

ePORTFOLIO-IMPLEMENTATION IN THE MASTER'S PROGRAM OF BUSINESS EDUCATION AND DEVELOPMENT



Dr. Michaela Stock
Karl-Franzens-University of Graz
Department of Business Education and
Development
Universitaetsstrasse 15/G1
A-8010 Graz
AUSTRIA



Mag. Anna Winkelbauer
Karl-Franzens-University of Graz
Department of Business Education and
Development
Universitaetsstrasse 15/G1
A-8010 Graz
AUSTRIA

Abstract

The introduction of the new Master's Program of Business Education and Development in the winter term of 2009/10 also marked the ePortfolio-initiative's kick-off. At the same time the companion research was started to accompany the initiative for a period of at least six terms. This article gives insights into the initial results of the companion research, which has the purpose to examine the ePortfolio-initiative's effectiveness.

Introduction

In the winter term of 2009/10, the Department of Business Education and Development at the University of Graz, Austria, launched a new five semester Master's Program of Business Education and Development. One of the most innovative elements of the new curriculum (not found in any other national program of Business Education and Development) is the structured integration of ePortfolio-work, which is implemented within the entire course of studies. The new ePortfolio-initiative is also anchored in the curriculum, which is available is publically available online. Information on the requirements of successful ePortfolio-work can be retrieved from the online curriculum. Also, they can gather information about the new ePortfolio-initiative on the webpage of der Department.

Due to its competence-oriented nature, a field of study such as Business Education requires students to internalize a philosophy of lifelong learning. Aim of the ePortfolio-initiative is to encourage students to become lifelong learners who are self-aware of their competence development and are able to reflect on their learning behavior. In the spirit of collect – select – reflect – connect, the ePortfolio-work supports the students to make their competence development transparent, reflect on their learning behavior and

promote their motivation to engage in sustainable reflective practice. The ability of self-reflection is a basic prerequisite for their professional future as a teacher. Teachers should be able to reflect their own competences to identify opportunities to improve themselves and thus, to ensure the best education for their pupils. Moreover, the Department of Business Education and Development assumed that a structured ePortfolio-work encourages the Master students to act as multipliers to use this instrument independently in their future teaching activities.

In addition to the launch of the ePortfolio-initiative, a companion research was introduced to evaluate the whole initiative. The companion research is developed and conducted by a working group which consists of academic staff of the Department, an ePortfolio-coach and a sociologist to proof the methodology of the companion research. They also developed the evaluation tools which are used in the companion research and are responsible for the examination and interpretation of the results of the companion research.

The companion research's first results show that some students are not always convinced of the ePortfolio-work. In order to increase their conviction, the working group considers additional coaching units in the form of focus groups in future.

Purpose of the Study

The introduction of the new Master's Program of Business Education and Development in the winter term of 2009/10 also marked the ePortfolio-initiative's kick-off. At the same time the companion research was started to accompany the initiative for a period of at least six terms. This article gives insights into the initial results of the companion research, which has the purpose to examine the ePortfolio-initiative's effectiveness. To meet this requirement, the following objectives were established for the companion research:

Objectives

- Evaluation of the implementation process concerning the ePortfolio-initiative.
- Evaluation of sustainability (continuation of ePortfolio-work by students, independent from course work).
- Self-Evaluation of the ePortfolios' effectiveness with regard to
 - students' attitude towards ePortfolios and self-reflection,
 - the function as a multiplier later, and
 - expected benefits for future job applications.
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Limitation

Fact is that this research project is not aimed at measuring competences per se but focused on the students' change of the subjective perception of their individual competence development by doing ePortfolio-work. Furthermore, it should be noted that ePortfolios are not used for performance assessment and teachers, therefore, have no access to individual ePortfolios.

Methodology

In a first step a short overview about the term ePortfolio is given, after that the methodology of the ePortfolio-initiative and the companion research is discussed.

Review of Literature

The term ePortfolio generally describes an electronic collection of competences, knowledge and skills (Belgrad, Burke, & Fogarty, 2008). This article uses the definition of ePortfolio by Hornung-Prähauser, Geser, Hilzensauer, & Schaffert (2007) that an ePortfolio is a digital collection of works made with skills by a person, who seeks to document and illustrate the product (=learning outcome) and process (= learning path/growth) of their competence development in a specified period of time for a specified purpose. Further the ePortfolio-initiative is based on the competence model developed by Peterszen (2009) covering four areas of competence: professional competence, social competence, methodological competence, self-competence as well as the intersection of these competences, which is the holistic ability to take action, respectively learning empowerment.

ePortfolio-Initiative

Every student has to do ePortfolio-work at several stages over the course of studies. At each of these stages students will be professionally coached with regard to their ePortfolio-work.

Professional coaching means that an ePortfolio-coaching is implemented in cooperation with the Academy of New Media and Knowledge Transfer (in short: academy). Coaches from the academy conduct ePortfolio-units in specified courses of the Master's Program of Business Education and Development. During the term the academy also supports the students with individual coaching lessons.

The following description of the conduction of the ePortfolio-work in the first term should provide an example for this process:

- Introduction of theoretical and practical aspects of ePortfolio-work.
- Competence development through conversational student pair activities.
- Design of an individual ePortfolio (home assignment).
- Feedback and suggestions for improvement provided by a coach and fellow students.
- Individual coaching and guided reflection.

ePortfolio-work will be done in the first, third and fifth terms. Each stage of the ePortfolio-initiative will establish a different focus. Whereas ePortfolio-work in the first term will be focused on self-perception and the reflection of social competence and self-competence, ePortfolio-work in the third term will mainly be concerned with the reflection of professional and methodological competences. In the fifth term, finally, the reflection of a comprehensive, holistic development of learning empowerment will take center stage.

Companion Research

The companion research is conducted by a working group consisting of academic staff of the Department of Business Education and Development, an ePortfolio-coach and a sociologist. One semester before the ePortfolio-initiative was launched, the working group began with the conceptualization of the companion research. In the first meetings the working group started to discuss the objectives of the companion research. Further, it was decided to choose questionnaires as the evaluation instrument.

Based on the research's objectives to evaluate the implementation process, the sustainability and the effectiveness of the ePortfolio-initiative, appropriate questions for the questionnaires were derived. Upon completion, a pretest with four students was conducted. The result of the pretest was sufficient – the questionnaires worked very well. The questionnaires feature qualitative as well as quantitative items, the latter of which will be measured on Likert-scales. The Likert-scales use numbers from one to five and corresponds to the Austrian school grading system, in which 1 is excellent and five is insufficient. All questionnaires contain recurring elements in order to make the students' subjective competence development transparent.

Each questionnaire uses the following elements:

- Evaluation of structural implementation.
- Evaluation of self-perception and awareness of individual competences.
- Evaluation of sustainability – motivation for sustainable use.

In general, the companion research is designed as a panel survey, in which the same students are measured on the same units over time. This survey method was chosen because of its usefulness for researching a potential change of the development of competences at the individual level. The questionnaires are handed out to the students before they start with their term-specific ePortfolio-work. After filling out the questionnaires, a member of the academic staff collects them again, before the ePortfolio-work is started. This procedure guarantees that the ePortfolio-coach is not involved in the companion research's administration and ensures anonymity. Another advantage of this procedure is that as the questionnaires are hand collected immediately, the questionnaires' return is 100%. However, as some students do not finish the Master's Program, they are not included in the companion research's later stages, which induce the problem of panel mortality. As the companion research is in the beginning phase, it is unclear how severe the panel mortality issue will turn out. The working group further processes the collected data with the statistical software SPSS Version 19. Figure 1 illustrates the design of the companion research.

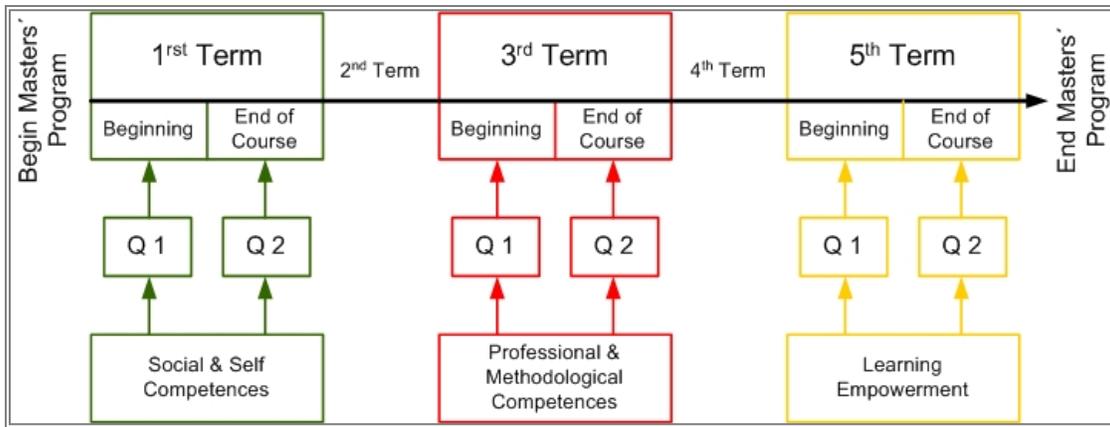


Figure 1: Research design

Surveys are taken at the beginning of the term (Q 1), before the conduction of the ePortfolio-unit, as well as at the end of the term (Q2). For example, the measurement of competence development starts with an analysis of the status quo via questionnaire one (Q1) in the first term. This analysis of the status quo gathers information on students' knowledge of the ePortfolio-method and their awareness of and reflection on their own competences. Questionnaire two (Q2) is designed to measure individual competence development and competence-related self-perception of students at the end of the term. This procedure permits a quantitative comparison of Q1 and Q2. In order to ensure the creation of a suitable framework for ePortfolio-work, there will also be an assessment of the structural and organizational implementation by students.

First Results

This section presents some of the companion research's first results of in the academic years 2009/10 and 2010/11, concerning the evaluation of structural implementation, the student's self-perception of their own competences and their attitude towards future ePortfolio-work. A total of 170 students were surveyed, who already passed the first semester of the new Master's Program in that time.

The following figure 2 presents an overview of the student's satisfaction concerning specific items of the implementation process of the ePortfolio-work. The students were able to rate between 1, which means excellent and 5, which means poor satisfaction. The used scale corresponds to the Austrian school grading system.

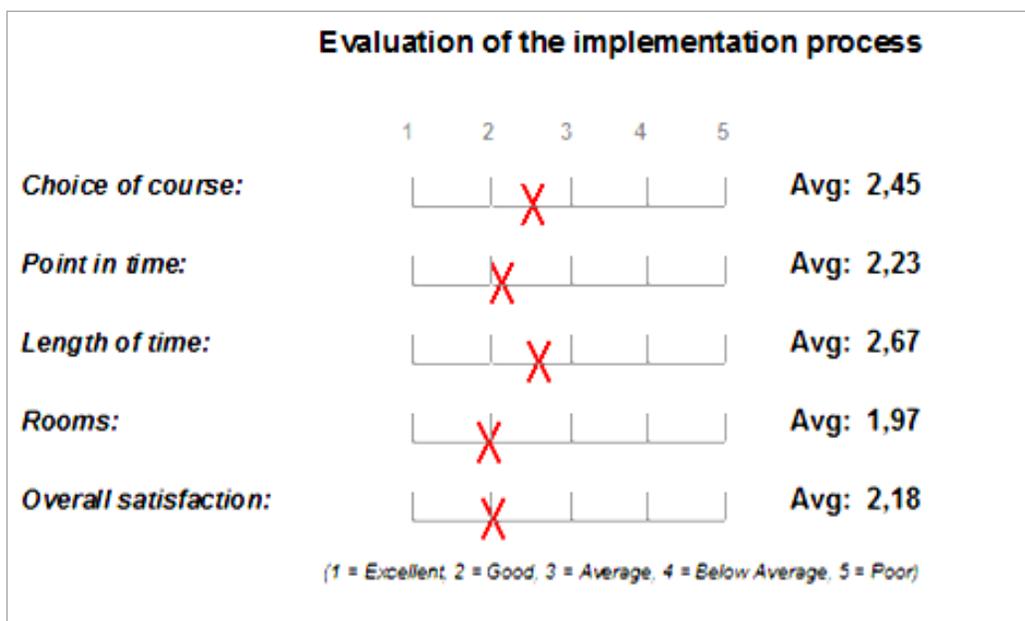


Figure 2: Evaluation of the implementation process

As these results indicate, students (n=170) students are pretty satisfied with the structural implementation (average ratings range from 1.97 to 2.67). This suggests that students were satisfied with the choice of course and the time of the ePortfolio-introduction. Students were least satisfied with the length of time dedicated to ePortfolio-work during class. The assessment of overall satisfaction with the structural implementation of the ePortfolio-initiative yielded a satisfactory average rating of 2.18.

The next part of the survey was concerned with assessing students' self-perception with regard to their individual competences before and after the creation of their own ePortfolio. Figure 3 shows the change of students' self-perception over the course of time.

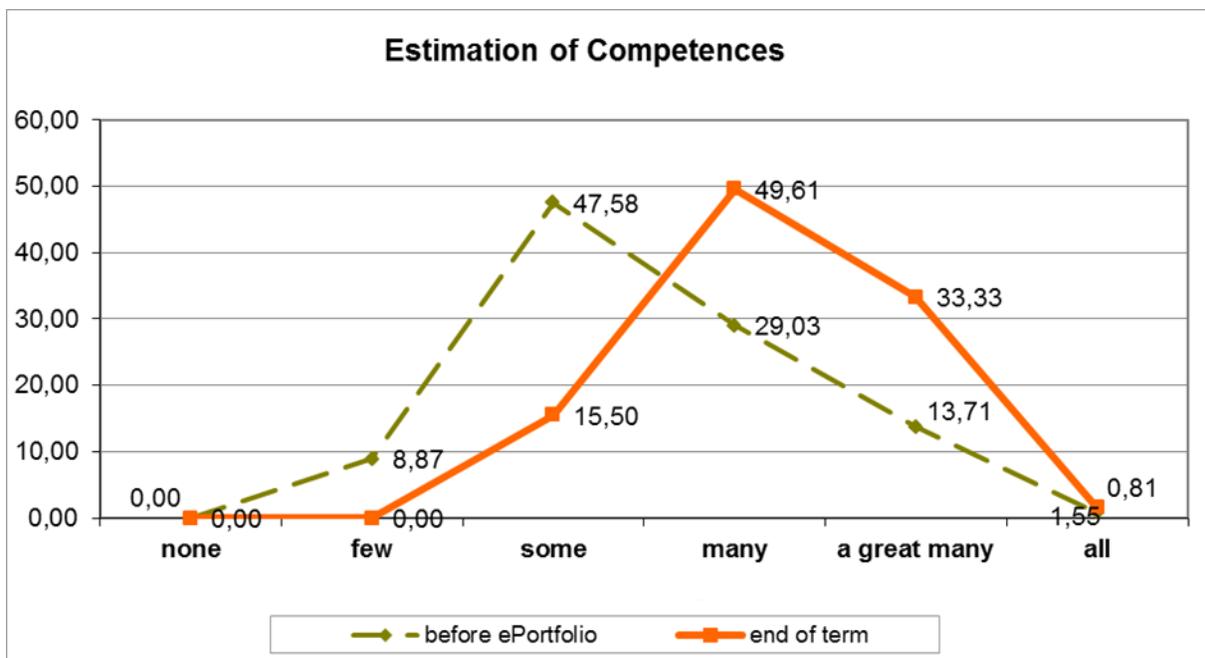


Figure 3: Evaluation of self-perception of individual competences

The dotted line depicts the results before the start of the ePortfolio-initiative, showing that about 55% of the students questioned indicate that they believe themselves to possess only few or some competences. The solid line in contrast reflects the results at the end of the term. A significant shift of the curve to the right can be detected. After ePortfolio-work, approximately 83% of students indicated that they believed themselves to possess a great many or many competences. This shift was also reflected in a highly significant difference of the mean value. At the end of the term students were clearly more aware of their competences than at its start.

Further lines of inquiry went along the lines of potential future use of ePortfolio-work. More than 65% of the students said, that they planned to continue developing their ePortfolio for the purpose of self-reflection with regard to their own learning processes. In addition, 76.9% rated the ePortfolio-initiative in the Masters' Program of Business Education and Development "very beneficial" and "rather beneficial".

Conclusions and Recommendations

The ePortfolio-initiative aims at giving students space for an analysis of their own potential and helps them grasp the importance of autonomous lifelong learning. The

integration of ePortfolio-work in the curriculum of the Masters' Program of Business Education and Development represents a first step in the right direction. The experience of the first four terms of ePortfolio-work has shown that external coaching and clear disconnection from performance assessment are essential. It has been also revealed, however, that nudging students towards a sustainable use of ePortfolios will still require considerable efforts.

The goal of promoting a disposition towards lifelong learning, constant development and reflection cannot be limited to selected courses with integrated ePortfolio-work. It is, therefore, vital that students are shown the benefits of ePortfolio-work over the entire course of studies, so that they become intrinsically motivated to continuously engage with their ePortfolios on a voluntary basis. Reflection is a virtue required in almost any realm of learning and development and should not be taken for granted. A disposition towards self-reflection is not a purely innate quality people can be assumed to be born with, but something that has to be trained. Many people find it difficult to critically contemplate themselves and their learning processes and relate themselves to their environment. Writing these thoughts down often proves to be a particular challenge. (Earl, 2003)

The companion research revealed that certain students' attitudes towards ePortfolio-work leave room for improvement. A study by Rick Breault (2004) described how frictions concerning the implementation of the ePortfolio-method can negatively affect students' acceptance of the instrument. He listed the following problem areas, which applies to the ePortfolio-initiative at the Master's Program of Business Education and Development:

- Conflicting objectives of ePortfolio-work.
- Lack of transparency with regard to the benefits of ePortfolio-work.
- Lack of transparency with regard to the role and integration of ePortfolio-work within the curriculum.

Future research of the department will address these problem areas, investigating whether potential frictions and contradictions concerning the implementation of ePortfolio-work result in diminished acceptance on the student's part. A first measure in this context will be the conduction of focus group interviews to add a qualitative dimension to the quantitative information gathered by questionnaire.

To conclude, coaching efforts with regard to students' self-reflection skills have to be intensified. Furthermore, the process of implementation has to be investigated with regard to potential frictions and contradictions. The following suggestions for improvement can be derived from these observations:

- Clear communication of the objectives and purpose of the integration of ePortfolio-work in the curriculum.
- Systematic integration of ePortfolio-work within the curriculum.
- Demonstration of the benefits of ePortfolio-work for students' lives, instilling a passion for self-discovery.

By eliminating the obstacles that hamper students' motivation for ePortfolio-work, the ePortfolio-initiative can achieve its desired multiplier effects with regard to

students' professional future as teachers in schools. Only those young teachers, who possess the capacity of self-reflection, text competence and positive attitudes towards ePortfolio-work, will be able to pass on this instrument to their pupils. Once ePortfolio-work has found its supporters within schools, pupils too will be guided towards self-reflection and lifelong learning.

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