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# EXPERIMENTATION OF THE E-PORTFOLIO WITH STUDENTS SEARCHING FOR A NEW ORIENTATION

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## ABSTRACT

Université de Bretagne-Sud put a study program into place called the COC “Cycle d’orientation et de Consolidation” which allows first-year students to make a new direction choice during the year. We are currently testing the use of an e-portfolio for students who are currently enrolled in this program.

In this Personal and Professional Project program, they develop the means to manage, organize, and archive information. This year, the approach will be using the e-portfolio.

Meant to be, first and foremost, an introspective and structuring process of one’s thoughts, it is also a tool for capitalizing on and exploiting collected information by structuring it. This paper will focus on the acceptability of the e-portfolio, meaning how the students will use and appropriate it within the specific framework of this program.

**Keywords:** e-portfolio, information, structuring, reflection, traceability, personal and professional project, technology acceptance model

## Introduction

In this paper, we present a specific action called COC “Cycle d’Orientation et de Consolidation”. It helps students to define and manage their personal and professional projects (PPP). This year, we have experimented, connected to the PPP, the use of an e-portfolio that has been developed at Université de Bretagne Sud, in France. Meant to be, first and foremost, an introspective and structuring process of one’s thoughts, it is also a tool for capitalizing on and exploiting collected information by structuring it [1].

The method of the PPP is based on a set of related activities, designed on one hand to acquire a better knowledge of oneself and one’s environment, and on the other hand, to acquire the skills and key competencies needed to succeed in a professional project. The e-portfolio keeps in memory all the results of the different activities involved in the construction and evolution of a professional project.

The first part deals with the COC which is a study program for students to better help them construct their personal and professional projects.

The second part of this paper gives a quick presentation of the e-portfolio, its foundation and its basic structure.

Finally, in the third part, we wanted to find out how the e-portfolio would be accepted. We answer the issues of e-portfolio use: Is the e-portfolio seen as useful, easy to use, and as an introspective tool for oneself?

Finally some conclusions and perspectives will be given.

# **1 – THE COC “Cycle d’Orientation et de Consolidation”: STUDY PROGRAM FOR PERSONAL AND VOCATIONAL GUIDANCE**

## **1-1. PRESENTATION**

The COC is a study program for students, which has been in place at Université de Bretagne Sud for 10 years. It is offered to first year students who have had difficulties or who are unsure of their choice. The objective is to consolidate student knowledge in a certain number of disciplines to prepare for a change of direction for the beginning of the next school year (another Bachelor’s degree, technological degree, A.S.,...) to create a new professional project with the help of a career counsellor and to validate the project through a training period in a business. This pathway will not lead to a degree but it is evaluated.

Each year, it includes around one hundred students from various majors coming exclusively from Université de Bretagne-Sud.

It specifically includes first year students with a French professional or technological high school diploma (STT, STI, SMS, STL,...), even a vocational training certificate, as well as students who had to redo their first year.

## **1 .2. INTEGRATION ON THE PROGRAM**

To integrate this program, a preliminary meeting is held with the student’s counsellor-teacher, and the student must be willing to do so.

Indeed, all of the first year students from various majors (science, law, economy, literature, foreign languages, history) have at least one meeting per semester with their counsellor-teacher who offers them, if need be, the possibility of integrating the COC according to the results obtained by the student and his/her project.

Once the tutor has agreed, and if the student is willing, he/she then goes to the university’s career center, the SUIO-IP (Service d’Information, d’Orientation, et d’Insertion Professionnelle), to schedule a personal meeting with a career counsellor to confirm the request of enrolling in the program or not.

## **1.3. DEVELOPMENT**

The program lasts for ten weeks during the second semester of the academic year. The student enrolls in compulsory and elective courses.

The students are evaluated regularly and there is a final exam to conclude the program. Class attendance is required, and is therefore verified for each class. Any absences are reported allowing a SUIO-IP worker to get in contact with the student rapidly to understand the reason for absence, or, if need be, to try to motivate the student to go back to classes.

Along with the classes, the student project is supported through both a collective and individual approach. The career counsellor regularly follows up on each student during the entire program and even after the end of the academic year. The counsellor makes sure the student was able to integrate the course of study of their choice that was in accordance with their project.

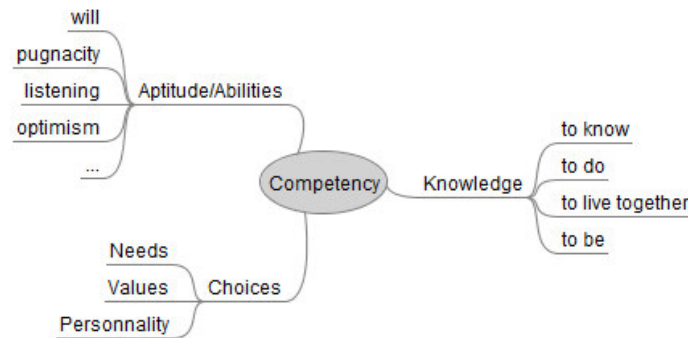
If this was not the case, meeting can be scheduled to try to find a solution that is adapted to the project. Each year, 80 to 90% of students manage to enrol in their course of choice.

The counsellor, while advising the student, will propose a certain number of activities based on the concepts described here after, which will help fill out the e-portfolio (cf. § 2).

It is within this framework that the students are asked to use the e-portfolio.

## 1.4. ACTIVITIES

Building a PPP is an essential part of student life. At that time he/she decides what he/she wants to become in the future and what place he/she wants to take in the society. To help himself/herself in this approach, the student must take information from his environment: on the economic situation, prospective situation, but he/she must also get introspection to know who he/she is. One of the underlying characteristics of introspection is understanding what competencies are [2]. One of the main objectives of the PPP is to characterise the competencies of the student. We present in the following the retain definition of competencies.



In our definition, competencies are based on three notions: knowledge, abilities and choices. The organization of the e-portfolio is closely linked to this definition of competencies.

### **Knowledge**

Even if other classifications of knowledge can be found in the literature, we focus on four aspects: knowing, doing, living together and being.

*Knowing*: will allow the student to understand and predict his/her environment. This is roughly learned in school. The effect is to stimulate discernment and increase curiosity.

*Doing*: will increase the quality and efficiency of the work. The side effect is that, in a team it will increase its trust in what people are able to do efficiently.

*Living together*: is an introduction to human diversity. It shows similarities, interdependence, social and cultural diversity between people.

*Being*: this characterizes the way we are in society. Autonomous, communication, judgement, charisma are some of the master words of this.

### **Abilities**

Abilities are characterized by the execution of aptitudes. Aptitudes are the personal features that make us different from one another. Abilities are the use of these aptitudes; if someone does not train his aptitudes they may be lost. For instance aptitudes are; will, pugnacity, listening, optimism, concentration, memory ...

### **Choices**

Even if we have a wide range of knowledge and a lot of abilities, if we are not able to use them in front of a situation then it is waste. The choices are motivated by three notions: needs, values, personality.

*Needs*: here we use the basic Maslow hierarchy of needs[3].

*Values*: are based on Schwartz's Value Inventory [4].

*Personality*: The underlying model is taken from Briggs-Meyer MBTI [5].

## **2. E-PORTFOLIO STRUCTURE**

The e-portfolio is a structure [6] designed to record the information acquired during the PPP activities. Initially, the structure is the same for all students, however the information stored in the portfolio will depend on the choices of each individual user. The student can modify the e-portfolio's structure by adding or deleting criteria but cannot change the basic structure. The students are free to create their e-portfolio as they wish within the above-stated five folios. They are then given full responsibility and autonomy to create sections in each folio to organize and personalize their e-portfolio throughout the elaboration of their PPP. This means that the description presented in this part is to be understood as a generic structure.

Furthermore, the originality of the e-portfolio resides in its functioning. In fact, it is possible to add information for two different means of use: through a graphic interface or through e-mail.

To create and build a personal professional project, the e-portfolio has a basic structure of five folios: my uniqueness, my discoveries, my project, my competencies, and my communication.

### ***My uniqueness***

The goal of this folio is to identify and keep all of the student's basic information.

### ***My discoveries***

This folio stores the results of the different activities the student has done to discover the working world. For example: documentary research, external view: reports on all the meetings, visits, conferences, forums, etc. in which the student participated, the student's personal network, which he/she will be able to use for his/her future project and complementary education: list of complementary skills or knowledge required to increase the potential of the student.

### ***My project***

This part defines all the criteria used to identify and manage a project. This section should be completed only after the previous two, as it is strongly connected to them both. In the criteria formalization students can describe the main project with all the skills needed, the steps to be done, and the knowledge required.

Some possible alternative projects are also defined as acceptable solutions.

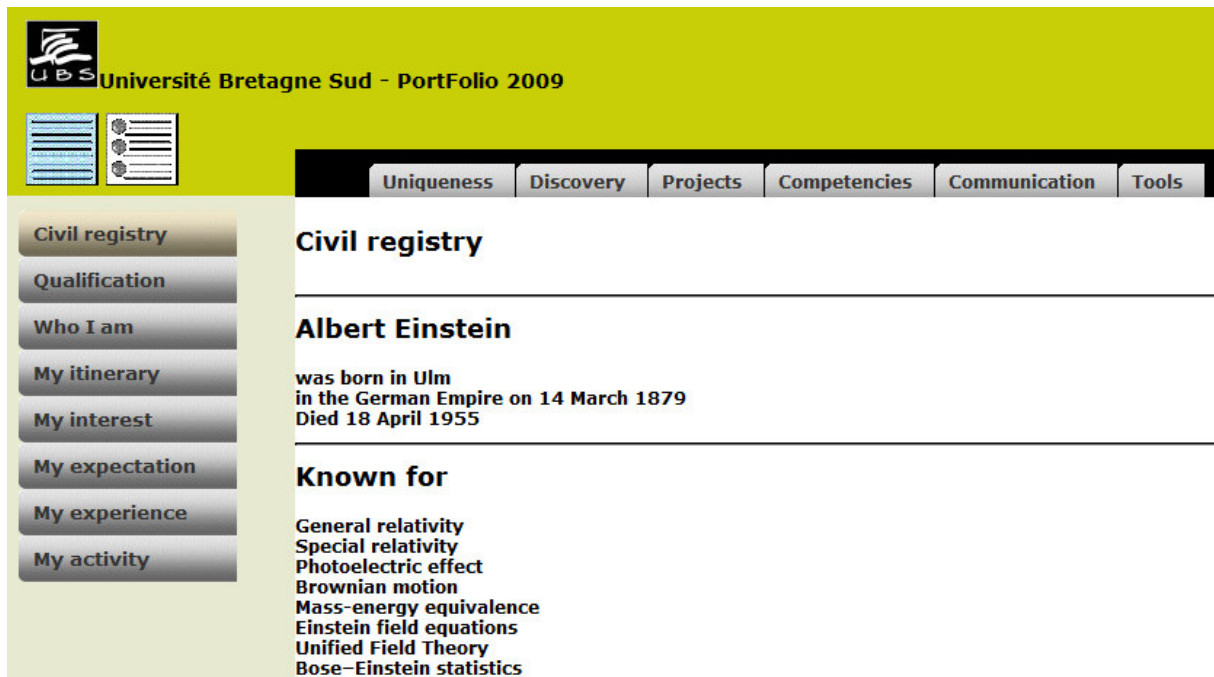
### ***My competencies***

It is focused on the skills of the person. His/her competencies are first identified, their capacity to be used in other contexts is then studied, after which promotion and updating are defined, and finally, consideration of their evolution (past and future) is engaged. See [7] on this subject.

Students can have the results of the MBTI personality test for those who take it, development which reflects the choices the person had to make in life and how he/she was helped in those choices, motivation which is based on the Maslow hierarchy here, and values based on the S.Schwartz theory.

### ***My communication***

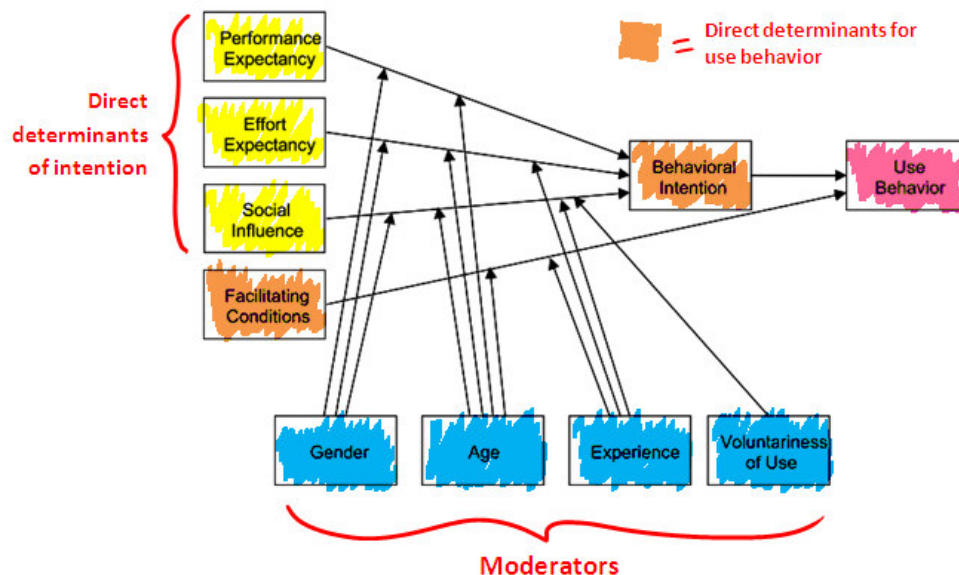
In this part, we store all the information the student wants to use to share information with the business environment. This part of the e-portfolio is public. It includes the CV, the cover letter for a particular sector, and finally, a blog for personal expression.



Hard copy of an example of the e-portfolio

### 3 – HOW THE E-PORTFOLIO IS USED

From a scientific point of view we need to analyse the potential and effective use of the e-portfolio. In a more general term we need to apply the method defined in Theory of Acceptance.



Source: Unified Theory of Acceptance and Use of Technology (UTAUT) [Venkatesh ]

The TAM [8,9] states that user acceptance of a new technology depends on two influencing factors: the perceived usefulness and perceived ease of usefulness. The concept of the TAM is based on the idea that user perception of the usefulness and ease of usefulness determine the attitude and consequently, use behaviour for new technologies.

It is undoubtedly one of the most accepted and wide-spread acceptance theories; it was, however, greatly enhanced by the author, and is currently enhanced a several other theories (theory based on user satisfaction, theory of disconfirmed expectancy,...)

This theory is based on a certain number of external variables (expected performance, expected added value, social influences and representations, ease of use), as well as intrinsic variables taking sex, age, experience, willingness or unwillingness into account, have an impact on the use intention of a new technology and behavior.

Our experiment is not aimed at completely covering all of the aspects mentioned in this theory, however we have focussed on the following aspects: having an idea of how the students use the e-portfolio, how they will appropriate it, and seeing how useful it is to build the PPP.

The experiment was done with 50 first year students during one month for the first part of the experiment. This one will last all the academic year.

The full questionnaire is given in See Annexe 1

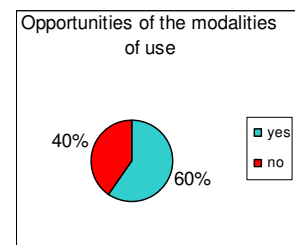
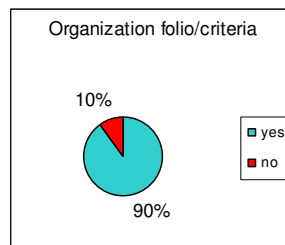
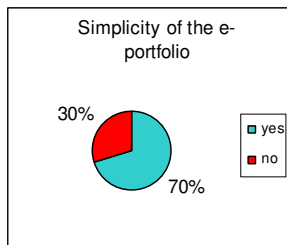
These are the main answers:

Overall, the students understood that it required introspection and the importance of self-knowledge. The use of the e-portfolio and the ease at which it can be used generally correspond to any type of use (either the graphic interface mode, or e-mail mode).

Among some of its most appreciated features is the freedom at which the information they add to it can be structured and organized.

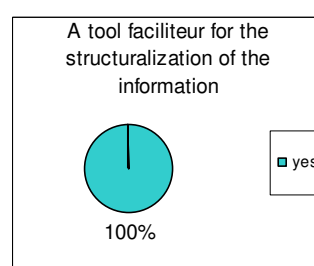
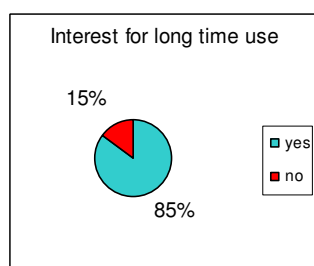
Generally speaking, they like the digital organization of their information, which they prefer to a paper version.

### Use/Ergonomy

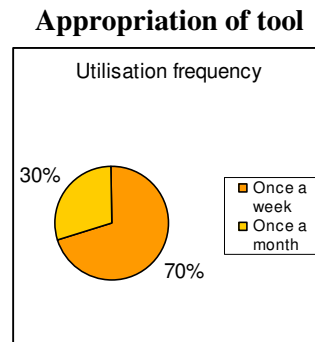


The results on both means of e-portfolio use should, for the moment, be taken with precaution as the experiment timeframe did not allow for full assessment of the e-mail mode. Consequently, the slightly low results for the e-mail mode can be noticed throughout the answers.

### Usefulness/Use



The same can be noted elsewhere due to the experiment timeframe. Its immediate short-term usefulness is not obvious, however they consider it rather interesting for a more long-term perspective.



This short-term evaluation has not had much impact on their habits for the moment; they do not see its usefulness in relation to the construction of their project yet. They are currently not convinced of the usefulness of this tool, and consider that a non e-portfolio organization of their information would be just as efficient.

However, the time period in which it takes to appreciate the tool seems quite short, judging by use frequency and use reflexes. These results should therefore be confirmed in a long-term approach.

Definitive conclusions cannot be drawn today due to the low number of students who did respond.

#### **4-CONCLUSION**

This presentation has described the experiment on e-portfolio use by students enrolled in the “Cycle d’orientation et de Consolidation” study program, specifically for the construction of the personal and professional projects.

It would need to be seen through a more long-term perspective to take into account the necessity of a more distant view by the students so as to obtain long-term assessments to confirm results.

The scope of this experiment on the *Cycle d’orientation et de Consolidation* will be progressively widened to all students hoping to obtain a Bachelor’s degree in one or more courses of study.

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## **Annexe 1**

### **Questionnaire on the use of e-portfolio/UBS 2009-2010**

#### ***Part 1: methodology***

- 1.1. What is a PPP?
- 1.2. Did you understand what introspection was?
- 1.3. What is an e-portfolio used for?

#### ***Part 2: Use / ergonomy***

- 2.1. Did you find it easy to use?
- 2.2. Does the folio and section organization seem well adapted to the use of the tool?
- 2.3. Were you satisfied with the "interface" mode?
- 2.4. Were you satisfied with the "e-mail" mode?
- 2.5. Did you like the possibility of being able to structure and organize your input information?

#### ***Part 3: Usefulness / use***

- 3.1. Does it seem useful to you?
- 3.2. Does it make organizing and structuring your information easier?
- 3.3. Did you like being able to structure your information they way you wanted to?
- 3.4. Is it comparable to a paper version? A file?
- 3.5. Would you have preferred to use a paper version?
- 3.6. Do you understand the titles of the folios? Do you have any remarks to make?
- 3.7. Does it change the way you deal with your information?
- 3.8. Does it seem useful in the construction of your PPP?
- 3.9. Does its use have meaning for you?
- 3.10. Do you see an immediate use?

#### ***Part 4: Appropriation of tool***

- 4.1. How do you structure your information? Your sections?  
Please explain your organization by sections.
- 4.2. Do you have the reflex of immediately posting your information?
- 4.3. What often do you use the tool?

#### ***Part 5: what functions should be added?***

- 5.1. What functions would you like to see added to the tool?

#### ***Part 6: other***

- 6.1. Would you accept to show your e-portfolio to a career counsellor?
- 6.2. Who would you authorize to add information?

Would you accept to give us your name