Thematic Report on ePortfolio for teachers' training

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Lifelong
Learning
Programme

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1. INTRODUCTION

The report reviews the initiatives of e-portfolio used for supporting teachers' professional development in various countries across Europe and beyond. It screens the practices reflected in the resources and presents the current status of developments.

The report focuses on the presentation of resources targeted at the teachers published on Europortfolio Portal by its members in two sections: teaching practice and professional development.

The appendixes provide the list of organisations and institutions dealing with e-portfolio at various levels and the briefing of the resources available elsewhere targeted at the teachers

Target group profile

A high level of engagement and the large number of initiative generated by the teachers proves that they are equipped with advanced self-learning skills. They are able to develop their own e-portfolios and/or implement e-portfolio in teaching process based on guided path such as a structured course or a practical recommendations. Interestingly presentation of students' e-portfolios often results in a mirrored presentation of teachers' competences which, in effect, leads to the increase of the visibility of their teaching practice and pedagogy they use.

As e-portfolio has not been implemented strategically in the European education yet, it can be assumed that teachers interested in e-portfolio are a group of innovators and early adopters who observe and recognise the value of e-portfolio in both their teaching practice and their own professional development.

2. RESOURCES FOR TEACHERS IN EUROPORTFOLIO PORTAL

The content reported upon the Portal can be grouped into two main categories:

1. E-portfolio in teaching practice: focuses on implementation and use in instructional design to support students' learning
2. E-portfolio in teachers' training and professional development: presents e-portfolio as a method enhancing teachers' initial and continous professional development

Despite the division the majority of resources available is prepared for teachers who are willing to or have capacity to implement eportfolio in the classroom.

The resources reflect the practical approach and contain:
- instructional materials for teachers:
    - eVET2EDU courses
    - MOSEP training materials

- guidelines on how to start work with e-portfolio in a classroom:
    - Europortfolio Teachers' Implementation Guidelines
- self-paced learning courses about e-portfolio in general:
    - Europortfolio Self-Study MOOC
    - TRANSIt courses
    - MAPPED course
- scenarios:
    - EUFolio Resources Portal
- examples of e-portfolio:
    - Europortfolio Teachers' Implementation Guidelines
    - EUFolio Resources Portal
- tools tutorials:
    - EUFolio Resources Portal
- case studies and stories from practice:
    - Europortfolio Teachers' Implementation Guidelines
    - EUFolio Resources Portal

2.1 E-portfolio in the teaching practice

A number of ePortfolio implementations reported in the Europortfolio Portal were developed jointly within numerous projects carried out by various European institutions - universities, schools, public authorities and companies. Such a variety of actors involved in implementation process where etachers are involved reflects the multicontextual nature of eportfolio but also proves that teachers are active partners that act as triggers for change.

International character of the community working on training and learning materials for teachers is crucial because it covers variety of perspectives, discusses and takes into account obstacles and challenges common for different education systems around Europe. Within such a heterogenous group main research questions can be raised: what stands behind eportfolio concept? how it can be used for enhancing 21st century skills? what are the advantages, barriers and impact of using e-portfolio? what are the key specifications required for designing eportfolio in schools? In such a diverse background European Qualification Framework gives educators from different educational backgrounds a common ground for analysis of the best approach to eportfolio implementation. On the other hand it gives the room for reflection on unique features and educational dependencies in each country.

The common aim of the projects published on the Portal is to **make indirect influence on the development of students' key competences** through enhancing teachers' skills in innovative and alternative pedagogies and assessment strategies.

Resources created within European initiatives intend **to raise teachers' awareness on the benefits** of the developing their own competences and organising/assessing learning

resources in e-portfolios, as well as how **to exchange resources and competence driven strategies** with other teachers around Europe.

EUfolio Resources Portal (http://eufolio-resources.eu/) provides teachers with access to the educational materials and resources needed for the integration of the e-portfolio approach in the learning process. The portal is constantly updated with the training activities and classroom implementations completed in the piloting countries (Ireland, Slovenia, Spain, Lithuania, Cyprus, Bulgaria and Austria).
Content:
- learning scenarios annotated with teacher's reflective commentary on implementation results and lessons learnt. The scenarios present e-portfolio-base design and are followed by a reflective part, for example a webquest on Charles Dickens, group work on creating newspaper article, analysis of the language of Shakespeare, etc.
- e-portfolio examples developed by students
- access to the self-paced learning course about e-portfolio. The course introduces teachers to the ways in which e-portfolios and digital tools support learning strategies and can be used for formative assessment. The course is an example of instructional resources that requires from teachers high motivation and vision of e-portfolio usage.
- Continuing Professional Development (CPD) materials that equip teachers with the knowledge and skills for the 21st Century Education such as ePortfolio approaches, support for planning, designing and implementing eportfolio in the classroom. and helps them to plan, design and implement an ePortfolio approach in their classroom.
- competence-based assessment. Resources contain general description of eportfolio usage in the assessment as well as detailed assessment criteria in a form of rubrics or assessments sheets.

Europortfolio Teachers' Implementation Guidelines
http://europortfolio.org/guidelines
provide insight into 5 implementation phases (exploration, planning, development, implementation and sustainability) with regard to the school setting. It is a very practical resource for individual teachers on all levels of education. The guidelines covers different ideas of e-portfolio implementation in the teaching context: working individually with learners on e-portfolio development; working with other teachers on cross-curriculum ePortfolio development. Guidelines provide teachers with examplary e-portfolios created in various tools (dedicated to e-portfolio like Mahara and no-dedicated like Padlet).

2.2 E-portfolio in teachers' training (professional development)

E-portfolio understood as method and process that can provide evidence for teacher's competencies and guide a long-term professional development was acknowledged in **MOSEP project**. Case studies showed the need of change in teachers' role from didactic presentation to a more facilitative style of teaching. The following competencies required from teachers were reported in research [summary report](#): facilitation skills, active listening skills, feedback skills, intervention skills, evaluation skills. Based on the findings from desk research a set of training materials targeted on teachers-trainers, in-service teachers-trainers and vocational counselors for use of e-portfolios with their students was developed.

The focus is put on **learning and development processes and not on eportfolio tools.** Here again, a strong practical approach is visible. The content integrates both theory on e-portfolios and practice on how to create and use e-portfolio with pedagogic approaches to teaching and learning through e-portfolios. The content is structured in a form of an online course with pre-defined learning path but it is possible to 'pick and mix' modules or sessions depending upon trainers' experience or needs. Each trainer working with an e-portfolio can decide either follow a logical sequence or choose required topic to learn/to further work with. Additionally, the resources are available under Creative Commons Attribution - Share Alike license that allows for copying, re-using, adapting the content to any course that trainers might want to create on the subject of e-portfolios. CC license is also a kind of invitation for educators interested in e-portfolio to add links and resources to the WikiEducator where MOSEP content is published.

MOSEP filled in the gap in instructional content on e-portfolio for trainers and teachers that focus on the process not the product or tool.

Teachers' taking advantage of their key competences development are in focus of TRANSIt project which aims to raise the teachers' awareness on how they can take benefit from developing their own competences: facilitation of students' learning, assessment and and reporting students' learning outcomes, engagement in the continuing professional development and establishment of partnerships and collaborations. Eportfolio was used as an **assessment method of teachers key transversal competences** built up along the course and evidenced by the samples of authentic works (learning scenarios, resources, reflections, etc.) but also as a reference for regional or national qualification standards. TRANSIt training framework defined the evaluation criteria for eportfolio. The survey revealed that teachers regards eportfolio as a suitable assessment method for their professional development.
http://www.transit-project.eu/
Courses available at http://transit.cti.gr/moodle/course/index.php - (login required).

Digital badges were included in some training activities for the teachers involved in TRANSIt. Teachers who had achieved the learning goals of the training modules could earn

badges that represented knowledge and skills. This aspect of TRANSIt is noteworthy as the open badges coined more to informal and non-formal learning are rarely developed in the context of teachers' education.

The concept of e-portfolio was embedded in [a massive open course for VET teachers](#) about designing and facilitation online course. The three main pedagogical pillars of the course were authentic learning, reflection and **an portfolio-based competence development**. Teachers recorded the evidence for a pre-defined competence resulting from activities that supported the development of the skills, acquisition and application of knowledge as well as reflecting and gaining new attitudes. The evidence-based learning and hidden eportfolio were strategies to engage teachers in discussions, collaboration, group work and reflection.
The resources developed within eVET2EDU are targeted on trainers and VET teachers, practitioners, VET organizations that are responsible for implementation of dynamic, open and innovative training methods.

The eVET2EDU OER Kit consists of:
- the course *How to design and facilitate online course in VET context*, available in 9 languages published under Creative Commons Attribution license.
- a detailed course handbook for facilitators that guides the facilitator through the course by providing examples of model table of competency, example of posts for opening, weaving and summing-up discussions, additional hints for raising teachers motivation in the course timeframe, etc. The handbook is also available under Creative Commons Attribution license so can be adapted according to needs and requirements of each facilitator or along with changes made upon the course.

Eportfolio-based design was implemented into training process in **post-graduated pedagogical online studies** in IT2EDU project. The post graduate studies were addressed to engineers willing to gain additional competences and start a work as VET teachers. As a result, participants achieved pedagogical qualifications. According to the Ministry's requirements, the focus of the studies was put on using ICT in teaching and learning.

Although, the project finished in 2010 and the study was a pilot initiative, the assumptions and approach to programme and curriculum design is worth mentioning. E-portfolio was used for assessment of competences achieved and mastered along the 3- semesters programme. Students gradullay worked on their eportfolios and at the same time received a detail analyse of the structure, evidence and reflection process. Such a long-term perspective was adopted to build-up experience in subject domains and e-portfolio both as a process and as a product - a final outcome of the 3-semester studies. E-portfolio created during the studies could serve as starting point for further teachers professional development.

ePortfolio Self-development Study MOOC on eportfolio is another offer for teachers searching for effective method for enhancing their Continuing Professional Development. This MOOC can serve as an entry point to the topic for non-expert users through the theory

of e-portfolio and set of practical and reflective activities regarding individual (or organizational) objectives.

Modular structure of the MOOC allows for either learning along with pre-defined path or select lessons accordingly to individual interests, concerns and purposes.
Lessons 1-5 are addressed to individual participants and guide them through e-portfolio process. Lesson 6-7 focus on institutional/organisational context and show how develop a strategy to design and create an ePortfolio that fits to   organizational/institutional needs.
Access to the course: ([http://platform.europeanmoocs.eu/](http://platform.europeanmoocs.eu/course_eportfolio_self_development_st)
[course_eportfolio_self_development_st](http://platform.europeanmoocs.eu/course_eportfolio_self_development_st))

E-portfolio and improving employability in the job market

Creating and managing online identity as a part of professional development lined up with creating professional portfolio online is a key assumption for online course MAPPED. The course is addressed to vocational training institutions (eg. teachers' trainig agencies) and individuals.

Appendix I. Organizations in Europe with the thematic impact

American Institutes for Research
Haute Ecole Pédagogique du canton de Vaud (Hep-vd)
Kolegium Nauczycielskie w Bielsku-Białej
Pädagogische Hochschule Niederösterreich
The University of Macerata
Department of Educa. and Skills
Hong Kong Institute of Educa
Navreme Boheme, s.r.o. -
Pädagogische Hochschule Wien
University of Teacher Educa. Vienna
Spanish Observatory of Valida. of Professional Competences (OBSERVAL)
University College Sjælland
SRCE
Canterbury Christ Church University
Centro Studi Bruno Ciari
CEMEA del Mezzogiorno
IUT 2 of Grenoble Alps University
European Journal of Open, Distance and E-Learning
Centre of e-Learning AGH-UST
Regionalny Ośrodek Metodyczno-Edukacyjny Metis w Katowicach
Akademie für Neue Medien und Wissenstransfer - Academy for New Media and Knowledge Transfer

Appendix II. Contributions from outside Portal with thematic content[1]

1. Assessment

[Full paper] **ePortfolio as a tool for formative assessment of knowledge and skills**
Tanja Rupnik Vec, Leonida Novak National Education Institute Slovenia (NEIS), Slovenia

EUFolio Project insight from Sloveniania partner . We work with fifteen Slovenian schools with eighty teachers of different subject groups being actively involved in the process. We will answer the questions about how successfully teachers have grasped the idea of ePortfolio as a formative assessment tool and how successfully they have implemented this idea in their everyday teaching. Two sources of data were used in the evaluation process: a. a self-assessment questionnaire, collecting data about implementation of different elements of the AfL process using ePortfolios, b. teachers' lesson plans and focus group interviews, collecting qualitative data.

Access: https://www.authorea.com/users/17985/articles/20354

[abstract] **Hellenic Teachers' Life-Long Learning Skills Validation via Interactive ePortfolios (HeTeLeSeP)**
Niki Lambropoulos, Marianna Vivitsou

This project explores the possibility of validation of Hellenic Teachers CoP Life-Long Learning Skills via Interactive ePortfolios (HeTeLeSeP).

Access: Learning Forum London 2010, conference proceedings, p. 102, http://www.eife-l.org/publications/eportfolio/proceedings2/lfl2010/lfl2010proceedings.pdf

[Full paper] **Blogs And Web 2.0 Tools To Open Student Teachers' Eportfolios: Student Teachers' Perceptions On Eportfolio Openness**
Gemma Tur Ferrer, Santos Urbina Ramírez, University of the Balearic Islands, Spain

At the University of the Balearic Islands, Ibiza local centre, an eportfolio project has been implemented since the school year 2009-2010. This article is based on the research of the first two school years (2009-20 and 2010-11) of experimental implementation of blogs and Web 2.0 tools as electronic portfolios. The results reported are those related to student teachers' perceptions on openness in eportfolios. Openness is an important characteristic of the system used in this eportfolio implementation. However, data collected during the two-year period of research reveal some unexpected issues of open eportfolios.

Access: 11th International ePortfolio and Identity Conference, London, Conference Proceedings http://www.epforum.eu/sites/www.epforum.eu/files/ePIC%202013_0.pdf p. 59.

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[1] The links to the resources reported were checked on 20 August 2015

How do Trainee Teachers use ePortfolios?
Mills, J. Wearmouth, A. Gaitan, University of Bedfordshire

This research investigated how trainee teachers use an ePortfolio on one year Initial Teacher Training Courses. For the first year of research (Pilot phase cohort one) a commercially produced ePortfolio was adopted for the course, incorporating a range of tools, marketed as a personal learning space for multiple uses accessible through the internet. For the second year of research (Main Study cohort two) the tutors designed an ePortfolio using tools available on the University Virtual Learning Environment allowing the trainee to complete and upload work to be assessed against course criteria. The decision to change the ePortfolio after the first year was a direct response to the reported negative experience of both students

Access: ePIC Conference 2012, London, Conference Proceedings, p. 28 http://www.epforum.eu/sites/www.epforum.eu/files/ePIC%202012_0.pdf

[abstract] **ePortfolio and identity construction. A program for newly hired teacher training**
Lorella Giannandrea, Stefania Quattrocchi, Pier Giuseppe Rossi, Patrizia Magnoler University of Macerata, Italy

The paper aims to investigate the construction of a professional identity of teachers during their training, especially for newly hired teachers.

Access: 12th International ePortfolio and Identity Conference, Greenwich, London, conference proceedings, p. 27 http://www.epforum.eu/sites/www.epforum.eu/files/ePIC2014_abstracts_0.pdf

[Full paper] **ePortfolio for development of teaching identity: Identifying learning stages**.
Drs Kathy Sanford and Tim Hopper

In this paper we will share findings from students in a teacher education program who have all created a professional ePortfolio (a dynamic website that interfaces with a database of student work and related experiences stored as artefacts) that points to new spaces for learning drawing on program content, but ultimately informed by the students who see themselves as agents of a complex system.

Access: Learning Forum London 2010, conference proceedings, p. 90
http://www.eife-l.org/publications/eportfolio/proceedings2/lfl2010/lfl2010proceedings.pdf

The eportfolio as support for the professional development of preservice teachers: A theoretical and practical view.

Thierry Karsenti, Gabriel Dumouchel, Simon Collin

The portfolio is rapidly gaining attention in initial teacher training programs. It serves multiple uses and ends in the professional development and reflective practice of preservice teachers, and the technical advances of Web 2.0 will only increase the potential for learning opportunities. From now on, portfolio content that was formerly private territory can be generously shared. Against this ba

ckground, this article provides an overview of the portfolio's role in initial teacher

training programs. The four main functions of the portfolio are addressed, followed by the advantages of the eportfolio over the paper portfolio. A working conceptual framework is then proposed for eportfolio use to support professional development in the Web 2.0 age. To provide a practical application for initial teacher training, we conclude with a presentation of Eduportfolio, an eportfolio that effectively taps the potential of Web 2.0.

Access: International Journal of Computers & Technology
http://www.academia.edu/5900495/
The_eportfolio_as_support_for_the_professional_development_of_preservice_teachers_A_theoretical_and_practical_view)

2. Pedagogy

[abstract] **Teacher Portfolio: a Tool for Reflection on the Teaching Sense**
Ljuba Pezzimenti, Pier Giuseppe Rossi, Lorella Giannandrea, University of Macerata, Italy

The paper will explore the potential of Teacher Portfolio to make the teachers aware of their professional knowledge. This exploration examines the materials from the TP of some teachers who attend a master course at the University of Macerata.

Access: Learning Forum London 2010, conference proceedings, p. 100 http://www.eife-l.org/publications/eportfolio/proceedings2/lfl2010/lfl2010proceedings.pdf

From single evidence collection to reflection on learning over time: process and product e-portfolio in Teacher Education. A case study.
Gemma Tur, Santos Urbina University of the Balearic Islands, Spain

Process and product e-portfolio have been one of the most relevant debates in eportfolio literature for a long time. There is numerous research on diverse aspects of eportfolios such as reflection, collaboration or digital development. However, the implementations of eportfolios reported in research do not address the aspects in relation to the differences between product and process eportfolio. This study offers some data collected from student teachers' process and product e-portfolios and some of their perceptions on the contribution of what the eportfolio presentation means for their learning. Data collected allow us to

observe the difficulties in the first steps of student teachers, the development of their skills over their years at university and the positive final perception of the eportfolio presentation. Conclusions arise some implications for further research of eportfolios in Teacher Education.

Access: http://www.researchgate.net/publication/ 270219007_From_single_evidence_collection_to_reflection_on_learning_over_time_process_and_product_eportf olio_in_Teacher_Education._A_case_study

[Full paper] Design and Implementation of an ePortfolio Learning Strategy Aimed at Teachers Training: Making Sense of the Process of Learning

Andrea Ximena Castaño, José Miguel Jiménez, Ángel Pío González

A learning strategy with electronic portfolios was designed and implemented in order to be used in a Master level of Teacher Training Erasmus Mundus. The Research Group FORTE at Rovira I Virgili University has given support to the implementation of experiences with learning ePortfolios to foster professional identity building and the learning process. What are the implications for student's professional development and their learning approaches with ePortfolios? In this sense, we consider a concept of professional identity formation with ePortfolios needs to be established in the higher University context.

Access: http://www.researchgate.net/publication/ 266384611_Design_and_Implementation_of_an_ePortafolio_Learning_Strategy_Aimed_at_Teachers_Training_Maki ng_Sense_of_the_Process_of_Learning

[Full paper] Eportfolios in Initial Teacher Education in Singapore: Methodological Issues Arising From Initial Attempts to Make Meaning of Artifacts

Stefanie Chye, Mingming Zhou, Liu Woon Chia, Caroline Koh, & Evelyn Chew, National Institute of Education, Nanyang Technological University, Singapore

This investigation took place at the National Institute of Education (NIE)A developmental ePortfolio was designed for initial teacher education with the purposes of: (i) charting the learning and personal growth of the student teacher through his/her experiences at the NIE and developing his/her personal teaching philosophy over time; (ii) helping to bridge the theory-practice nexus and providing evidence for the theory-practice link in the student teacher's learning and classroom teaching; and (iii) providing evidence of the attainment and integration of standards and competencies in teaching.

Access: ePIC 2012. Conference ePortfolio & Identity.
https://repository.nie.edu.sg/bitstream/10497/13800/3/ePIC-2012-54_a.pdf

3. Implementation cases

[Full paper] **ePortfolios in School Practical Studies at Vienna University of Teacher Education – from Theoretical Considerations to Practical Implementation.**
Thomas Strasser, Harald Knecht, Vienna University of Teacher Education

For the University of Teacher Education Vienna the role of reflection and reflective processes concerning the development of professionalism mechanisms, i.e. student teachers should constantly reflect on their role as a teacher including all the accompanying factors, like lesson planning, lesson design, general pedagogical performances in the classroom, etc., can be seen as highly important. Research project "The role of self-organized learning within the context of ePortfolio software Mahara at Vienna University of Teacher Education." As mentioned earlier, the project examines the role of self-organized learning with ePortfolios. Our focus shall be put on the question whether by means of using ePortfolios additional benefits can be generated by student teachers during their teaching practice in contrast to analogue portfolios.

Access: ePIC 2012. Conference ePortfolio & Identity. Conference Proceedings, p. 38 http://www.epforum.eu/sites/www.epforum.eu/files/ePIC%202012_0.pdf

[extended abstract] **Using E-portfolio in Teacher Education: A Case of Hong Kong**
Wai-Mui Christina YU, Hong Kong Institute of Education, Hong Kong S.A.R. (China)

Based on the use of FE e-portfolio of the teacher education programme in Hong Kong, this paper aims to examine how e-portfolios provide pre-service teachers with a platform to document their learning progress in FE and bridge the gap between theory and practice through a series of learning activities as well as critical reflection on FE

Access: ePIC 2014 - 12th International ePortfolio and Identity Conference, Greenwich, London, p. 28 http://www.epforum.eu/sites/www.epforum.eu/files/ePIC2014_abstracts_0.pdf

[abstract] **The use of ePortfolios to support Initial Teacher Training**
Matt Wingfield, Janette Mills

This paper, and the accompanying presentation, will case study one particular implementation of a web services based ePortfolio solution and how this has been used by an initial teacher training organisation in Bedfordshire, UK, called The Pilgrim Partnership to support the delivery, management and assessment of Higher Education student teachers and Continued Professional Development (CPD/PDP).

Access: Learning Forum London 2010, conference proceedings, p. 104 http://www.eife-l.org/publications/eportfolio/proceedings2/lfl2010/lfl2010proceedings.pdf

[Full paper] **Integrating ePortfolio in an Online Platform for Teacher Professional Development: Design and Expectations**

Albena Todorova, Ludwig-Maximilians-University Munich, Germany; Danny Arati, Thomas Osburg Intel Corp.

This paper presents a work in progress on the integration of ePortfolio functionality in an online training platform within the most recent development of the program Intel® Teach – Advanced Online for professional development of teachers in the use of technology for teaching and learning.

Access: Learning Forum London 2010, Conference Proceedings, p. 105 http://www.eife-l.org/publications/eportfolio/proceedings2/lfl2010/lfl2010proceedings.pdf