



# The Experience of E-portfolios in Student Learning Objectives

Alfredo Soeiro  
FEUP

Bologna Seminar on Development of a Common  
Understanding of Learning Outcomes and ECTS

# PROJECT

---

## Project of University of Porto (GATIUP):

- to implement the use of e-portfolios among the academic community;
- to promote the continuous improvement of the quality of teaching and learning.



# MISSION

---

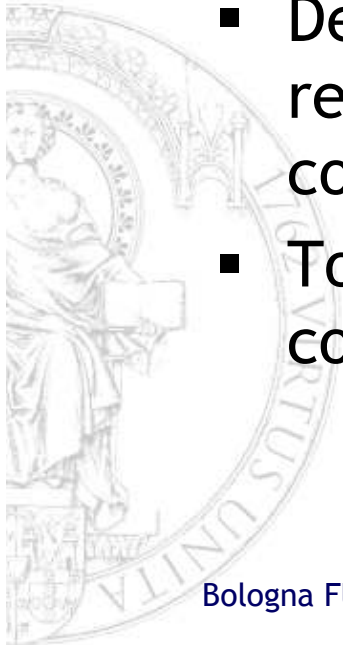
- Encourage the use of e-portfolios as an important tool to promote:
  - autonomy
  - interactivity
  - self-assessment, peer assessment and teacher assessment



# GOALS

---

- Collect and display a student learning journey over time;
- Create an organized and contextualized register of the initial and development phases of work progress;
- Develop a more participative, constructive, reflexive, interactive and creative attitude concerning learning experiences;
- Tool for validating skills that aim at the construction of a digital identity.



# HOW IT STARTED

---

- Consulting teachers to know if someone was using e-portfolios in their courses;
- Some of them were already using portfolios in paper format;
- A small group of teachers was interested in applying this new methodology (6);
- No conditions were imposed for the e-portfolio development (no software or rigid structure);
- The aim was to start slowly, be ambitious and increase the complexity gradually as the variables at stake were assimilated.



# IMPLEMENTATION

---

- Present the project to the students:
  - clarify the concept of an e-portfolio;
  - explain the importance of this reflective work;
  - explain how they will be evaluated;
  - assure them support when they have technical problems.



# IMPLEMENTATION (cont.)

---

- Discussion in class (teacher/students) of e-portfolio evaluation:
  - presence of all the elements agreed;
  - organization;
  - selection and systematization of content;
  - research and synthesis of text;
  - reflection on learning (content, self-assessment and hetero-assessment);
  - creativity.



# IMPLEMENTATION - Case Study

---

- Faculty of Engineering
- Construction Management
- There is a particular interest of students in this area because about two thirds of civil engineers will have jobs in this area (motivated students)
- This course uses an e-learning platform since 2004/05 (WebCT Vista)
- In 2006/07 and 2007/8 one of the homeworks was to submit an e-portfolio
- Main goal: a reflection on the course and the skills acquired

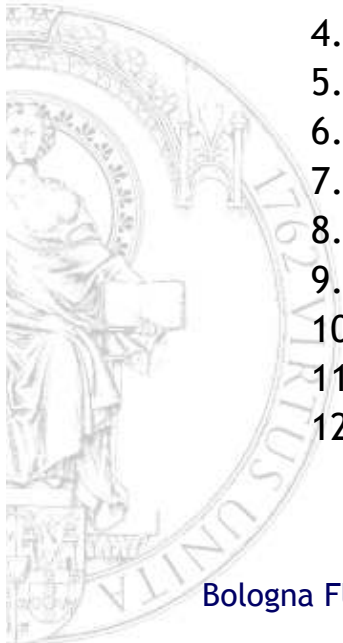




# IMPLEMENTATION - Case Study [cont.]

---

- The students could use HTML pages, MSWord, blogs or even one of several open-source solutions
- Proposed structure on what an e-portfolio should have:
  1. Index
  2. Program
  3. Goals (general and specific)
  4. Bibliography
  5. Types and criteria of evaluation
  6. Learning platform
  7. Relevant texts
  8. Videos and other multimedia resources
  9. Required class works
  10. Reflections about learning
  11. Competences, skills, attitudes
  12. References and seminars participations



# IMPLEMENTATION - Case Study [cont.]

Pedro Miguel Ramos Silva Carvalho Borges

Universidade do Porto  
FEUP Faculdade de Engenharia



Home page  
Dados pessoais  
Portfólio de Direcção de Obras  
Contactos

## Pedro Borges,

Um jovem estudante de Engenharia Civil, da Faculdade de Engenharia da Universidade do Porto (FEUP), que decidiu investir no mundo digital de forma a transmitir todo o conhecimento adquirido na Disciplina de Direcção de Obras, ilustrando conteúdos, trabalhos e visitas realizadas no âmbito desta disciplina.

Esta Página, servirá para ilustrar num futuro próximo, outros trabalhos e conteúdos, desenvolvidos durante a minha actividade escolar.

### Objectivos

Este **site** surge com a necessidade de divulgar, todas as actividades por mim desenvolvidas, no âmbito da Disciplina de Direcção de Obras, do Curso Mestrado Integrado em Engenharia Civil (especialização em Construções Cívicas) da Faculdade de Engenharia da Universidade do Porto.

Estrategicamente adoptei uma política de internacionalização, de forma a valorizar todo o trabalho desenvolvido e, de forma a transmitir todo o conhecimento adquirido através desta disciplina.

# IMPLEMENTATION - Quotes (A. Gonçalves - 2007)

---

- “I would appreciate if the Leadership theme was more detailed in the Psychology area since being a leader is to coordinate these factors in people we interact with.”
  - Acknowledgement/Conscience
- “But I recognize that there is no time to debate in detail all subjects.”
  - Maturity/Realism
- “I also recognize that our training allows each one of us to know the way and to research the needed knowledge and skills.”
  - Lifelong Learning/Attitude to learn



# IMPLEMENTATION - Quotes (A. Araújo -2008)

---

- “The work done ... was diverse allowing the practice of Civil Engineering”
  - Purpose
- “It was possible to acquire competences, knowledge and skills announced in the curriculum”
  - Compliance
- The course developed autonomy, responsibility, efficiency and sensitivity for the analysis of complex problems”
  - Enrichment



# IMPLEMENTATION - Case Study (cont.)

---

- Results:
  - outperformed initial expectations;
  - weak point:
    - lack of experience of students on creation of web pages.
  - strong points:
    - revision of documents and submission of works was done before the period of examinations that gave to the student time to think and to prepare their exams;
    - reference for students for subsequent years.



# IMPLEMENTATION - Case Study (cont.)

---

- Conclusions:
  - allowed an autonomous work of each student;
  - encouraged the synthesis of the course;
  - allowed a structured reflection on learning.



# CONCLUSION

---

- Evaluation conditioned since it required from students different skills:
  - planning;
  - constructive analysis;
  - reflective thinking;
  - redesign;
  - self-assessment;
  - critical analysis.



# CONCLUSION (cont.)

---

- The e-portfolio is essentially a picture of the learning progress and also allows the student to share personal experiences, highlights the creativity and emotions involved in each work.
- E-portfolios are emerging as a *continuous process*.





# FUTURE WORK

---

- In the future
  - improve guidelines and initial framework;
  - investigate usage the students gave to e-portfolios and investigate acceptance by employers;
  - organize seminars to share information, good practices and exchange of experiences with other institutions.





# Thank you!

Alfredo Soeiro ::: [avsoeiro@fe.up.pt](mailto:avsoeiro@fe.up.pt)