e-Portfolio in student’s evaluation

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Abstract

In students evaluation the e-Portfolio can provide interesting feedback about student’s ability to collect, organize, interpret and reflect on documents and sources of information. The existence of e-Portfolio can help the continuing professional development of the student, encouraging them to take responsibility for their work and demonstrate the results of their own learning. Also gives the learners the ability to manage her/his learning. The paper presents a pilot project taking place at the ODL Department of the University of Bucharest. This paper mean is to present the way in which e-Portfolio can be used in student’s evaluation. The students registered in the open learning system of the University of Bucharest form the target group. Pedagogical aspects and technical elements will be briefly analyzed in this study. Now, student’s evaluation process consists from 40 percent semester homework and 60 percent written exam mark. Homework can be sent using UniBuc Virtual Campus or via e-mail but the final exam require the physical presence of the student. The ID system experience accumulated in seven years of existence will be helpful in development and anticipation of the e-Portfolio system used in students’ evaluation.

Keywords: e-Portfolio, evaluation, assessment, distance learning

1 Introduction

Portfolios are not just for students and can be used in order to develop teachers’ own professional expertise and recognized achievements. An e-Portfolio is a thoughtfully organized collection of artifacts that illustrates professional status, pedagogical expertise, subject matter knowledge, knowledge of learning processes, and professional and personal attributes that contribute to teaching.

The aim of this paper is to explore the implementation of e-Portfolio within different educational and training contexts and the benefits of using an e-tool for skills development.

Students must create a portfolio during their period of study so that the portfolio can serve as a record of accomplishment, of particular experience evolution, a statement of growth, maturity. Constructing the portfolio is actually a learning activity that make possible active engagement of the student in the learning process rather then just be recipients of information. e-Portfolio make the outcomes, or results of learning more explicit, identify the achievements of learning and support the concept that learning is a lifetime activity.
What is an e-Portfolio?

e-Portfolios have continued to evolve for many years. Since the early 1990s the term “electronic portfolio” has been described in a range of ways, but an e-Portfolio is a web-based information management system that uses electronic media and services. The student creates and maintains a digital repository of artifacts (individual pieces of work), which they can use to demonstrate competence and reflect on their learning. Having access to their records, digital repository, feedback, and reflection, students can achieve a greater understanding of their individual growth and even career planning. In education and training contexts, e-Portfolios are learner-centered and outcomes-based. They are created when individuals selectively compile evidence of their own electronic activities and output as a means to indicate what they have learned or know. In this sense, e-Portfolios function as a learning record or transcript. Given their developmental character, e-Portfolios function as both an archive and a developmental repository that is used for learning management and reflections.

The e-Portfolio is a repository of students’ learning. It allows a student to create a system of tracking their work over time with students and faculty reflecting on it. The organized presentation of their material allows a student to submit work, allow faculty to comment on it, enable the student to review it and aggregate the information over a semester and eventually an academic career. In turn, when the student graduates and applies for a job, the e-Portfolio provides an employer with relevant information about the potential employee.

Types of e-Portfolios

There are three types of e-Portfolios: developmental, assessment, and showcase.

Developmental e-Portfolios. Demonstrate the advancement and development of student skills over a period of time. Developmental portfolios are considered works-in-progress and include both self-assessment and reflection/feedback elements. The primary purpose is to provide communication between students and faculty.

Assessment e-Portfolios. Demonstrate student competence and skill for well-defined areas. These may be end-of-course or program assessments primarily for evaluating student performance. The primary purpose is to evaluate student competency as defined by program standards and outcomes.

Showcase e-Portfolios. Demonstrate exemplary work and student skills. This type of e-Portfolio is created at the end of a program to highlight the quality of student work. Students typically show this portfolio to potential employers to gain employment at the end of a degree program.

Hybrids. Most e-Portfolios are hybrids of the three types of e-Portfolios listed above. Rarely will you find an e-Portfolio that is strictly used for assessment, development, or showcase purposes. Occasionally, you may come across showcase e-Portfolios that do not show evidence of self-reflection, rubrics for assessment, or feedback; however, as Helen Barrett, an expert in the field of e-Portfolios, would say, "A portfolio without standards, goals and/or reflection is just a fancy résumé, not an electronic portfolio".
3 How can we use e-Portfolio in evaluation?

Assessment is one of the most important parts of the learning environment. The main purpose is to assist the learning process and secondly to determine the effectiveness of the educational system – students learning, students certification and quality assurance. In students evaluation we want to assess the basic knowledge, skills, higher cognitive skills. For this we have to have clearly defined learning outcomes for both the overall course and for constituent modules. Also, the learning outcomes should ideally be stated in term such as knowledge, skills and competencies to reflect the levels of the cognitive processes involved.

Throughout the semester, the teachers have to get feedback from student’s achievements. The formative assessments are carried out periodically during a course to measure the level of learning, and are used mainly for diagnosis and feedback. The summative assessments are carried out at the end of a course give the final mark for a diploma or a certificate. In distance learning system there are numerous assessment methods available at the moment, but the majority tend to evaluate at the lower levels of cognitive skills. Technology has developed rapidly over past years, which affected the ways of communicating and learning but has not been fully exploited for assessment purposes.

The final grade mark has a calculation algorithm in which the component part of the two types of evaluation is included (homework and on-line tests from one side and final exam to the other side). Each of them has a specific percent from the final mark.

Usually, the final exam is 60% of the student’s final grade mark and it is probably the only factor, which keeps the most characteristics of the “traditional” education. It can be an oral or written exam depending on the specific of each.

The Distance Learning Department of the University of Bucharest benefits of a Virtual Campus (http://portal.credis.ro/), which is a bind and a bridge in the relation with students.

Virtual Campus was created to allow interactive, mainly asynchronous, communication between students and teachers, and between students and students. Virtual Campus is an Internet based e-learning delivery and support system. It uses a client-server technology and common interface to integrate a series of services and applications. It views the learner as the heart of the educational system.

To have access to the Virtual Campus the student receives a password and a username at the beginning of the course.

3.1 Homework, projects

Each week the students have to solve many types of homework. The new factor is given by the chance of making their homework with Portal assistance. Even if the student didn’t participate to the tutorial meeting, he still could consult the aiding material, because the section called “Materials” is helping him 24 hours a day.

The professor or the course manager can post there information, necessary to solve the homework, homework’s deadline and the ways to hand over it (e-mail, personal message through Portal). The “Materials” section can also be used in posting usefully information, so the student lay down his project.

Asynchronous communication is available for students, through forum discussions.
The questions from threads and their answers can be easily seen on the Portal; they have an arborescent structure. Once the professor receives the homework he can discuss it with every student. If the homework is send before the deadline, the professor can suggest rewriting it until it will be well done.

3.2 On-line tests
On-line tests represent a modern way for student’s evaluation since the hindrances caused by the time and space are eliminated.

They allow comparing the performance obtained by one single student during the whole semester, as well as the knowledge achieved by a group of students. These results can be stock and one can make analysis regarding each student’s evolution in that matter.

The tests are at the end of the semester, helping on to verify student’s theoretical knowledge. Students can solve them in a specific period of time, no mater from where.

They are grid-tests whose right answer is to be chosen doing a single click. When the test is finished, the student receives a mark depending on the number of right answers he/she gave and his mark is automatically scored in an electronic roll that the course manager administrates.

Solving the tests can be done both at home and at the office, but it is compulsory to have Internet connection of the computer you use. During the entire semester, students have many tests for one discipline, and the professor is able to make final evaluation in accordance with the activity carried out by them.

3.3 e-Portfolios
A portfolio is an organized collection of completed work. What makes e-Portfolios different is the intersection of three trends:

a. Student work is now mostly in electronic form, or is based on a electronic file even if it's printed out: papers, reports, proposals, simulations, solutions, experiments, renditions, graphics.

b. The students have ready access to the Web.

c. Databases are available through Web sites, allowing students to manage large volumes of their work. The "dynamic" Web site that's database-driven, instead of HTML link-driven, has become the norm for Web developers.

The e-Portfolio allows freeing student work from paper and making it organized, searchable, and transportable.

One of the problems we have to resolve is:

Storage. We have to use the server in order to save all materials. For this we need a standard and a template. Using the Portal students will have access to a web form that will allow them to upload multi-media files and text files. This materials can be public or private.

Security: Because the students need a user name and a password in order to connect to the portal we can maintain a high level of security for personal information transmitted over the wires or stored on the server.

Certification: When grades are submitted, the work at that point is certified as the authentic work of each student. After that, students would have access only to the
unofficial version of the data and would no longer be able to alter their work in the official version.

The materials that can be stored are not just text-based materials, but also multimedia assets which can be presented in any digital format, including the WWW. E-Portfolio can lead to a new learning landscape allowing the management of material but also an opportunity for reflection, engagement and the formation of communities of learning providing a means to promote deep learning.

In order to prepare an e-Portfolio the students have to collect all the material. It’s very useful for the students to use online archive so that they will have easy access to their work. This collection will also allow them to see their work, progress, and development over time.

The next step is the selection of key materials from this collection. Using the materials that demonstrate its achievements the student will design a website to showcase this work creatively.

The e-Portfolio is not completed without the reflection on the work. Reflection is a deliberate attempt to examine the act of learning and to document the learning. This means that the student has to think critically about the total learning experience and drawing connections between a body of knowledge and its applications.

The e-Portfolio will be use to make personally meaningful connections between academic environment, service, community, and work experiences. It will serve as a showcase for the student’s best work, documenting the growth and change over time.

4 Conclusions

Among others, e-Portfolio increase learning effectiveness, model professionalism, enhance information technology skills, reflections on artifacts as well as how they match goals and standards, help students make connections among their formal and informal learning experiences, prompt learners to articulate their learning goals from different perspectives and allow individuals to display learning in ways overlooked or undervalued by other assessment means.

The following outlines the benefits for e-Portfolio user for students:

- increased learning effectiveness
- model professionalism
- enhance information technology skills
- gain academic credit for learning beyond the classroom
- reflections on artifacts as well as how they match goals and standards
- help students make connections among their formal and informal learning experiences
- prompt learners to articulate their learning goals from different perspectives
- allow individuals to display learning in ways overlooked or undervalued by other assessment means

Students seem most interested in the ways e-Portfolios can flesh out their resumes, both before and after graduation. If internship interviewers or potential employers can see an online resume that includes views of a student's actual work, that student may be more likely to obtain the position. Students also want to see where they are in their college career regarding requirements. e-Portfolios can facilitate this.
When students study for a test, they can review their own work and read the instructor's comments on their work. e-Portfolios will make this easier to do, especially over multiple semesters. If a student wants to transfer, the e-Portfolio data may ease the process of articulation with another college or university. After graduation, having their work still available to them in a university-supported environment will provide ongoing value and help sustain the relationship with their alma mater.

References