Tutorial

Layouts and setups for specific purposes of videos in education. Designing a video recording studio
eduhub.ch - January 2020

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Pre-service teacher training
K-8 (primary education)

In-service teacher training
K-12 (prim. + secondary education)

Table of contents

1. The studio
2. The scientific literature

6 layouts and setups in the studio
Lecture
Class time
Show time
Scientific debate
Educational workshop
Personnalized

Technology acceptance model

External variables
Perceived ease of use
Perceived usefulness
Attitude towards the use of IT
Intention of use
Actual use of the system

Video


Research trends in instructional design and technology journals.
Lecture

1. other U
2. professionals
3. OER

#OpenEducationalResources
Class time

1. well-established contents
2. additional contents
3. universal design for learning perspective

#FlippedClassroom

1. highlight
2. science popularization

#Communication
Scientific debate in video

1. link
2. interdisciplinary
3. high-order thinking

#Complexity

Educational workshop

- Educational workshop
- Atelier pédagogique
- Pädagogischer Workshop
Educational workshop in video

1. details
2. step-by-step
3. goal-oriented

#Procedures

<table>
<thead>
<tr>
<th>Setup</th>
<th>Pre-recording job</th>
<th>Voice</th>
<th>Image</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lecture</td>
<td>As usual</td>
<td>As usual</td>
<td>As usual</td>
</tr>
<tr>
<td>Class time</td>
<td>As usual</td>
<td>As usual</td>
<td>As usual</td>
</tr>
<tr>
<td>Show time</td>
<td>New</td>
<td>New</td>
<td>New</td>
</tr>
<tr>
<td>Scientific debate</td>
<td>As usual</td>
<td>As usual</td>
<td>As usual</td>
</tr>
<tr>
<td>Educational workshops</td>
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<tr>
<td>Personalized setup</td>
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Summary

Literature?
theoretical & empirical

Technology acceptance model


Technology acceptance model


Technology acceptance model


Technology acceptance model


Technology acceptance model
Cognitive theory of multimedia learning

- **Multimedia presentation**
  - Words
  - Pictures
- **Sensory memory**
  - Ears
  - Eyes
- **Working memory**
  - Sounds
  - Images
- **Long-term memory**
  - Verbal model
  - Pictorial model
  - Prior knowledge

Motivation and metacognition

Cognitive load theory

“Cognitive load theory assumes the major aim of instruction is to facilitate the transfer of domain-specific, biologically secondary information, initially into working memory from the external environment, and then from working memory to long-term memory where it can be stored” (p. 7)

Models

- **Environment**
- **Working memory**
- **Long-term memory**

Self-regulated learning within digital environment

1. Control learning
   - Metacognitive strategies
   - Control immediately
   - Control in the end
2. Process information
   - Cognitive strategies
   - Use prior knowledge
   - Elaborate new knowledge
   - Organize and reduce
3. Plan learning
   - Metacognitive strategies
   - Set up goals
   - Plan learning time
   - Create a quiet environment
4. Keep motivation high
   - Emotional-motivational strategies
   - Control of environment
   - Self control

Signaling effect

“Cues that highlight relevant elements or the organization of the material” (p. 1)
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Use of color
Not used as the only visual means of conveying information
Contrast ratio

Usually, at least 4.5:1

Low or no background audio

Usually, at least 20 decibels lower than the foreground speech content

Caption → Audio description → Sign language

Info

Information, structure, and relationships (associations between distinct pieces of content)

Text spacing

Detailed specifications in WCAG 2.1

Signaling effect

Social interactions

Segmentation

Length

Multimedia guidelines

Accessibility guidelines
Empirical recommendations/considerations?

<table>
<thead>
<tr>
<th>Setups</th>
<th>Animations</th>
<th>Signaling</th>
<th>Segmentation</th>
<th>Proposed length</th>
<th>Accessibility guidelines</th>
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</thead>
<tbody>
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“Nine-tenths of education in encouragement”

Anatole France

And videos can hardly do it....