

Evaluation of E-Portfolio-Software

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Abstract:

E-Portfolios are a new type of software and it is still relatively vague to determine, which functions are obligatory – that is which functions constitute characteristic features – and which functions are just optional (“nice to have“). This article describes the concept and the preliminary results of a research project which was conducted to evaluate E-Portfolio software, and aims at providing decision guidance for implementing E-Portfolios in higher education - first and foremost from the pedagogical perspective. Which recommendations can be made to an institution which now wants to implement electronic portfolios with a certain objective?

1 The crucial question: What is E-Portfolio software?

Presently the market of E-Portfolio software has simply become unmanageable. In his position paper, Serge Ravet – director of the European Institute for E-Learning (EifEL) and initiator of the campaign “E-Portfolio for all“ – puts the various E-Portfolio terms straight and tries to outline the foundation for E-Portfolio software-architecture of the future, from a rather organisational point of view [1]. Graham Attwell, an expert on advanced training and E-Portfolios from Wales, is of a different opinion. According to him, the future of e-learning lies primarily first and foremost in the creation of a “personal learning environment (PLE)” [2]. Both experts formulate their ideas for the future of individual learning processes, in which the electronic portfolio plays a major role – even if they do so from two totally different perspectives. At the same time they both agree that at the moment the educational and technological implementation with current software products is still far from these visions. But which recommendations can experts give to an institution in higher education now, if they want to implement a system for the use of E-Portfolios within their studies? Which kind of software best suits the intended portfolios? And, which criteria can the institute of higher education utilize to determine which is science-based and forward-looking?

2 Starting point of the evaluation: a taxonomy for E-Portfolios

The main reason for the presentation, and specifically respectively development, of a taxonomy for E-Portfolios is that the various forms of appearance manifestations of E-Portfolios can be classified according to a consistent method. Again and again it is emphasized that E-Portfolios can be used in various ways; which that is why in literature/studies show there are more than twenty different types of E-Portfolio classifications found in literature on the topic [3]. Due to the broad meaning of the term „E-Portfolio“ the development of this taxonomy is a tedious and iterative process, which was started by Silke Kleindienst, but has not been completed yet [4]. Kleindienst identified five major types of E-

Portfolios and corresponding “purposes” and “learner activities” that were used as “meta-categories” for the criteria checklist within the research process.

3 Research Design

In literature, various evaluation methods for software products are offered [5]. Each of these methods holds a number of advantages and disadvantages, so that in practice a useful combination of various methods proves to be most suitable. For our evaluation, we applied the method of “Qualitative Weight and Sum (QWS)”, originally developed by Michael Scriven [6], which eliminates the disadvantages of mere numerical operations as much as possible. The QWS-method represents an iterative process of evaluation, which focuses on a weighted list of criteria (from “Essential” to “Not Important”).

The basis for the criteria checklist are the 69 E-Portfolio software criteria, which were developed in course of the WCET-study [7]. Additionally, we introduced a meta-level layer, which refers to the taxonomy of E-Portfolios mentioned before. Thus there are five major categories:

1. Collecting, organising, selecting
2. Reflecting, testing, verifying and planning
3. Representing and publishing
4. Administrating, implementing, adapting
5. Usability

The 69 criteria which were found in literature were commented on and justifiably classified into these meta categories.

4 The results of the evaluation process

As a result a new checklist of 27 criteria was created in an iterative process, which was assessed by 25 E-Portfolio experts and weighted according to the QWS-method.

Considering our propositions and minimum requirements, a list of roughly around 60 E-Portfolio providers was created at the end of January 2008. The evaluation of the software products was carried out in the period of April/May 2008 by the same panel of 25 E-Portfolio experts, using the weighted criteria list. After the last evaluation period in June/July 2008 a final paper will be available, which will provide a overview of 12 recommendable products, with ratings, detailed criteria checklists, and a description of major functions as well as recommendations in regard to the intended use of electronic portfolios.

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