



UNIVERSITÄT PADERBORN
Die Universität der Informationsgesellschaft

SEEL - Sound in European E-Learning (2014-1-DE02-KA200-001631)

Teacher Training – Module 2: Importance of audios in courses and in the classroom

SEEL - Partnership

General support for learners

Methodological variety

Audios in
courses and
classrooms

*Addressing different
learning styles*

Use and integration of
new media

Sounds

What can be sounds in a course?

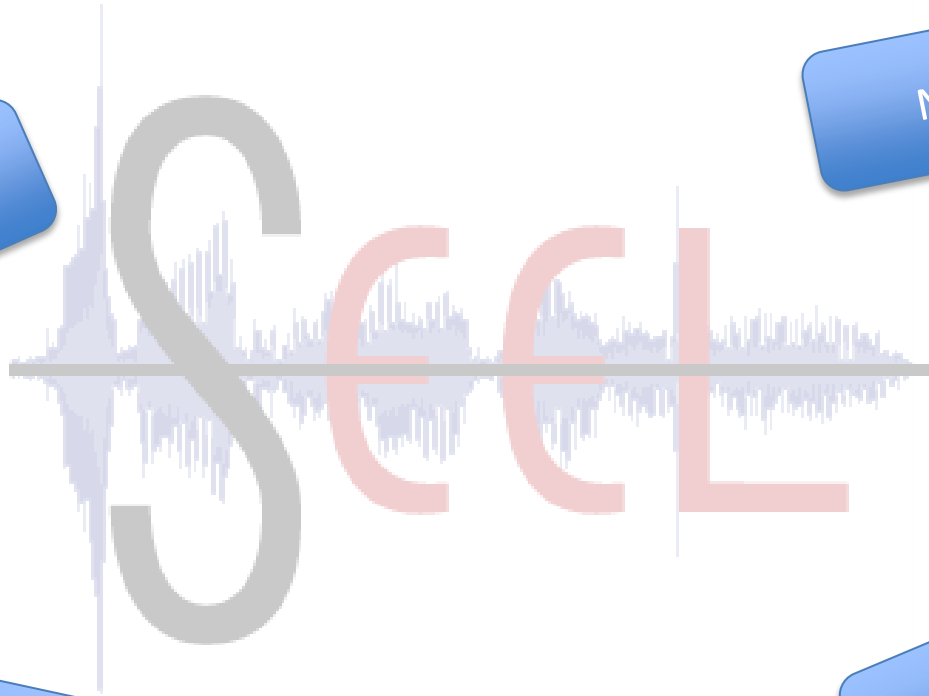
- General audio files
 - Signals
 - Speech and communication
 - CD-Presentations
 - Music
- 

Music

Specific sound signals

Narrative audios

Filter



Pressure

Podcasts



Erasmus+



Power

Intensity



Wave

Decibels

Pure Tone Waveforms

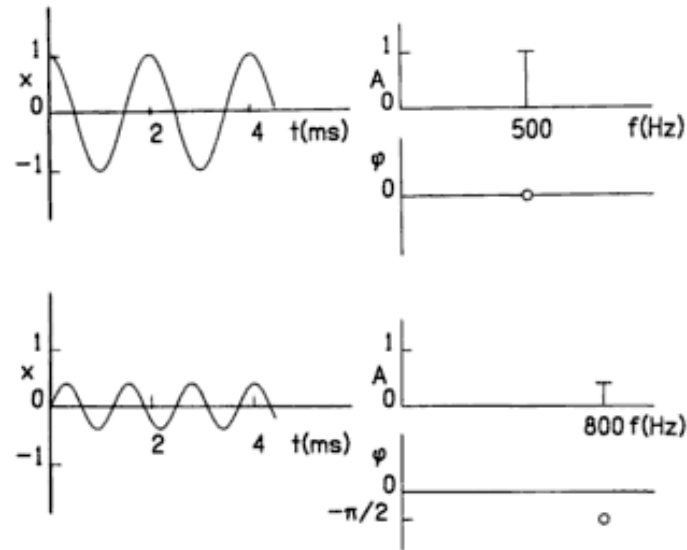


FIGURE 1.4. Pure tone waveforms, with frequencies of 500 Hz and 800 Hz, are shown on the left as functions of time. The corresponding amplitude and phase spectra are shown on the right. The phase reference is chosen so that a cosine function has zero starting phase.

See

Hartmann, W. M. (2005): Signals, Sound, and Sensation.

Springer Science & Business Media 2005

The Approach of Legault

A general approach – Part I

Audio types according to Nicole Legault

- three types of audio used in e-learning:
- Narration and its four “subtypes”
 - Elaborative (on-screen text summarizes the audio)
 - Paraphrasing (audio summarizes the on-screen text)
 - Verbatim (reading exact words on-screen)
 - Descriptive (audio describes image on-screen)
- Music
- Sound effects

See Legault, N. (2012): Audio and Narration in e-Learning: Pros and Cons. On the internet:
<https://flirtingwelearning.wordpress.com/2012/12/03/audio-and-narration-in-e-learning-pros-and-cons/>

A general approach – Part II

Audio use Pros and Cons according to Nicole Legault

PROS	CONS
<ul style="list-style-type: none">• Good quality audio might appeal to auditory learners (although there is much debate as to whether learning styles even exist...)• Audio might help reinforce certain points and may help some learners retain more information• Audio can add some personality and a more personal touch to the e-learning	<ul style="list-style-type: none">• Adding audio files (which even when compressed can be quite large) will add to the bandwidth, loading time, etc.• Bad quality audio will be more distracting and detrimental than useful• Writing and practicing a script and recording the audio are time intensive tasks

See Legault, N. (2012): Audio and Narration in e-Learning: Pros and Cons. On the internet: <https://flirtingwelearning.wordpress.com/2012/12/03/audio-and-narration-in-e-learning-pros-and-cons/>

A general approach – Part III

Audio use Pros and Cons according to Nicole Legault

PROS	CONS
<ul style="list-style-type: none">• Good quality audio might appeal to auditory learners (Reduces the reading load, less on screen text when there is audio/narration)• Might add “authenticity” to on-screen characters	<ul style="list-style-type: none">• Syncing audio with on-screen text and images can also be labor intensive – and if the audio/on-screen are not harmonious it will be distracting to learners• If your course needs to be updated often (once a year, maybe more) then it can be difficult and time-consuming to record and add updated audio.• If your course will be localized (translated) it can be challenging to write scripts and narrate your course in multiple languages

A general approach – Part IV

Audio use Pros and Cons according to Nicole Legault

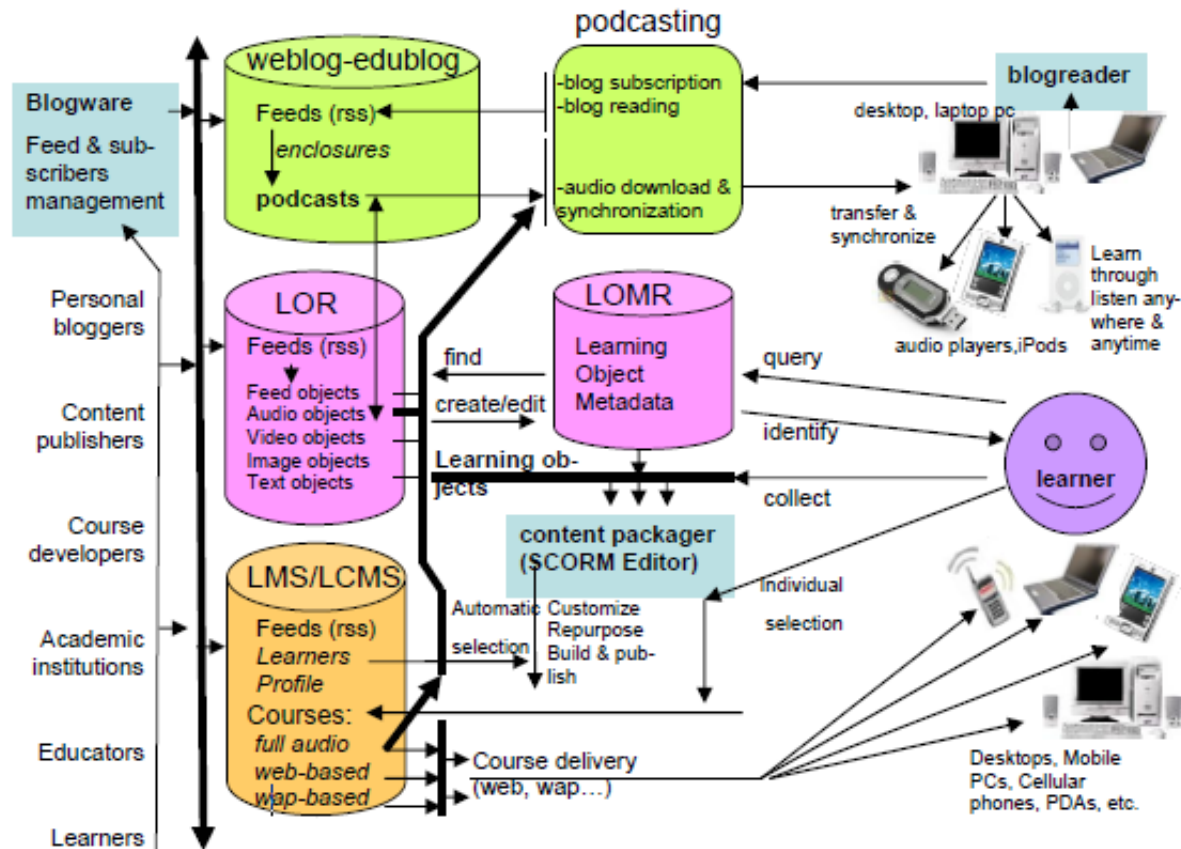
PROS	CONS
	<ul style="list-style-type: none">• If your course is available in different countries, unfamiliar accents and cultural references can lead to confusion• Having exact same audio and text on-screen can be redundant and boring• Some research suggests that learners dislike word-for-word narration, because quick readers can often read the whole text before the narrator is done talking

See Legault, N. (2012): Audio and Narration in e-Learning: Pros and Cons. On the internet: <https://flirtingwelearning.wordpress.com/2012/12/03/audio-and-narration-in-e-learning-pros-and-cons/>

The technical approach of Cebeci / Tekdal

Discussiong Podcasts in Education

The approach of Cebeci & Tekdal



Graphic taken from:

Cebeci, Z. / Tekdal, M. (2006): Using Podcasts as Audio Learning Objects. Interdisciplinary Journal of Knowledge and Learning Objects. Vol 2. 2006.

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