because competent experts and institutions represent all aspects of this complex topic. This mix of competency can be seen as one of the success factors of this project. It can be considered as a merit of the project coordinator to gain the best profit from this setting.

#### ***Collaboration***

Both, efficiency and intensity of collaboration have been adequate. The coordinator offered means and support for communication and collaboration. We would like to spotlight the intensive documentation of communication, minutes and reports.

It is clear that different language skills in English have been a limiting factor.



## Socrates

### ***Improvement of Cooperation***

The documents presented to the evaluators show a continuing improvement of the cooperation between the partners of this project and a growing solidarity among the participants.

#### ***Partners Involvement***

We saw a high mutual agreement about the aims of the project and a strong commitment towards its goals. All partners have shown responsibility for the success of the project.

#### ***Trust among partners***

During our stay in Cluj Napoca we found a very friendly and trustful atmosphere during the discussions. The acceptance of different professional backgrounds didn't cause any problems.

#### ***Means of cooperation***

The project management has implemented all necessary means for cooperation and collaboration. There is a multilingual website with news section, all necessary information about the project, description of participating institutions, agendas and minutes of the meeting, documentation of the project outcomes and dissemination activities. In addition they provided a password protected groupware tool.

## **Project Management**

---

### ***Management and leadership qualities***

As far as we could see from the documents and our experience during the meeting in Cluj Napoca the project coordinator took care of a clear understanding of the tasks of the different participants, an efficient process of the development of the project and especially a successful chairing of the meetings.

### ***Structure of the project***

The arrangement of the tasks within the project was clear and suitable, the work plan has been realistic – sometimes maybe a little bit to optimistic – and the coordination between the partners has been well organised.

### ***Quality assurance***

The project management took care of internal and external evaluation during the whole project phase.

### ***Support for partners***

As far as the evaluators heard from the participants they have been pleased with the support they got from the project coordinator.



## Socrates

### ***European political dimension***

The partners formed a living European wide network. All outcomes have been translated into the languages of the participating countries: Finnish, Greek, Rumanian, Spanish, Polish and English.

The system allows that students from different countries can work and learn together.

### ***Dissemination***

The project coordination took responsibility of an excellent dissemination of the project results to all important target groups.

## **Outcomes**

---

In the proposal of this project the following outcomes have been promised:

- VccSSe Server
- Proposal concerning the using of different virtual instrumentations.
- VccSSe Moodle E-Learning Platform and Webpage
- phpGroupWare Collaborative Platform
- VccSSe e-Space (which provides 55 virtual experiments as models with the draft translated in the languages of the participating countries)
- Training materials
- Training modules
- Teacher training for over 300 teachers
- Database (Matrix) with over 200 learning objects as products (Lesson plans and educational material)
- 50 Virtual Experiments and 9 Remote labs presented in an web Exhibition
- Guidelines for Best Practices in Educational Use of Virtual Instrumentation
- Internal evaluation
- Dissemination products (including a DVD edition and a special Dissemination volume)

As far as we have been demonstrated the consortium of the partnership has done all requirements. This is proved by VccSSe- Website were all the material can be seen or downloaded. We especially refer to the fact, that nearly all the material has been translated into all languages mainly used in the partner countries.



Socrates



## **Accomplishment of project goals**

---

### ***Educational goals***

This project works on the border between education and technology. That means it shows a good example how technology can support the development and efficiency of education in a European context.

### ***Curriculum integration***

All examples are well selected so that they are fitting in the different curricula of schools in the participating nations. We can expect a recognizable positive influence on school activities by offering the possibility of learner centred and self paced learning by students.

### ***Integration of students and teachers***

Students and teachers have been successfully integrated by:

- Creating training modules
- Creating material for training modules
- Designing assessment tools to evaluate teacher training
- Organise teacher training
- Designing and testing virtual learning instruments
- Organising meetings with European teachers
- Producing an e-Space with a web based virtual learning environment

### ***Technical and organisational goals***

In this project it could be demonstrated that it is possible to implement a technical system, where teachers without explicit IT competence can create their personal educational environment.

### ***European educational dimension***

By using VccSSe – Virtual Community Collaborating Space for Science Education – students will see that colleagues in other countries are learning the same topics. It could be a task of a following project to offer them the possibility of cooperative learning.

### ***Innovation and sustainability***

The innovation potential can be seen in the fact, that teachers are able to create innovative educational material by using free available software or low cost possibilities. The innovational challenge will be that the educational systems must be adopted and teaching methods must be changed to receive the full effect of the results discovered within VccSSe. By showing the possibilities with the learning units produces in this project VccSSe offers a great potential of sustainability.



Socrates



## Dissemination

---

The project has produced an outstanding amount of dissemination activities. These are:

- Leaflets
- Posters
- Articles in books and journals
- Scientific presence
- Presentation at conferences
- On-line meeting (videoconference) with European educators
- DVD edition
- Dissemination volume
- Web dissemination

This allows saying, that dissemination of the results and obtainment of the target groups has been a major task of this project and contributed to the overall access.

## Conclusions and Recommendations

---

In general VccSSe can be described as a very successful project in many dimensions:

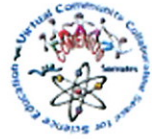
- Innovation in educational and technical dimensions
- Teamwork in a multicultural and multi-sectoral sphere
- Creation of a new market model of educational content

Therefore the evaluators recommend a future procedure:

- The partnership has reached an excellent level of cooperation and an outstanding result of outcomes. In this sense a future cooperation should be considered.
- We recommend the development of educational means by the cooperation of promoters and users of virtual experiments within the EU Educational Community.
- We recommend a stronger cooperation between trainers (in-service teachers / European educators) by using standardised training moduls for science education.
- The evaluators got the impression that the science education in EU countries can benefit from the work of this project consortium and also the consortium is prepared to continue its work.



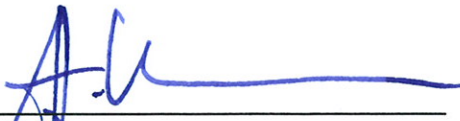
Socrates



University College of Education

Evaluators of the project:

Comenius 2.1. Project  
No. 128989-CP-1-2006-1-RO-COMENIUS-C21



---

Mag. Knierzinger Anton, Prof. (PH)



---

Wieser Claudia, BEd

Linz, 30. September 2009