



Sounds in European E-Learning - SEEL
Grant Agreement No.: 2014-1-DE02-KA200-001631
Project No.: 2014-1-DE02-KA200-001631
Sounds and audios in learning processes
Research Paper
Intellectual Output No. 01-A2
Research on sound in learning - P1, UPB – Germany



SEEL

Criteria for Sounds in ELearning

Sound in European E-Learning
Criteria for Sounds in ELearning (O1/A2)
Report

P3 Základní škola – ZSC (Czech Republic)

<i>Project Title</i>	<i>Sound in European E-Learning</i>
<i>Project Acronym</i>	<i>SEEL</i>
<i>Reference Number</i>	<i>2014-1-DE02-KA200-001631</i>
<i>Project Duration</i>	<i>01.09.2014 – 31.08.2016</i>
<i>Project Partners</i>	<i>P1 University Paderborn – UPB (Germany)</i> <i>P2 Ingenious Knowledge – IK (Germany)</i> <i>P3 Základní škola – ZSC (Czech Republic)</i> <i>P4 Colegiul Tehnic Ion I. C. Bratianu – CTI (Romania)</i>

Roman Anýž, Petr Baťa, Robert Kočí, Tereza Sommersová



*Sounds in European E-Learning - SEEL
Grant Agreement No.: 2014-1-DE02-KA200-001631
Project No.: 2014-1-DE02-KA200-001631
Sounds and audios in learning processes
Research Paper
Intellectual Output No. 1
Research on sound in learning - P1, UPB – Germany*



SEEL – Criteria for Sounds in ELearning



A systematic view on sound design is important for deep understanding. We would like to ask questions like: Under which circumstances does sound reach the stage of emotional stimulation?

Descriptions about how to design sound

- **Each answer for all the questions below depends on what you want to use the sound for (testing, motivation, evocation, notification, reflection, etc.).**

Please try to give answers to the following questions:

- What is a good (high quality) audio for teaching? *The higher the quality, the better the sound, in most cases. For example, when teaching foreign languages and doing listening activities or new vocabulary, clear and high quality sound is needed in order for students to learn the correct pronunciation. High quality sound is also very important during testing so that instructions are clear. However in some situations, sound with lower quality can actually create a better, more authentic atmosphere. From a technical standpoint, in order to achieve high quality audio in the classroom, one must have high quality speakers and recordings.*
- What is a bad (low quality) audio for teaching? *Outdated recordings and speakers that don't achieve their purpose, for example authentic recordings of speeches, parts of old films can be difficult for students to understand. On the other hand, sometimes these authentic recordings can be used to evoke curiosity and create a specific atmosphere.*
- What aspects are important when you are thinking about integration of audios into learning situations? *The most important aspect is using audio to make lessons more interesting and dynamic. This helps maintain students' attention for a longer time. As we mentioned before (in bold) the main aspect is the goal of the activity or use. The main aspect in using sound during lessons is to have in mind a goal for the lesson and using sound to achieve that specific goal. Different sounds should be used under different circumstances, depending on if the goal is to motivate, evoke an emotion, to notify the student of something or to help the student reflect.*
- Are there any elements an audio should have? *The most significant elements connected to sound in the classroom are meaningfulness and clarity. Without a meaning, it has no learning purpose and without clarity, it won't be effective.*
- Are there any elements an audio should not have (for instances voices) *The audio shouldn't have elements that aren't related to the learning process and that would distract the students from the activity at hand (for example rude language).*
- Are there any rules for using audios? *The teacher has to think a lot about the proper use of a sound – if it's useful for the goal of the activity or the lesson, what kind and*



quality of the sound he/she should use and why he/she uses the sound. There should be just enough sound – not too much (talking about length). To have an effective lesson, no activity should be too long, because the learners lose their concentration.

- *Under which conditions audios are useful? When the teacher can directly see that with the help of sound the goals of the given lesson can be reached more effectively. For an example when it improves students motivation, when it make students more curious or energetic. On the other hands it can also be used to calm students and improve their concentration. As I wrote, it depends on the goal.*
- *Under which conditions audios are not useful? When it does not help improve the learning process. Sometimes sound can be a distraction during lessons and in this case it is not useful. Also repetitively using sound in the same way during lessons can be boring and lose the effect.*

Please try to explain what teachers should take into consideration if they would like to design audios for teaching!

Once again, the main problem to think about is the reasoning behind using sound during a lesson – is it because of testing, motivation, evocation, notification, reflection, etc.? The teachers can use different kinds of sounds during testing (to encourage students to go on with the task), in order to motivate (to set the lesson into a specific time / place / atmosphere / language), etc. The volume and the kind (music / speech / background sounds / etc.) of the sound is also very important, again depending on why we use a specific sound (motivation, reflection, etc.).

Please try to explain what teachers should take into consideration if they would like to create learning scenarios with sounds.

The very first step is to set a clear goal of the activity or the lesson – it gives the teacher reasons why to use or not to use any sound. Will it support the goal or not? Can it help students to understand the topic or to reach the goal? Can it make the activity more interesting and effective? Will it help to motivate students? Does the sound have the quality that is needed? These questions must be taken into consideration whilst planning learning scenarios with sounds.