

**SOUND IN EUROPEAN  
E-LEARNING**

2014-1-DE02-KA200-001634

<http://seel.eduproject.eu>

**DATABASE OF SOUNDS**

**MUSIC**

**FILMS**

**INSTRUCTIONS**

**AUDIO MATERIALS**

**ONLINE COURSES**

**LEARNING UNITS**



**Erasmus+**

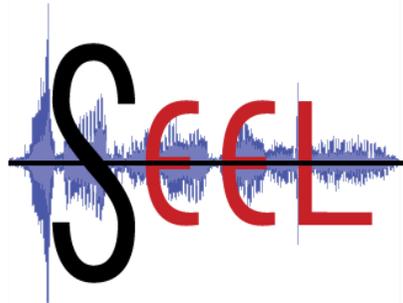
**PROJECT PARTNERS**

Universität Paderborn/Germany

Ingenious Knowledge/Germany

Zakladni skola, Chrudim, Dr. Malika  
958/Czech Republic

Colegiul Tehnic Ion I. C. Bratianu/Romania



This project has been funded with support from the European Commission. This publication reflects the views only of the author, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

**SEEL**

**Sound in  
European  
E-Learning**

[seel.eduproject.eu](http://seel.eduproject.eu)

## SOUND IN EUROPEAN E-LEARNING

The project consortium intends to research and develop ways of taking advantage of sound to enhance learning in e-learning settings. The consortium will create sample implementations such as instructional videos, audio lessons, interactive online lessons, exercises, and serious games, test them in different learning settings, and turn them into model implementations through the required redesign phases.

Special attention will be paid to visually impaired learners for whom acoustic perception is even more important than for other learners. The results will be published in a handbook, which will be made available along with the model implementations. The handbook will serve as a basis for future design of better learning content, especially EU opened learning content, by adding the dimension of sound.

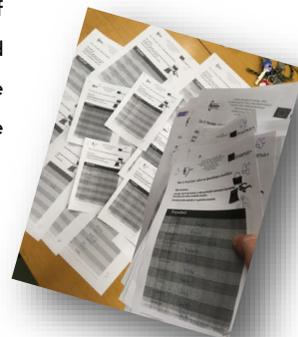
### SEEL Sound Database

To support learning and teaching scenarios with sounds and audios, the consortium developed an online sound database with at least more than 450 tracks. The consortium provided the audio files as Open Educational Resources under an open license.

### SEEL Learning Micro Units and the testing

One of the main outcomes of the European project SEEL are the online learning micro units. The pedagogical and didactical experts led by PROF. DR. MARC BEUTNER from the University of Paderborn developed three different online micro units related to the topics:

- Mathematics
- Vocabulary
- Economics



### SEEL Research Findings

57.6 % of the teachers who responded were regular teachers and 2.4 % were headmasters and additional 2.4 % are teachers who are responsible for other teachers. No teacher was responsible for EU projects or European activities of the school and only one teacher was responsible for IT at school. 18.8 % acted as language teachers and 6.4 % are working as teachers of mathematics. Also 3.8 % of the teachers were active in music and had therefore, a specific view on audio and sound in general. Some teachers would not provide information on their status and job.

The teachers have a good idea about the importance of e-Learning. 86.7 % agree or strongly agree on that.

Moreover, 87.6 % of the teachers state that e-Learning has to be supported by teachers. Currently more than two third of the schools encourage their teachers to use e-Learning (69 %).

### SEEL Testing Conclusions

The scores of the learners showed no significant better result with or without sound. Therefore, it can't be said that sounds and audios lead to better results in e-Learning than in e-Learning without music or signals.

Nevertheless, the learning atmosphere improved by using sound. Therefore, the same result of learning could be achieved in a more positive and easier way. This is an extremely positive result of the testing because this means that the use of sound has made the learning process more comfortable and came to the same results. Thus, the recommendation we can provide is that the use of audio should be increased. It does not distract the learner because it can create the same learning results. And at the same time it offers a better learning atmosphere to the learners.

