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# EPORTFOLIO FOR THE PROFESSIONAL INSERTION OF STUDENTS

*Laurence Perennes, Dominique Duhaut (Université Bretagne Sud)*

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**Abstract:** This is a presentation of the online tool designed at Université de Bretagne Sud to help students define and manage their personal lifelong project through an e-portfolio that records personal information. This e-portfolio will follow the person throughout his/her career as it will be kept available even after his/her university studies. Along with the e-portfolio, a set of activities based on university curriculum will be developed to help the student build, as well as learn to manage, his/her first project. Its particularity is that it can be managed through an email process.

**Keywords:** e-portfolio; lifelong learning; basic skills, key competencies

## Introduction

As mentioned in Reference [1]: "... achieving more and better jobs depends on ensuring that all citizens acquire key competencies and update their skills throughout their lives".

To reach this goal, long-term strategies are required, as well as institutional commitment, coordination and partnership with all relevant stakeholders. From the higher education point of view, it is then necessary to develop tools and activities to help students define their professional and personal project, as well as learn to manage it over the course of their lives.

In this paper, we present the tool and the method that has been developed at Université de Bretagne Sud, in France, to achieve this goal. The basic tool is an e-portfolio which keeps in memory all the results of the different activities involved in the construction and evolution of a professional project. The method 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 basic tool is the e-portfolio which is original in that:

- it is present on the virtual learning environment. This environment remains available to students after they leave the university, and allows them to continue to manage their project throughout their lives: their accounts will be maintained.
- the portfolio is managed by e-mail.

The first part deals with the basic structure of the e-portfolio. It is composed of 4 main sections, each of which is made up of a set of sub-sections named criteria. The e-portfolio is a structure designed to record information. 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. This means that the description presented in this part is to be understood as a generic structure.

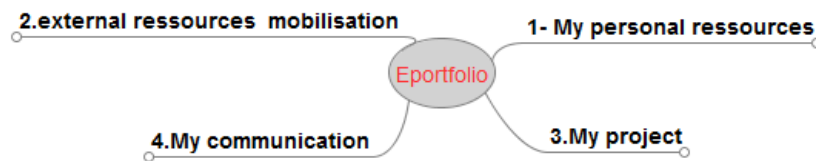
In the second part, the accompanying modules proposed to the students in the curriculum to build up their project are presented. Modules are developed to follow the project's design with a tempo of one module per semester, 10 modules for a 5-year degree course. The modules are designed to progressively build on the 4 basic sections of the e-portfolio.

In the third part, we explain how the e-portfolio is managed. A first section shows how e-mails are used to manage the information in the portfolio while a second section explains how to organize this management.

Finally some conclusions and perspectives will be given.

## E-portfolio structure

To create and build a personal professional project, the e-portfolio has a basic structure of four sections: my personal resources, external resources that can be mobilised, the description of my project, and how I can communicate.

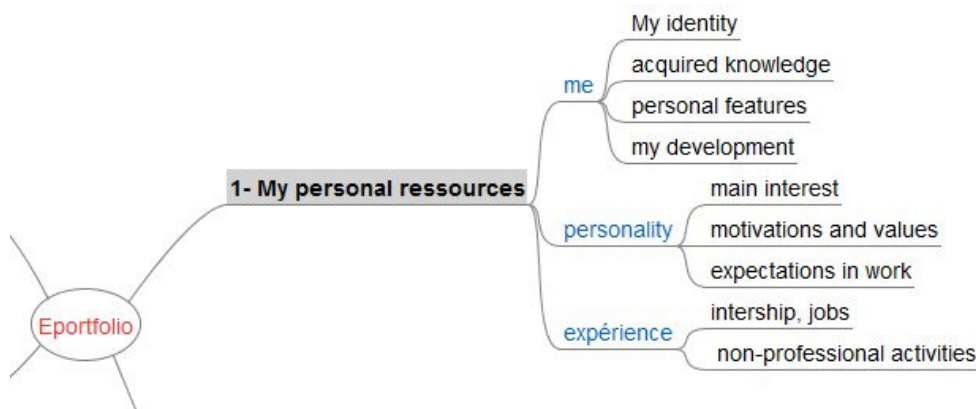


The content of each section will now be described.

### *Section 1: My personal resources*

The goal of this section is to identify and keep all of the student's basic information. It is divided into three different parts:

- ❑ Me: provides a global image of the person including his/her identity, acquired knowledge (with both “academic” and “informal” knowledge), as well as his/her personal preferences, for example, being alone or in a group, being indoor or outdoor, or even how he/she searches for information.
- ❑ Personality: gives the results of the MBTI [2] personality test for those students 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 [3] here, and values based on the S.Schwartz [4] theory.
- ❑ Experience: records all of the student's different work experiences.

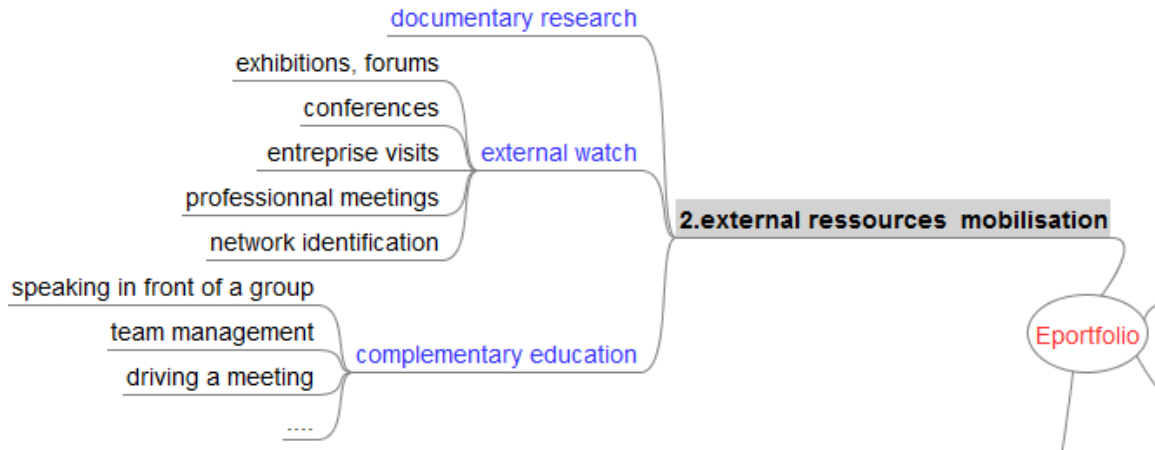


### *Section 2: The external resources that I can mobilise*

This section stores the results of the different activities the student has done to discover the working world. It is divided into three different parts:

- ❑ Documentary research: gives a link to a general presentation of the working world. Jobs, sectors, etc. are defined.

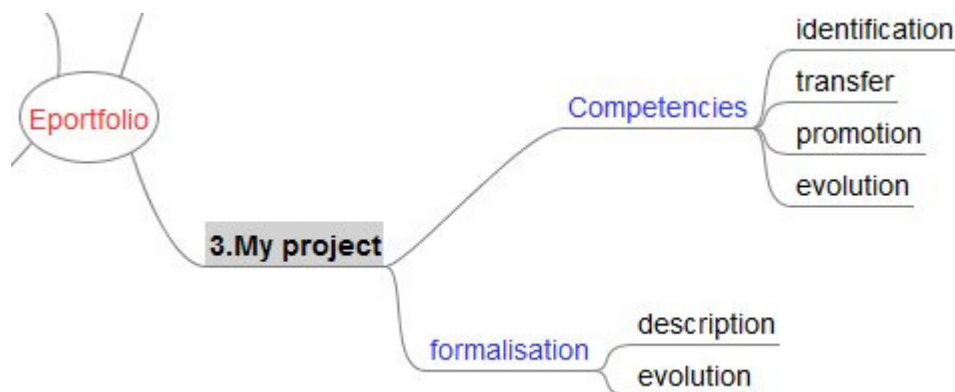
- ❑ External view: reports on all the meetings, visits, conferences, forums, etc. in which the student participated. The student's personal network, which he/she will be able to use for his/her future project.
- ❑ Complementary education: expresses the list of complementary skills or knowledge required to increase the potential of the student.



### Section 3: My project

This third 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. It is organised into two different parts:

- ❑ Competencies: is focused on the skill 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 [5] on this subject.
- ❑ Formalization: describes 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.



## Section 4: My communication

In this part, we store all the information the student wants to use to share information with the business environment. It is organised in two parts:

- ❑ Preparation: This first step is the preparation to external communication. It is done in the modules described in this paper. We want to be compatible with the requirement of Knowledge Tree [6] and Europass [7]
- ❑ Production: This second step is the part in the portfolio which is public. It includes the CV, the cover letter for a particular sector, and finally, a blog for personal expression.



## Modules connected to the Eportfolio

The modules are teaching activities included in the student's curriculum. Because the French degree course is organized in 3 or 5 year cycles, the modules are constructed on the same schedule. The first 3 years are used to define and build the personal project, while the last two years are for acquiring skills and perfecting the project.

All the modules contribute to filling up the e-portfolio. Each module is around 20 hours long and corresponds to one semester with roughly 2 hours per week. We developed 6 modules to cover the first three years of the university degree.

The modules are chaired either by a teacher, a professional from a company or a specialist in career counsellor (such as an education psychologist). Some activities are performed through online tests developed in the university.

The modules are organized as follows:

**S1: Self-knowledge, guided tour.** This entry point will include a presentation of the different services, inside or outside the university, which the student will use to construct his/her project, and an initial search into his/her past and reasons for being there.

**S2: Notion of competency.** This presents what is innate and not acquired through the education system. What is reviewed here is not only formal knowledge, but personal skills, as well as how to live in group and interact with people.

**S3: Job discovery.** To formalize the student's future job, this module encourages the student to study the job and to meet a professional holding this position to learn more. During the meeting, the student fills in a report which is recorded in the e-portfolio.

**S4: Job and competency link.** This section helps inform students of the competencies required for various job. These competencies are listed in terms of knowledge, skills, abilities, competencies. A

part of the module is used to determine if the projected training is in correlation with the goal, and if the student needs to train his/her personal skills for increased capabilities. At this point, the student writes his/her first CV.

**S5: Finalize the project.** In the third year it is time to prepare the student to begin his/her career. The student can search for a company that could provide the opportunity of acquiring the targeted profession. Methods to research companies, understand their activities and focus on the jobs can all be found here

**S6: Setting up a strategy.** The finalized CV, targeting the job has to be written, with a covering. Interview simulations are offered to train the student. An assessment is done on his/her career project, to see how it has evolved over the 3 years of studies, and an evaluation of competencies is performed.

During the following 2 years, modules are used to improve the project and acquire the skills needed at the engineer level.

**S7:** The project's **strong and weak** points. A comparison is made between the project and the student's situation. This step aims at giving the student an outsider's point of view, as well as good judgement, on his/her project.

**S8: Work market.** A national and international survey of the economic and political situation is performed. Information is given on how to create a company and a simulation is made.

**S9: Professional insertion.** At this level, the student will often have to act as the manager of a team. He/she is thus trained in conflict detection and conflict avoidance. The issue of work organisation is also dealt with. Special interest is given to the importance of the network: private, business and administrative. How to build up a network, keep it alive, and activate it to prepare for professional insertion

**S10: Internship.** For most of the students, the last part of the curriculum is internship. It is prepared to discuss the expectations and the target. At the end, a presentation is given to describe the time passed in the company.

## **E-portfolio management**

### *The e-mail tool to manage the e-portfolio*

This section describes the method used to manage the portfolio. The originality of our approach is that all the portfolio management is done by e-mail. For instance, if the owner, Joe Martin, wants to add information (for example, a text file) in the "my experiences" section of the "internal resources" criteria, he will send an e-mail as follows:

To: eportfolio.joe.martin@ubs.fr  
From: joe.martin@ubs.fr  
Subject: internal resources  
Attach: PersonalFile.txt  
Content: ADD my experiences

When the e-portfolio manager receives this mail it does the following:

- Checks if the sender (joe.martin@ubs.fr) is allowed to write something in the Joe.Martin portfolio.
- Checks the attached file (here a PersonalFile.txt)

- Interprets the contents of the e-mail. Here “ADD” is the instruction contained in the e-mail, meaning that the attached file “PersonalFile.txt” must be added in the section “internal resources” criteria “my experiences”.

The content of the e-mail gives the instruction to be executed in the portfolio. The attached file specifies what information must be treated. The subject defines the section in which the information must be placed. To keep the e-portfolio simple, the amount of instructions is limited.

### *Levels of management of the e-portfolio*

We can distinguish three kinds of portfolio management: information management, criteria management, authorized person management.

- **Information management** allows the user to add, move, delete information in the portfolio as described in the above example. There is also a set of specific instructions to organize the presentation of the information in the e-portfolio. For instance, it can be included in the text or linked to it.
- **Criteria management** gives a set of instructions to change the structure of each section of the portfolio. For instance, criteria can be added, removed, or put in a different place (see Figure 1). This is important if the portfolio is to be used in a lifelong project. We cannot determine what kind of criteria someone will need to add based on his/her professional and life experience. Consequently the list of criteria described in the above section is the standard one at the creation of the portfolio, but the student can quickly add or delete criteria to build up a personalized e-portfolio.
- **Authorized person** management is a list of people authorized to send information to the e-portfolio. This list is managed by the portfolio’s owner, no one else can accept someone in the list and allow them to write in a specific section of the e-portfolio. This protection is necessary to guarantee the protection of the data. People writing in the e-portfolio can be: a teacher during studies, an employer during working life, or the user him/herself, for online self-evaluation tests (see part IV).

### **Conclusion**

This presentation has described how Université de Bretagne Sud prepares students to build individual professional projects, as well as to learn how to manage them throughout their lives, by providing the organizational tools and training necessary.

The key element is the e-portfolio, connected to a set of modules designed to initiate the definition of the project. This personal e-portfolio is maintained by the university for lifelong learning.

### **Acknowledge:**

This work as been done with MH Gloanec, Y.Normand and C. Le Scouiller

### **References**

1. CONCIL OF EUROPEAN UNION, DELIVERING LIFELONG LEARNING FOR KNOWLEDGE, CREATIVITY AND INNOVATION, 5723/08, JANUARY 2008
2. MBTI BRIGGS-MEYER ISABEL & MACCAULLEY MARY, MANUAL: A GUIDE TO THE DEVELOPMENT AND USE OF THE MYERS-BRIGGS TYPE INDICATOR, CONSULTING PSYCHOLOGISTS PRESS, 1985.
3. A THEORY OF HUMAN MOTIVATION A. H. MASLOW (1943) ORIGINALLY PUBLISHED IN PSYCHOLOGICAL REVIEW, 50, 370-396.

4. SCHWARTZ S.H., BILSKY W. (1990), "TOWARD A THEORY OF THE UNIVERSAL CONTENT AND STRUCTURE OF VALUES: EXTENSIONS AND CROSS-CULTURAL REPLICATIONS", JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY, 58, 5, PP. 878-891.
5. OFFICIAL JOURNAL OF THE EUROPEAN COMMUNITIES, DETAILED WORK PROGRAMME ON THE FOLLOW-UP OF THE OBJECTIVES OF EDUCATION AND TRAINING SYSTEMS IN EUROPE C 142/1, 11.6.2002MBERED LIST OF REFERENCES (REFERENCE - TIMES NEW ROMAN 11 PTS, LEFT ALIGNED, SINGLE SPACING, AFTER 6 PTS):
6. KNOWLEDGE TREE. E-JOURNAL OF FLEXIBLE LEARNING IN VOCATIONAL EDUCATION AND TRAINING ISSN:1448-2673, 2007
7. HTTP://EUROPASS.CEDEFOP.EUROPA.EU/

## Annex

This is a copy of a page of the current e-portfolio designed in our university.

4 Main Sections

Université Bretagne Sud- Portfolio 2008

Internal Ressources External Ressources My Project My communication Links

Curriculum Vitae  
Covering letter  
Job interview  
Mobilize network  
Speaking group  
Leading group  
Driving group

**Curriculum Vitae**  
Short introduction

Dominique Duhaut received his PhD degree in computer science from the University Paris 6 in 1982 on "The study of complexity of recursive function under the definition of Trahtenbrot". He became assistant professor in 1984 in University Paris 6. In 1987, he moved to the "Laboratoire de robotique de Paris" where he worked on the cooperation of robots in a flexible cell. In 1996 he was participating to the definition of the RoboCup movement that he organised in Paris in 1998. At that time his research was focused on multi-agents programming in robotics. He moved in university of Bretagne Sud in 2000 where he became professor. His research interests are actually on self reconfigurable systems, teams of robot programming and social aspect of robots. He is also interested in science promotion for young people. He his organising competitions for schools since five years and is participating in the RoboFesta movement.

[Long CV](#)

Sub-sections can be added during the life evolution