

„Not for school, but for life we learn“

Abstract:

Learning is a process that never ends. Even though it seems that our brain has the capacity for storing all the information we acquire, we forget most of it. However, there are forms of learning that help to memorize knowledge for longer time. „Repetitio est mater studiorum“ as the old Romans used to say. Within a time of three years, a combination of Peer-Strategies and ePortfolio supported eLearning as a teaching and learning strategy was developed and implemented in such a way that the course that was taught in this way is still considered as the most effective and important one.

Keywords: Assessmentportfolio – Teaching Strategy – Process Orientation – Activity Orientation – Ongoing Contribution to Class – Peer Assessment – Students – Motivation

The highest reward for man's toil is not what he gets for it, but what he becomes by it.
John Ruskin (1819-1900)

Basic Conditions

The degree programme described in this paper is in an unusual situation:

As part of a larger enterprise, which is located in a city with 200.000 inhabitants, this campus is situated next to a spa garden in a small town well known for its long spa tradition surrounded by vineyards, woods and fields. In the middle of nowhere so to say. Sometimes you can see pheasants strutting through the park, rabbits hobbing across the parking places and deer browsing in the woods behind the building that only get disturbed by students jogging by. An idyll that a student in a big city can only dream of. At least this is what could be assumed. This idyll is marked by serious isolation and journey time of two hours by public transportation from the federal state capital. At the same time this isolation, with all its downsides, is the elementary prerequisite for a specific culture of communication that defines the rapidly growing success of this degree program as an acknowledged research- and know-how-transfer center. Through the concentration of high quality education and research in a rural environment all people concerned, altogether 300 students, stay close together. The development and extension of this pioneerproject became an element of connected endeavor, a keyfactor for the development of a specific culture of communication.

Learning as a Process

“When a man's knowledge is sufficient to attain, and his virtue is not sufficient to enable him to hold, whatever he may have gained, he will lose again.” (Confucius, Quotationspage, April 2006)

Learning is a neverending process. Even though it seems that our brain has the capacity for storing all the information we acquire, we forget most of it. However, there are forms of learning that help to memorize knowledge for longer time. „Repetitio est mater studiorum“ as the old Romans used to say (citation of the author).

Despite this saying an ongoing trend in knowledge transfer is visible. A decrease of permanent effort to cooperate in the learning process, which would grant an independent repetition of the learning matter, with an increase of age (citation of the author).

Learning for the sake of an exam is the result as the grading is a snapshot, the exam at the end of a class or course. As a consequence of this form of knowledgetransfer und evaluation, students try to memorize the learning matter within a very short period of time (citation of the author).

This knowledge is only in the short term memory. The loss of new gained knowledge over a certain amount of time can be seen in the “curve of knowledge-loss”, by H. Ebbinghaus. 66 percent of this knowledge is lost after only after one day according to this model if the learning matter is not repeated. At the beginning of this paper, the

processes of acquiring and losing knowledge are described (Stangl, 2004) to create a better understanding for the evaluating opinion on the different teaching and learning methods.

Acquiring and Losing Knowledge

In learning situations performance is seen to be equal to knowledge. This paper describes the results of process oriented learning with a step by step development of accompanying ePortfoliostrategies at three classes of an institution of higher education with a non-technical focus in the course of their project- and informationmanagement classes as well as their research and project assignments.

At the beginning, ePortfolio is only a collection of student assignments, certificates and similar documents. Out of this, a process oriented evaluationportfolio was developed which permanently requires work from the students, documents it electronically, stores it and is part of the final grading of performance. This strongly motivating way of teaching is accompanying the process. An enhancement of performance can be achieved through this permanent repetition of the learning matter and also leads to a determination of performance (Lorenzo & Ittelson, 2005, S. 3).

Society has changed and requirements in working life with it. Therefore the approach of action-orientation (example shown in the course of this paper) is discussed as a meaningful supplement which creates a connection between theory and practise and trains soft skills, such as teamspirit, self confidence and communication skills, which are frequently seen as keyfactors of modern time.

Therefore ePortfolio is not only an accumulation of documents for grading, but also process- and action oriented. However it can be seen as an alternative teaching method to prepare students for the requirements of working life (citation of the author).

An important factor of success was the motivation of the students to take over this way of learning and gain sustainable success out of it.

Motivation and Success in Exams

Motivation of the students needs to be established especially in connection with in-class cooperation since it means an addition of work. The term "motivation" does not necessarily mean something positive as it is usually understood. It describes the reason for specific actions or reactions of people – the motive for an action. So, which ambiance and situation can be created by a lecturer to increase the motivation for voluntary work and an ongoing learning process?

Fear is seen as the most important of all learnable drives. There are primarily two reasons for this: fear is particularly persistent against elimination and can be easily activated and associated through conditioned stimuli. Fear has a positive and a negative aspect to it. On the one side new abilities of reaction can be learned which leads to an increase of flexibility for situations. On the other side intensively felt fear leads to unadjusted reactions (Zimbardo, Angermeier, Brengelmann, & Thiekötter, 1983, S. 374-376).

Thus the reaction on fear of exams or on fear of failure in ones studies is dependent on its intensity. It can be a motive to study harder but also lead to blockade which can prevent ideal learning. Therefore the goal of a class or course should be a climate which minimizes fear, but doesn't close it all out (citation of the author).

Learning through doing nothing?

Another example can be shown from the second semester. In the first session of class Y the students were told that the effort for the exam will not be very high and that a negative grading can hardly be achieved. Through this message the fear of the exam was taken from most of the students completely which led to a not expected bad result of grades. The average grade after the first try was 2,98.

Learning through permanent in-class work

With the start of a class in 2003 held by one of the authors of this paper, a set of basic conditions could be established through an accompanying ongoing improvement process for process-accompanied learning. All described classes are held by one lecturer.

Learning through permanent cooperation

With the start of the lectures through an author at this program of study, a general framework for the process accompanied learning has been created in a continuous process of improvements.

Alle lectures described are held by the same lecturer.

For the implementation of this design the learning platform Moodle was introduced. Moodle not only serves as a learning platform for the students. It is also frequently used for the organisation of student life and projects. All students regularly use electronic communication devices such as forums and wikis on the Moodle platform and messenger systems privately. They are always in contact within the groups, with lecturers and external projectpartners. The ability to use those devices is trained intensively with practical examples from the first day of the studies on.

A teaching- and learningepisode is constantly repeating itself over a timeframe of two to three weeks for project- and informationmanagement classes that is supported and documented by Moodle.

Phase 1 Hand in of Work

- Lecture (2 hours) + exercise (2 hours)
- Assignment of a written exercise
 - Completion of assigned exercise alone (75 students) within one to two weeks
 - Documentation of working steps in a forum or wiki
 - Problems during the process are discussed in a FAQ forum by the students
 - Help within this forum is provided in the following order:
 - by students of the same year – they receive plus points for helping
 - by eTutors of another year – who have already completed the class above the average level. The students are not motivated by monetary factors but by the knowledge of additional and ongoing learning and a certificate provided by the lecturer (a management consultant).
 - by the lecturer himself
 - short term problem solving also happens through messengers or skype conferences, but are documented afterwards in the forums.
 - Hand in of work through a peer-assessment module (Moodle-Workshop)

Phase 2: Peer Reviews for Phase 1

- Completion of three to four anonymous peer-assessments of other student works on the basis of a category scheme
 - Additionally random samples get feedback through the eTutors or the lecturer in the work and the forum to make it accessible for everybody.
 - Results of the feedbacks are included in the next class
- Acception/refusal of the evaluation
- Lecture (2 hours) + exercise (2 hours)

Phase3: Work on the results of Phase 1 and 2 in groups

- Expansion of the concept
- The works from the previous phases are summarized to one in small groups (four to five students) within one or two weeks under consideration of the given feedback and the insight that was gained by the assessment of the other student works.
 - The creation of the work is accompanied by a forum discussion
 - Problems are discussed in the FAQ forum
 - Help within this forum is provided in the following order:

- by students of the same year – they receive plus points for helping
- by eTutors of another year – who have already completed the class above the average level.
- by the lecturer himself
- Hand in of group work in the exercise module (Moodle-Exercise-Module)
 - This group work gets individual feedbacks by the eTutors and lecturers directly to the group and also in the forum to make it accessible for everybody.

Phase 4: Work on these results in class

- Results of the feedbacks are included in the next class

To summarize this process one can say that after the attendance in this lectures and exercises the students are able to create works on their own, solve problems in forums and virtual conferences, reflect on each other and edit their work in a second run.

Cooperation is equal to the written exam!

- 40% of the grade can be achieved through cooperation
- 10% can be achieved over active help in the FAQ forums
- 50% can be achieved through the written exam
- 67% of all achievable points are necessary for a positive grade.

Therefore students can't achieve a positive grade without constant cooperation.

The process-oriented ePortfoliostrategy tries to create but not intensify positive fear. Noncooperation minimizes the chance to get a good grade or even a positive result in the exam due to the missing exercise. A student will cooperate as far as he wants a good grade. This is proven by the numbers of participation in the classes of 2003 and 2005, which was 98% in the winter semester of 2005/06. For this evaluation, quantitative methods of platformstatistics can be used.

Parallel to this, the fear of exams is reduced as there are more grades influencing the final evaluation. This opinion is also adopted by the students of the class 2005 who discussed this topic in a forum. Quotations of students serve as examples:

„The grades on the exams are, of course, important. Though, they are only a snapshot and can be influenced by ones personal shape on that day. Therefore I regard it as highly important to include cooperation grades. It is also easier for students to keep on learning constantly and not only for an exam. You just memorize it a lot better.“ (Student of the class of 05, 6. Oktober, 2005)!

The development of e-learning at our university initially was received a bit sceptically, not unusual for new developments, but by now I regard it as something very positive as it helps us with facilitating our Science- and Projectworks because of it's hand on approach. It has been proved to be perfectly suited for all kinds of communication.

Meanwhile, due to the frequent use of those tools in several courses it could be achieved, that all students got rid of their initial reluctance towards this new type of learning and working. By now MOODLE is part of our everyday life just as e-mailing or using mobile phones (Student year02, 2005)“

It should be kept in mind that fear is felt differently by all individuals. Therefore a common recipe for creating a situation of fear in a class cannot be provided.

This brings up the question until what extent fear is already in the students. If students are accompanied by fear from the beginning – if fear is a basic setting – the creation and increase of this feeling would lead to negative consequences such as failure-motivated-learning behaviour. Additionally it is not clear how much fear has a positive impact – if one can talk about positive impact of fear in connection with learning at all (citation of the author).

Side effects are desired

Positive aspects of the intensive work on projects can be seen in a survey that was conducted by a student in January of 2006:

- The number of students who rated their ability of communicating virtually with “very good” rose from 9% at the beginning of this education to 47% after a few months. Whereas the students who rated themselves as poor users in the beginning (19%) were nullified. Almost all the students (96%) now rate those abilities as “Good” or “Very Good”.
- The classes who are described here all use forums, wikis and messengersystems (100%). Also in their private time.
- Before their time at the university 37,5% described their level of computer knowledge as poor and 18,75% as very poor, now only 3,75% or 0,75% do so.
- Even though most of the students are on site, in Bad Gleichenberg, most of the time, more than half of the students (55,42%) assert that the communicate with each other virtually.

The students absolve 2 internships, 2 semesters. During the last three years, four of five students declared that the projectmanagement class was most useful for them during their time in the companies. In May 2006 the first graduates were surveyed on this – 70% answered that the combination of project- and informationmanagement was sustainably most important for them.

Outlook

At this time a diploma thesis on the topic of ePortfolio-strategies as a method for process accompanied learning is conducted by one author of this paper. Until the start of the conference, more evaluated results will be available. Another author moderates the development of a complete new peer-assessment modules for Moodle that will ensure the complete reproduction and tracing of the learning process to get even better insights on the learning portfolio. Also in this field more results will be available until the start of the conference.

In the full paper, the methodical didactical approach and its results on the class are even more visible.

The Approach: *"The main value of an online course is not the content, but the human interaction and activities that take place around it."*

The Motto: *This ePlattform is not a "thing", its a "place".*

Literaturelist

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Note: Four more theses have been used for this paper which we don't refer to now, for anonymity reasons.