Mobile Learning Scenarios

Analogue history – digital preservation

Oberstufenzentrum II Barnim

Subject: brick layers

We are a vocational school training young people in 45 different professions. The trainees are aged 18+ and they are apprentices in a dual education. They work in firms and visit school for theoretical education every third week. Due to the high level of technical equipment the trainees are keen on learning in school accep-ting it as a supplement to practical education. All trainees are 'digital natives' using media mostly privately to gain or spread information and messages. They know well how to operate the devices and how to explore the Internet. In our school, media devices have been used randomly so far and the digital expertise of the trainees has hardly been considered.

Description (long term project)

Mobile devices, here smartphones, are used to collect data outside school to create a video guide. While visiting an old building trainees take photos of historic building techniques. They discover wall paintings, sculptures, brick laying techniques etc. and thus preserve analogue history in a digital way. The trainees are further asked to record audio comments to describe the scenery and the different buildings (audible note taking). Additionally, the note-function of the smartphones is used to cover the actions with keywords in a logbook displaying the trainees' progress and way of learning. Later, these data help to reconstruct the scenery at school when working on the video guide and becoming aware one's own way of learning. The use of smartphones enriches theoretical research about historic ways of constructing and designing houses by capturing vivid impressions from existing buildings. Creating a video guide teaches the trainees to sort out certain information for a target group and to bridge the gap between the trainees' expertise and the possible "general" audience.

What is more, smartphones are used to record the trainees' presentations at the locations outside school when they inform each other about the outcomes of their research. Watching the video recordings and listening to them helps the trainees to recognise their strengths and weaknesses of the individual presenting competences, e.g. body language, articulateness of speech and interaction with the audience.

Learning outcomes

The trainees can …
- record historic building techniques
- choose several references for gaining information with the audio and video function of smartphones
- evaluate different sources of information and their reliability
- create audio comments, slide shows and videos
- make up a video guide
- evaluate their presenting competence
- write logbook entries

Preparation

1. Allow at least 8 lessons each 45 min if a satisfying result should reflect the progress.
2. Inform about the number and functionality of available smartphones (SIM-function is not deeded, no costs involved). Make sure the phones have a camera for photos and videos, offer speech memo function and note taking. It's useful to ask for available data space, if necessary increase the storage capacity.
3. Introduce the trainees to the method of writing a logbook so it can be used for evaluation afterwards. (keyword messaging, note taking)
4. Choose a building in which trainees can walk around freely and are allowed to speak and take graphic recordings. Check for copyright.
5. Organize PCs, Laptops etc. to work on the material, there should be suitable software for video processing on. Ensure technical requirements are available to transfer data from smartphones to PCs – cable, card-slot, common platform/ cloud.
6. Prepare an extra-room for the audio-comments of the video-guide.
7. Think of a valuable way to present the video-guide. (video-exhibition, YouTube, official presentation).

Realisation

1. In school, give the trainees a clear task to collect data that is relevant to theoretical matters. Say which type of recording should be used and where the data is collected. Give a glimpse to indicate what will be done with the data. **(IDEA)**
2. Send the trainees to the historic building to collect the data (photographs, videos, audio comments). Give them the layout of the logbook to be written while collecting data (note taking). **(COLLECTION)**
3. Having collected the data the trainees process it to produce the video guide. Therefore, they have to choose the most powerful pictures and video sequences and enhance the material by adding audio comments and supplementary information. **(PROCESSING)**
4. Finally, the trainees present their video guide to the class or other audiences (can be public) and discuss the results. Doing so they have to evaluate their own work and possibly review their own work because of arguments arising in the discussions about their video guide. **(DISCUSSION AND EVALUATION)**
5. After reassessing the result and the possible hints from the discussion the trainees hand in the video guide together with the logbook that includes their personal evaluation of their work stating
   a. which elements of their project worked well
   b. which problems had to be solved and how this was done
   c. which competences they have developed or they still lack
      (ASSESSMENT)

Opportunities

- Using smartphones in informal contexts is the best way to gather individual learning material at external places.
- Using digital devices motivates the trainees as they can show their expertise in handling them.
- The combination of recording, processing and presenting gives the trainees an idea about the production of video guides and target group production
- The logbook clearly displays the working and learning process.

Challenges

- Don't focus too much on technical aspects. (But make sure it works, especially data transfer)
- Check the level the trainees are going to reach with the video guides, some aim too high and might finally be disappointed.
- Make sure the trainees develop with the task by discussing, evaluating and reassessing.
- Create an open atmosphere of tolerance and creativity that even accepts mistakes and uncertainty, esp. in reference to presentation competence.