



DESIGNING AND VALIDATING AN E-PORTFOLIO TOOL FOR TRACKING TEACHER COMPETENCIES AND DEVELOPMENT THROUGHOUT A CAREER ACCORDING TO EU PRINCIPLES

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Abstract

A policy describes and advocates an ePortfolio career-tracking system for European Union educators in order to strengthen professionalism and raise standards of teaching and learning. It argues for a need to include non-formal and informal evidence, as well as formal qualifications, in order to provide a more complete picture of an educator's knowledge and competence. Professional principles rather than arbitrary standards are suggested as being more enduring and meaningful in transnational contexts as the criteria for selecting appropriate evidence. These are defined for the beginning, middle and specialist stages of a career. The policy and ePortfolio tool were developed in the context of the PEEP project. This paper presents the methodology for designing the ePortfolio tool, as well as results from pilots taking place in Greece. Recommendations are made from stakeholders feedback regarding the development of the ePortfolio career record. It is suggested that this tool becomes a mandatory recording system of continual professional development for EU educators in order to assist and confirm professional status and provide a useful passport for mobility.

Introduction

Teaching is a complex profession, coping with increasing student diversity and struggling to raise educational standards for global competitiveness. The environment of an educator (teacher/trainer) at any level is immensely challenging and member states are reviewing how they prepare and support them for the vital tasks they perform on behalf of the European society. Educators play a core role in supporting the learning experiences of both child and adult learners. They influence the evolution of education systems and implement reforms which can make the European Union (EU) the highest performing knowledge/competence-driven economy in the world. They recognise that quality education provides learners with personal fulfilment and effective communication, enabling social competencies and greater employment opportunities. Their profession, inspired by values of inclusiveness and individual development, has a major influence on society by advancing human potential and

shaping future generations. To achieve its objective, the EU views the role of educators and their career development as key priorities (COM, 2007).

The quality of teaching determines Europe's competitiveness in the world and is positively correlated with student achievement (Darling-Hammond, 2005). The European Commission Report (2004) on progress towards the Lisbon education and training objectives, as the route out of poverty and means of social inclusion, emphasises the development of key competences (2006). As well as imparting knowledge and understanding, educators must help students become autonomous learners by targeting transferable abilities rather than just memorising facts to pass tests. This calls for common European competencies and qualification principles for both teachers and trainers. Directive 2005/36/EC provides the legal framework for the professional mobility of teachers with common principles and recognised qualifications to support this.

European Principles for Teacher Competencies and Qualifications

The Principles have been devised in response to challenges laid down in the Joint Interim Report by the European Council and the European Commission on progress towards Education and Training 2010.

- **Well-qualified:** requiring extensive subject and pedagogic knowledge to guide students, understanding their physical, mental, emotional, social and cultural needs.
- **Life-long learners:** needing continual knowledge and skill updating to cope with a rapidly changing world.
- **Mobility:** working/studying in other European countries with mobility central to professional development in a global world with continual movements of populations
- **Partnership:** working collaboratively with all stakeholders for maximum results.

The PEEP Project

Europe comprises a rising number of diverse cultures and ethnic groups with values and attitudes exhibited in different conventions of thinking, communication and action. A more comprehensive, flexible mode of educating, training and assessing teachers meets these demands. A common EU ePortfolio of professional development encourages educators to plan and participate in life-long learning to validate this process. It addresses on-going monitoring of knowledge, attitudes and pedagogic competencies and their effectiveness in practice within a career dossier. This provides a coordinated, coherent, continuous, cooperative approach to personal-professional development, promoting a culture of reflective practice and research; supporting professionalism and assisting the status, recognition and mobility of educators.

Portfolios are used in professions outside education such as architecture, journalism and medicine (GMC, 2003). They enable the inclusion of formal, non-formal and informal evidence for a richer, more complete picture of individual learning and experience (Council recommendation on validation of non-formal and informal learning, 2012). The European Centre for the Development of Vocational Training (CEDEFOP) has emphasised the importance of non-formal and informal evidence, which 'has a key role to play to increase the value of skills and competence developments for adults in the workplace' (2013). It is to finalize and disseminate results of a study on the validation of this new approach to gathering evidence.

- **Formal evidence** would include a relevant qualification, such as an under-graduate B.A. or B.Sc. degree or a post-graduate qualification like a Higher Education Certificate or Diploma, an M.A. or M.Sc and at a further level a M.Phil, subject Doctorate and ultimately a PhD. These can be measured against the European Qualifications Framework (2008).
- **Non-formal evidence** would be an organized activity, such as a teaching plan and implementation of this with personal analysis, reflection and review of what has been learnt.
- **Informal evidence** has many possibilities. It could record student, colleague or parent comments on something a professional has been involved in, such as a concert, field trip, community or other event with a response to this. Another possibility is a conference review, article or book with reflection on how knowledge and its application have been enhanced. It can also encompass skills acquired through life experience as in running a sports/drama club.

Choice of evidence reflects agreed principles, as described. At pre-qualification stage, this will be reviewed by a tutor with assessment in line with qualifications. In a post-qualification work-role, it will be the annual appraiser. How a portfolio is reviewed is a challenge requiring assessor training to ensure a consistent approach to its use.

Designing the PEEP ePortfolio Tool

The ePortfolio tool has been designed taking under consideration the following fields and employs a grid (Table 1) to plot the user's career stage against the four EU principles.

1. **The role of the creator:** This section contains a brief resume of the creator's present role, responsibilities and experiences, reviewing what has been gained from these and presenting a plan for future development in line with personal, professional and workplace goals.
2. **A grid defining principles at early, mid & specialist career levels:** This enables individuals to map their career stage to the four EU principles for evaluation of the formal, non-formal and informal evidence that has been selected.

3. **Evidence of formal, non-formal & informal evidence:** Portfolios are representative not comprehensive, so evidence should reflect significant, relevant aspects of a professional and their teaching and so during a career new material will be included and older information archived. Firstly, focus is on goals and growth towards these and later achievements. Secondly, it is self and collaborative evaluation, meaningful for the teacher and others involved. Finally, it is dynamic assessment with items added or deleted to fit development. Four classes of evidence are chosen with the portfolio creator having ownership of all material and deciding who can have access, at what point and for what purpose.
 - **Documents:** such as a curriculum/lesson plan, reflective log, conference/journal review.
 - **Recordings:** visual/audio recording of a lesson, meeting, discussion with colleague.
 - **Testimonials:** evaluations from colleagues or letters from parents/students
 - **Information links:** statement of beliefs, goals, rationale and captions that enable the evidence to be cohered and developed as a narrative of an individual's personal and professional experience.
4. **Witness statements of evidence selected:** It is important for validity and reliability to have a witness statement for evidence selected for assessment or evaluation purposes.
5. **Previous learning and experience:** Those presenting portfolios for various purposes well into their career will select only what is relevant for current requirements but need to summarize and review previous learning and experience as a context for the present evidence.

The career phases do not signify levels of experience; rather they frame general and recognisable aspects of professional competence and achievement. In order to support teachers in the completion process, guidelines have been devised describing in detail the non-formal and informal types of evidence, since it has been that fed back to the PEEP partners that stakeholders are not particularly familiar with the terms.

Based on the principles grid, the ePortfolio tool has been designed and is available at <http://peep.ea.gr>. Interested stakeholders can register and choose their career level that can be changed later if they find their experience is across the prescribed stages. Based on the selection the respective indicators appear for completion. The indicators are categorised in six (6) tabs. Since, emphasis is placed on self-reflection; a tab entitled “*My Narrative*” has been added. Educators might start with this section, providing a generic outline and from there insert their appropriate evidence according to the purpose required. When providing evidence for their profile, educators can complete the Europass Curriculum Vitae form (2014). Users may either submit a file, URL or text note for submitting evidence (see Figure 1). Respecting requests for privacy, teachers can choose whether they would like to showcase their ePortfolios fully or partly by checking the box “*Make public*”, existing under each indicator.

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Moreover, by sharing the link “*View Portfolio*” they can share it with other stakeholders, peers or potential employers for assessment, evaluation, revalidation or exchange of practices.

The screenshot displays the 'ePortfolio Editor' interface. On the left is a vertical sidebar with six numbered categories: 1 User information, 2 Acquisition and Application of Theory and Knowledge (highlighted in green), 3 Continuing Professional Development, 4 Partnerships, 5 Mobility, and 6 my Narrative. The main area is titled 'Apply and expand knowledge within your subject(s)'. It contains two entry boxes. The first entry, titled '1. Use exemplary teaching strategies and techniques that meet the needs of individual students, groups and/or classes of students in a highly responsive and inclusive manner', has an 'Add evidence' dropdown menu open, showing options: 'Add a URL', 'Add a text note', and 'Add a file'. Below this is a text input field containing 'http:// ee.gr'. To the right of this entry is a 'Make public' checkbox, which is checked. The second entry, titled '2. Consistently use exemplary assessment and reporting strategies that are highly responsive Acquire and apply widening specialist knowledge and problem solving approaches', also has an 'Add evidence' dropdown menu and a text input field containing 'http:// ee.gr'. A 'Change career stage' button is located in the top right corner.

Figure 1. Providing Evidence

Also, web 2.0 functionalities have been added, using this tool to either share their ePortfolio through popular applications or to print it out in hard copy.

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Table 1: PEEP Grid defining principles at early, mid and specialist career levels/phases

EU Principles	Early Career Professional Development Phase *	Mid-Career Professional Development Phase *	Specialist Professional Phase * (specialism in subject and/or leadership expertise)
Acquisition and Application of Theory and Knowledge	Apply knowledge within your subject(s) Apply subject/s or phase-related knowledge to diverse audiences appropriate to your work role Cater for diverse student learning styles and needs through consistent application of a wide range of teaching strategies Engage students in purposeful and appropriate learning experiences Monitor, assess, record and report student learning outcomes Apply comprehensive systems of assessment and reporting in relation to student attainment of learning outcomes	Apply and expand knowledge within your subject(s) Use exemplary teaching strategies and techniques that meet the needs of individual students, groups and/or classes of students in a highly responsive and inclusive manner Acquire and apply widening specialist knowledge and problem solving approaches Develop new ideas and initiatives with learners and colleagues	Take a leadership role in the expansion of knowledge within your domain(s) Contribute to innovation development through action research leading to the emergence of new tools, methods, theories, models, etc. Provide support to the less experienced peers in your community of practice by teaching, training, mentoring and managing teams Demonstrate sustained commitment and contribution to the development of new ideas or processes at the forefront of work or study contexts, including research
Continuing Professional Development	Take responsibility for your continuing professional development Reflect critically upon professional experiences in order to enhance professional effectiveness Participate in curriculum policy and program teamwork Participate in CPD activities Contribute to the development of a learning community Get informed feedback from peers, students and colleagues Provide informed feedback to your colleagues on their own performance Plan further learning to support current activities and develop leadership capabilities in your subject matter(s)	Take responsibility for your continuing professional development and that of others Contribute actively in the review of the performance of individuals, groups and organisation. Engage in a variety of professional learning activities that promote the development of a learning community Promote positive and effective communication and relationships with all education stakeholders in a range of leadership roles, motivating them to cope with complex, on-going challenges	Take a leadership role in the continuing professional development of a community Take a leadership role in the review of the performance of individuals, groups and organisation. Lead in a variety of professional learning activities that promote the development of a learning community Provide leadership in the school by assuming a key role in school development processes including curriculum planning and policy formulation
Partnerships	Establish partnerships Establish partnerships with students, colleagues, parents, and other caregivers and agencies Work willingly with others Learn from working with others	Lead work within partnerships Support student learning through partnerships and teamwork with members of the school community Be committed to fostering team approaches that enhance roles, improve personal and academic performances Share expertise with colleagues in communities of practice	Lead speciality work within partnerships Be able to plan teams, create new strategies and initiatives which work effectively, ensuring equal opportunities for the development of colleagues in different roles both within and outside the work base, across national and international boundaries
Mobility	Organise your own mobility Contribute to establishing partnerships with external organisations and agencies in the perspective of mobility of learners across organisations, regions and countries Contribute to projects and initiatives leading to external mobility	Organise your mobility and that of others Establish partnerships with external organisations and agencies in the perspective of mobility of learners and staff across organisations, regions and countries Initiate projects and initiatives leading to external mobility	Lead mobility Develop initiatives across contexts and countries by establishing networks/leading initiatives to enable consistent standards of education across national boundaries

Validation of PEEP outcomes

The PEEP ePortfolio tool has been piloted across the partnership (Greece, UK, Bulgaria, Latvia, Wales, and Poland) after a training session on its use that took place in Sofia, Bulgaria in April, 2013 with Master Teachers (see Figure 2). The evaluation of ePortfolio use for tracking careers took place with 258 respondents across Europe. Methods of analysis included face-to-face group and individual discussions with exposure to the e-portfolio tool. A ratings-style questionnaire, with supportive explanations requested, was completed after the master teacher training and from educators, via online questionnaires and dissemination events. Four key questions have been asked of educators:

- Q1. The usefulness of an ePortfolio to track a teacher's career.
- Q2. The use of principles rather than standards for classifying ePortfolio evidence.
- Q3. Whether formal plus non-formal & informal evidence provides a more complete view of an educator's knowledge and professional competence.
- Q4. The utility of ePortfolios for annual review, registration, job interview or sharing practice with colleagues to assist their development.

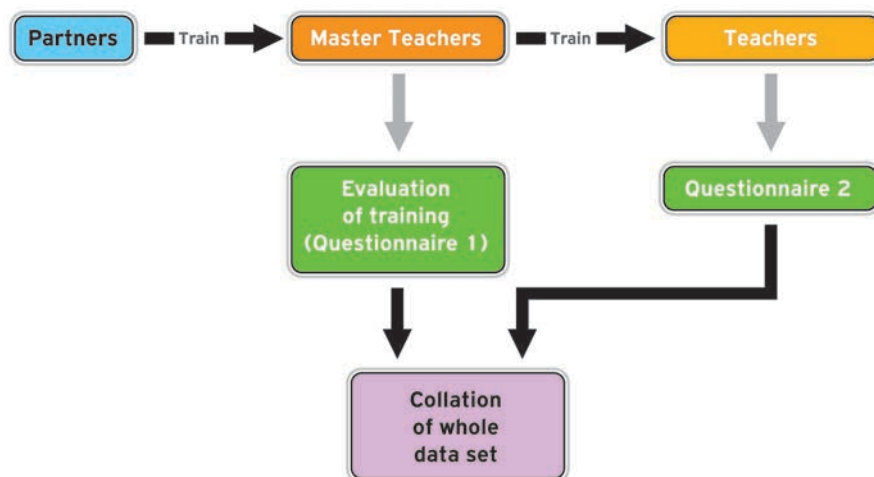


Figure 2. Model of training and data collection regarding the PEEP ePortfolio

Findings suggest that mixed quantitative and qualitative data, collected from questionnaires, capture a deeper understanding of respondent views, especially for triangulating evidence of question interpretation. Results of data analysis show that responses, from partner countries, are positive to the idea of ePortfolios. They offer insights into issues that may need resolution, such as a mandatory policy for career tracking and professional, technical support for the process.

Results from Greece

Sixteen (16) education stakeholders from primary and secondary education, lifelong learning sector, higher education, as well as teaching counsellors have participated in the workshop “Recording Teachers Professional Development” conducted in the context of the 7th ICODL 2013 Conference, taking place on November 9th, 2013, in Athens.

Methodology / Workshop Structure

After an overall presentation of the PEEP project and its aims, participants were split in three (3) groups based on their experience and career stage. They were asked to work in groups and provide examples of formal, informal and non-formal evidence from their career span in order to validate the project methodology. The teachers worked collaboratively and drew mind maps to record their answers. Presentations from team leaders were then made to the whole group. After the collaborative work, participants were asked to login individually to the ePortfolio tool and record their evidence, choosing the appropriate career stage. A very positive response for the use of non-formal and informal evidence has been recorded, with some reservations regarding the use of *principles* as criteria because standards are the recognised criteria for evaluating teacher competencies in Greece. However, for mobility purposes, the use of *principles* may be more appropriate and standards can always be used within this framework. Participants found the ePortfolio tool user interface intuitive and user friendly which is a very important aspect in promoting the platform. Regarding the utility of an ePortfolio to track a teacher’s career, some of the participants stated: *‘The e-Portfolio is mobile, allows flexible arranging of the information; it is more ecological’*, and, *‘I consider it necessary to write down and to present the good personal practices and new methods for improvement of the educational process’*.

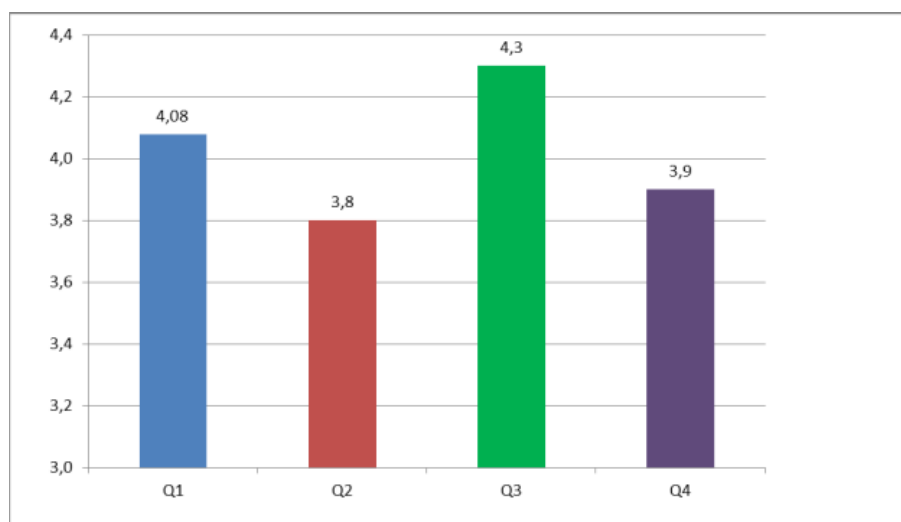


Figure 3. Collected input from Greek stakeholders

Further work

Based on the four (4) principles, a respective ePortfolio tool could be developed for other sectors and professions, such as the health or the engineering sector. Moreover, an online community has been created on Open Discovery Space Project portal entitled “*Record your professional development!*” and will be updated based on the activities implemented. All interested stakeholders are invited to join.

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