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ASSESSMENT OF TEACHER COMPETENCIES USING A VIDEO PORTFOLIO

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Introduction

The Graduate School of Teaching and Learning of the University of Amsterdam each year welcomes between 150 and 200 students. Students study to become a teacher in upper secondary education in one of 23 school subjects, ranging from foreign languages like German, English or Italian through Physics and Mathematics to Philosophy or Social Studies. School practice is an important part of our one year post master teacher education programme: students spend at least 50 percent of their working week 'on the job' in their practice schools. Student teachers have to learn how to teach in complex professional settings, and we try to make the learning environment as authentic as possible in order to stimulate the transfer from a learning environment to the actual school setting.

Assessing student teachers' competencies

The students' theoretical knowledge is tested in a written exam, their teacher competencies have to be assessed in a different way. In teacher education, e-portfolios are now commonly used as a means to assess students' competencies. From 2003 students at our Graduate School too had to prove their competencies in an e-portfolio.

Our students sometimes used additional materials like video to prove their competencies, but most often an e-portfolio consisted only of texts. These texts had been written by students (for example self evaluations or reflections), by their coach, supervisor or mentor or by others (pupils, peers or expert colleagues). These various perspectives are important for the assessment of the students competencies, but they are all writer's interpretations of students' competencies. After the evaluation of the use of e-portfolios we felt the need for a more valid assessment of individual learners. We hoped to achieve that by making both observed behaviour and reflection on the students' professional behaviour part of the portfolio. We thus developed our online video portfolio.

Our video portfolio

In 2006-2007 our Graduate School was the project manager a national project in which 14 institutions of higher education cooperated to design competency-based learning activities with an online video portfolio. Objective was to determine design principles for effective and efficient use of a digital video portfolio in university curricula. In this project we started using online video portfolios to assess teachers' competencies.

We expected to improve the quality of supervision, evidence and transfer in higher education, since through the use of video relevant competencies can be - literally - made visible.

We also had some concerns:

- What kind of selection will student teachers make if they have to select video clips of their practice? Will the selection represent the teaching of the particular student teacher?

- How do we assess a video portfolio?

- Which teacher competencies can we assess with a video portfolio in a reliable and valid way?

- Workload for staff and students

The design principles of our video portfolio are:

- Video recordings of the teaching practice have a central place, but video clips need to be enhanced with explanatory texts

- The actions are linked to the competencies, the videos are not produced with the aim of showing a specific competency.

- Not all competencies can be validly showed on video.

- Students need to learn to:

    - Observe: watching some video clips over and over again

    - Select: show only the essence in the video clips

    - Explain: Make a link between theory and practice

- Structured by tasks with enough possibilities for student teachers to create ownership by constructing a video narrative.

In practice the video portfolio is used as follows: During their school practicum our students (teacher trainees) record their classes on video and select video clips to be used in their video portfolio themselves. In the video portfolio, they are asked to reflect on their behaviour and interpret their actions and choices: they combine their video clips with short explanatory texts in video narratives. They then answer questions about the narrative as a whole, for example: in which competency have you improved particularly this last semester and where in the narrative do you show that.

To complete the video portfolio students add other documents (written material, photos, etc). These include the mandatory self evaluations, background information of the shown classes, future learning plans and self designed learning materials or even pupil evaluations.

The video portfolio can also be used for purposes of reflection on and analysing teaching. In this paper, we will go into the aspects of assessment of video portfolio.
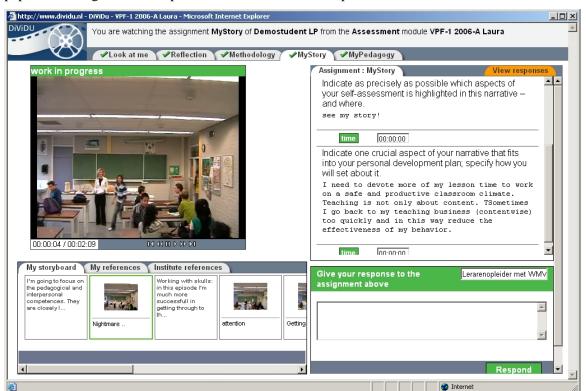

Figure 1: Example of a video narrative

Evaluation of the use of the video portfolio

The pilot with the video portfolio was evaluated during our video portfolio project in 2007. We interviewed teacher educators (assessors) and students.

In May 2008 we organised a more elaborate evaluation in which we gathered data from teacher educators in open interviews, 'think aloud' sessions in groups and plenary evaluation sessions. The results of this study can be found in Hoeksma (2008). The main subject was how to assess teacher competencies with a video portfolio. Does the video portfolio have additional value over a digital portfolio without video and does it make the extra efforts of both student teachers and teacher educators worthwhile? First experiences seem to be positive, but there are still some hurdles to surmount.

In the first evaluation an assessor was interviewed who did not know the students personally. She felt that she could form her own opinion more accurately because she could see and hear the students on video. She liked it because she didn't have to 'read between the lines' in texts written by others.

The interviews indicated that a video portfolio increases workload for both students and teacher educators. Students have to collect and select video clips for all competencies assessed in the video portfolio. Assessors have to watch the video clips as well as the explanatory texts and other documents provided by the students.

Students comment in interviews that they learn a great deal by watching and analysing the video recordings of their teaching practice. They also learn to analyse themselves during the selection of the video clips, because they go into the practical aspects of teacher competencies.

Some teacher educators liked the possibility to have a better view on the students' progress between assessments.

As said, there are also aspects we still have to work on:

Generally, the teacher educators - with a few exceptions - report negative feelings about being an assessor and performing an assessment task in addition to their coaching task. The consequence of this is that most of them were more focused on how to formulate feedback that student teachers could use to develop their competences, instead of provide a summative assessment.

Teacher educators did not share the same or even similar definition of the concept of competency. It is perceived as performance, performance development, the combination of performance, reflection, and knowledge, and the combination of performance, reflection, knowledge, and development .

Other threats of the quality of interpreting and judging video portfolio were that the general impression that many teacher educators have of the student is dominant. The affinity of the assessor with particular competences is also dominant in their assessment and assessment process.

Also teacher educators differed in preferences for different parts of the video portfolio: for most assessors the classroom performance is dominant, and for some assessors the justification and reflection is dominant.

As you can see some outcomes are not specifically related to the video portfolio, but to competency based learning in general.

Implementing a video portfolio

Although a bit different from the typical digital portfolio, some implementation issues are the same. The curriculum must be adapted to tutoring and / or assessing with a video portfolio. Apart from the assignments given to the students, they need to know what the role is of the video portfolio in the final assessment of their skills and competencies. Staff must be trained in assessing video portfolios.

In order to enable the students to benefit from watching and reflecting on their video clips, they need to be trained in skills like observing and providing (written) feedback. Sometimes, when a (video) portfolio is new to teachers, they too need to be trained in providing online feedback and assessing video.

The used technology must be low key. It's tempting in this age of rapidly changing technology to instantly use all new possibilities. We found that simple things like availability of cameras is more important than the newest gadgets and technology.

Most students find their own way with the technical things after the first instructions, some need more support with the technical things like video editing. Those student must have access to quick and accurate support; we provide manuals, a website with frequently asked questions and last but not least a person they can go to for help.

DiViDU as portfolio tool

The learning environment DiViDU was not designed as a portfolio tool, but for our purposes it has its advantages over other tools:

- it is 'full service': video and other documents (texts, presentations, photo's, etc) are all stored in the same environment, there is no need for a separate streaming video server.
- it combines video clips with explanatory texts in one screen.

Like portfolio tools DiViDU has the following features

- feedback provided by peers and teachers is collected and stored with the specific video clips
- students can provide and receive peer feedback

What will the future bring

Technology keeps changing, so maybe in a few years time the DiViDU learning environment can be replaced by another tool for video portfolios.

Our didactical knowledge of assessing teacher trainees with video can still improve in order to make the assessment even more valid.

References

1. HOEKSMA, M., JANSSEN, J., ADMIRAAL, W., (2008, September). RELIABILITY AND VALIDITY OF THE ASSESSMENT OF WEB-BASED VIDEO PORTFOLIOS: CONSEQUENCES FOR TEACHER EDUCATION. PAPER PRESENTED AT THE FOURTH BIENNAL EARLI / NORTHUMBRIA ASSESSMENT CONFERENCE, POTSDAM, GERMANY

2. KULK, R., JANSSEN, J., GIELIS, A.M., SCHERINGA, E., (2005), DIVIDU – LEARNING FROM PROFESSIONAL PRACTICE THROUGH ONLINE VIDEO. PAPER PRESENTED AT ED-MEDIA 2005, WORLD CONFERENCE ON EDUCATIONAL MULTIMEDIA, HYPERMEDIA & TELECOMMUNICATIONS IN MONTREAL, CANADA.

3. WEBSITE ON THE DIVIDU LEARNING ENVIRONMENT: HTTP://INFO.DIVIDU.NL (NOT AVAILABLE IN ENGLISH)

4. PROJECT WEBSITE: WWW.DIVIDOSSIER.NL (NOT AVAILABLE IN ENGLISH)

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