

The ePortfolio as a proof of competency

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Among her research fields she is actually interested on e-learning and precisely the ePortfolio and its interaction with different environments.

She has three courses on the Web: one is located in the AUF site, it is about data analysis and two others are located in the UVT. One course is about TIC and the other is about SQL and data bases.

Abstract: This paper presents the concept of ePortfolio and some guidelines to insure the authenticity and the security of its content. The goal is to use the ePortfolio as a proof of competency.

Keywords: ePortfolio, student, competency

Introduction

The concept of Portfolio has been used for many years ago by artists, painters, and architectures to present the best of their realisations. Its content may be a comment on a newspaper about this realisation or even about a photo.

Portfolios have been with us for a very long time. They are the reincarnation of the large memory boxes or drawers, where our parents collected starred spelling tests, science fair posters, the summary of our marks, our teachers' appreciation for each trimester... Each item was selected by our parents because it represented our acquisition of a new skill (Hebert, 2000).

Reflecting on the collection allowed us to attribute importance to these artifacts, and by extension to ourselves, as they give witness to the story of our early school experiences.

These collections are the genuine exemplar for documenting children's learning over time.

How many times did you hope to have the opportunity to inform your teacher, from the beginning of the school year that you were a good pupil during last years? You certainly thought that this will avoid you being punished or blamed for a wrong answer.

In the other hand did you never try, after postulating for a job, to contact the company manager because you are not very proud of the marks you had in your master degree for example?

These marks are due to the small accident you had during the last exam. In fact you are generally among the first five students and you realised many projects that received the compliments of your teachers? How to present these proofs?

The concept of ePortfolio tries to satisfy all of these interests and others.

I Definitions and goals

In the field of learning the concept of ePortfolio is used since fifteen years in the United States of America and in Canada, since few years in Europe and is relatively new in Africa.

1.1 Definition

The National Learning Infrastructure Initiative (NLII, 2003) defines the electronic portfolio as a:

- a collection of authentic and diverse evidence,
- drawn from a larger archive representing what a person or organization has learned over time
- on which the person or organization has reflected, and
- designed for presentation to one or more audiences for a particular rhetorical purpose.

The 'Association for Supervision and Curriculum Development' (Nwea, 2007) considers that the student ePortfolio has three sub-eportfolio:

- the learning portfolio that shows the student's progress in the knowledge acquisition,
- the assessment portfolio that shows the evaluation of the teacher
- the presentation portfolio that shows the best of the works of the student.

1.2 Benefits of an ePortfolio

According to Barrett (Barret, 2007) electronic portfolios are much more than innovative resumes as they show reflection, evolution of thought, and professional development. The benefits of the ePortfolio depend on its user as outlined here (Ims, 2005).

Benefits for students:

- increased 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
- allow individuals to display learning in ways overlooked or undervalued by other assessment means

Benefits for Faculty

- leverage student motivation
- align objectives and evaluation strategies
- allow for more fruitful advising
- enable the efficient management of student deliverables in distance courses
- enhance relationships among ePortfolio creators and mentors
- respond to calls for greater accountability
- increase transparency for evaluation and benchmarking

These are essentially national benefits but the usage of ePortfolio can also have international benefits too (Zubizarreta, 2004). The actual globalisation offers the opportunity to study each year in a different country and to progress at the same time (Jafari, 2006). Presenting the proof of its degree and competency may reduce the unemployment throughout the world. This is the case for Europe with the project Europass which emblem is “Whether you are planning to enrol in an education or training programme, looking for a job, or getting experience abroad, it is important to be able to make your skills and competences clearly understood” (Eurasmus, 2006).

Having university degree and competency clear throughout the world is certainly the aim of the ePortfolio users. But how to have confidence in the ePortfolio content ?

II Management of the ePortfolio

The authenticity of the ePortfolio's content is tightly dependent on its management. The first recommendation is to avoid the free providers and to lodge the ePortfolios in an official organism because the security in a free provider is frequently haphazard. Being in a free provider does not ensure confidence in the content of a site as there is not an official institution behind it. The possible question is then who is the official organism that should supervise the management of the ePortfolio?

1) Management by the student's institution.

The management of the student's portfolio may be insured by his institution (primary or secondary school or even the university). Conceptually this is the easiest solution but the most expensive as each institution will be obliged to have its own webmaster and its robust server. The webmaster will be responsible of the attribution and the removal of privileges to teachers and students. He will also be responsible for the safety of the data (backup,...).

But what about changing from institutions in the middle of the school year for example? Problems may concern the compatibility between the software managing the ePortfolio in each institution and also the ePortfolio's type selected by each institution.

2) Management by an official organism.

The proposed suggestion, based on internet, is to consider an official organism relevant to the ministry of education called for example "Eport_center".

The Eport_center may be equipped with many huge server and a group of webmaster to insure the management of the ePortfolios of all the learners (pupil, student,...).

Generally, primary schools, secondary schools and also universities are hierarchically relevant to the ministry of education. For each institution, the ministry can have information about its teachers and also their pupils or even students. We then propose to affect for each webmaster a certain number of primary schools to manage the ePortfolio of their pupils. A webmaster must then tightly collaborate with the different actors in the pupil's school year (headmaster, the pedagogical team,...).

In fact having for each course, its dates (begin and end), its teacher(s) and the associated pupils is important to grant and revoke privileges to students and teachers.

This centralized solution is conceptually complex but certainly the cheapest and the most efficient. It reduces the equipment investment as the storage of the ePortfolios will be centralised in a few robust computers. The EPort_center will manage the ePortfolio of the pupils in the primary schools, the secondary schools and also the universities as presented by the figure 1.

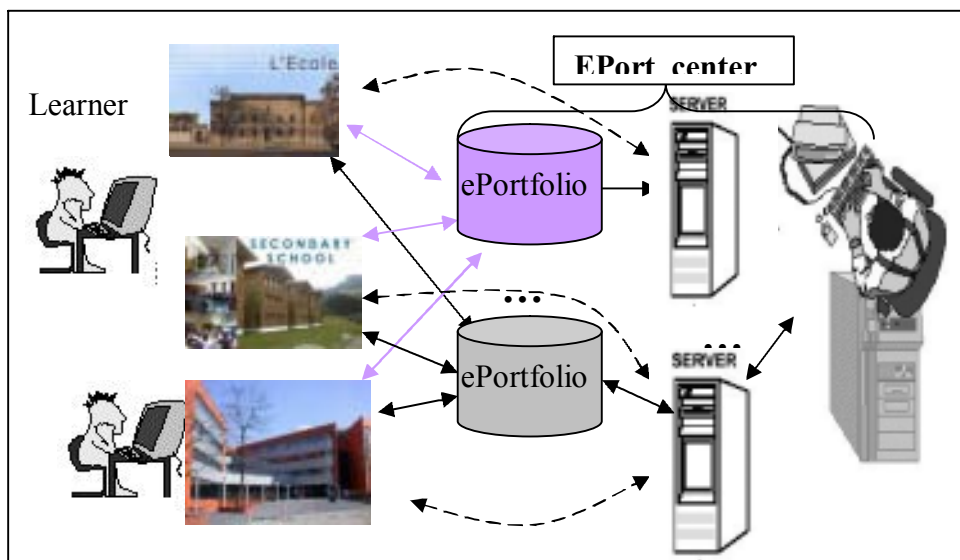


Figure 1: EPort_center and ePortfolio

This centralisation contributes certainly to reduce the problems of ePortfolio's compatibility. When a student changes from one institution to another it corresponds to changing some parameters in his profile.

These suggestions will certainly contribute to insure the authenticity of the ePortfolio content at the national level. But an international usage of it is certainly more profitable.

III. An international usage of the ePortfolio as a proof

Our aim is to offer to our pupils or students the possibility to use their ePortfolio in all their universities transactions and also in their job environment. For example a Tunisian student can follow his studies in a European university by just presenting his ePortfolio. Even a Tunisian engineer can

apply for a job in an international company using his ePortfolio as a proof of his degree and competency.

A mutual recognition at the international level requires certainly multiple meeting between similar EPort_Center to establish protocols. We can also mention that the concentration of the management of ePortfolio in one organism may be a factor of success of such meeting as we have one organism by a country.

Besides this administrative or political aspect we can mention that the usage of a Public Key Infrastructure will certainly reinforce the technical aspect. A Public Key Infrastructure (PKI) is a powerful tool that may help institutions use electronic transactions more securely (Inria, 2007). The objective is to facilitate trust in distributed electronic transactions and mitigate the risks associated with those transactions.

This insurance may encourage including the recognition of electronic diploma. To take advantage of this process, diploma or certification of success may also be included in the ePortfolio to be used as a proof while changing from one institution to another for example.

We should also mention that the centralization may also have its disadvantages and a compromise should be determined.

IV. CONCLUSION

The usage of the concept of ePortfolio becomes a common practice in the north American universities and it will be the case in Europe too. In 2010 each European will have his own ePortfolio. Our proposition is to offer an ePortfolio for each pupil and student by considering an organism relevant to the ministry of education called Eport_center. The Eport_center may manage the ePortfolio for each student. A centralized data base may raise many questions relevant to the security and the authenticity but this organisation may ensure the authenticity and the security of the ePortfolio content.

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