

# **E-portfolio for Recognition of Prior Learning Assessment in Continuing Education for Librarians in Croatia**

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## **Summary**

*Paper presents theoretical issues related to e-portfolio as lifelong learning tool. E-portfolio supports ongoing learning/professional development, formative and summative assessment, reflective writing and collaborative, active and deep learning. It is powerful tool for professional development planning or career planning by fostering intrinsic motivation of a learner to maintain portfolio on an ongoing basis throughout formal classes, programs of non-formal learning or just in demonstrating professional or personal growth over time. Focus is on e-portfolio as tool for evidencing prior learning for further assessment or recognition. Different types of digital technology are in use, and diverse portfolio purpose and use are reflecting on assessment. Paper focuses on modeling a conceptual model of e-portfolio system as a tool for assessment and recognition of prior learning in continuing education of librarians in Croatia.*

**Key words:** e-portfolio, recognition of prior learning, continuing education

## **Introduction**

Portfolio is a written record of the skills, achievements and learner's development over time. There are several types of portfolios; most commonly we think about artist's portfolio which consists of artwork that the artist can take to job interviews, conferences, galleries, to give others an idea of what type of genre the artist works in. Art portfolio, sometimes called "artfolios", can be a variety of sizes, and usually consists of approximately ten to twenty photographs of the artist's best works. Artists could maintain multiple portfolios for different types of work, one for technical illustrations and another for paintings.

Portfolio doesn't stand instead of formal qualification. Its purpose is to give evidences of someone's professional or personal competencies or learning experience gathered over some period of time. Portfolios can be of different types: artistic, learning, research, institutional, career, financial and so forth; and could be maintained on different formats, such as written, electronic or web-based

portfolios. LinkedIn and such social portfolio web sites have become very popular for presenting personal credentials and connecting with peers.

The aim of this paper is to examine a purpose of an electronic portfolio as a lifelong learning tool. Paper focuses on modeling a conceptual model of e-portfolio system as a tool for assessment and recognition of prior learning in continuing education for librarians in Croatia. Paper is reflecting on findings of research project "Lifelong learning for librarians in Croatia" financially supported by The National Foundation for Science, Higher Education and Technological Development of Republic of Croatia.

### **Learning e-portfolios**

Empirical researches on use of e-portfolio are very limited and focus more on its technical development. Helen C. Barrett (2005) gives a review on theoretical issues related to e-portfolios, and their use in education or academic research. Definition of learning e-portfolio differs in scope of its purpose, use, intended users or technical constraints.

Herman and Winters (1994) define well-designed educational portfolios as "representing important, contextualized learning that requires complex thinking and expressive skills. Traditional tests have been criticized as being insensitive to local curriculum and instruction, and assessing not only student achievement but aptitude. Portfolios are being heralded as vehicles that provide a more equitable and sensitive portrait of what students know and are able to do. Portfolios encourage teachers and schools to focus on important student outcomes, provide parents and the community with credible evidence of student achievement, and inform policy and practice at every level of the educational system."

Barrett and Wilkerson (2004) proposed a new taxonomy of electronic portfolio systems already in use in HEI:

- portfolio as a digital archive of learner's work
- portfolio as a learner-centered electronic portfolio and
- portfolio as an institution-centered database, or assessment management system, to collect administrative assessment data based on tasks and rubrics.

Portfolio system's market is every growing and Batson (2002) describes "e-portfolio boom" as follows: "We seem to be beginning a new wave of technology development in Higher Education. Freeing student work from paper and making it organized, searchable, and transportable opens enormous possibilities for re-thinking whole curricula: the evaluation of faculty, assessment of programs, certification of student work, how accreditation works. In sort, ePortfolios might be the biggest thing in technology innovation on campus. Electronic portfolios have a greater potential to alter higher education at its very core than any other technology application we've known thus far."

Kimball (2005) surveys trends in the e-portfolio boom, comparing technical constraints of portfolio systems to portfolio pedagogy. He states that majority of standardize database-driven portfolio systems is lacking in technical functionalities for meaningful reflection over learning artifacts. Self-reflection protects e-portfolio to turn to be a humped with of various elements, or just an enumeration of facts. Database portfolio systems employing either too much standardization or too much flexibility, and in both cases portfolio risks to missing the pedagogical target. Making a portfolio should be an imaginative, creative and rhetorical act, not merely a form to fill out. On the other hand, too much flexibility would fail to give adequate pedagogical guidance. Kimball concerns about privacy and ownership over electronic or web portfolios. The movement toward portability and persistence of created portfolios throughout creator's lifecycle, rises problems concerning access rights and ownership over portfolios.

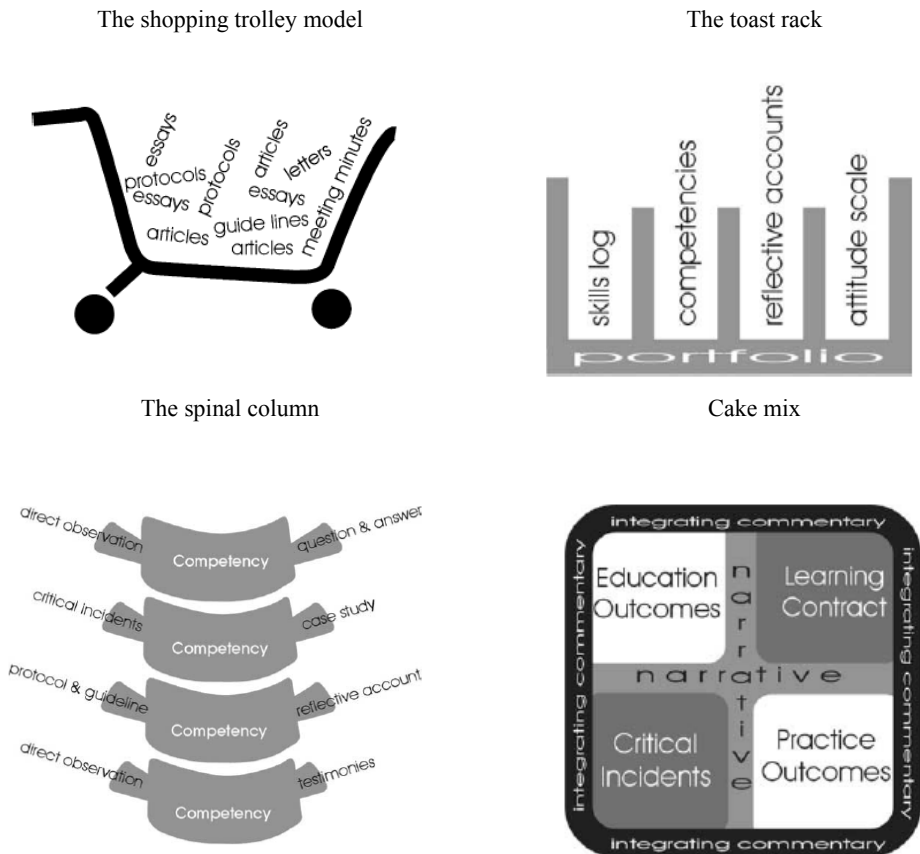
### **Portfolio for assessment**

Portfolio is more that just a tool for recording professional or personal progress over time. 'Suitcasing' of qualifications is just not enough in highly demanding information era where professional and personal competencies develop daily. E-portfolios have advantages over hard copy portfolios by being easily accessible, having the capability to store multiple media, being easy to upgrade, and allowing cross-referencing of learner's work (Johnson et al., 2006). Lin (2008) reviews theoretical findings to foster development of e-portfolios as a learning strategy, as a reflective and also technical tool. In Higher Education e-portfolio has been used as an alternative assessment tool. Principles of learner-active, experiential learning were central to the portfolio approach and foster the use of portfolios for the purpose of assessment and personal development plan. Envisaging assessment methods, Endacott et. al. (2004) concluded that portfolios are a system under development. This development affects portfolio assessment. Analyzed data revealed four approaches of the structure and use of portfolios: *shopping trolley*; *toast rack*; *spinal column* and *cake mix*. All four structures (Figure 1) imply the effectiveness of portfolios in assessing learning and competence.

The *shopping trolley* is similar to suitcase, repository for artefacts collected during the course. There is little cohesion evident in the portfolio, and little attempt to link evidence to learning outcomes or competencies. *Toast rack* is made up of discrete elements (the toast); assessing different aspects of practice and or theory, for example, sills log or reflective account. This elements remained separate even if the binder simply acting as a convenient device for keeping the elements in one place. There is no overarching narrative to connect the various sections, and different people may participate in the assessment of the various sections. The portfolio itself may or may not be assessed or reviewed. The *spinal column* is structured around practice competencies or learning outcomes (the 'vertebrae' making up the central column), and evidence

is slotted in, to demonstrate how each competence is been met. Reflective accounts could consider over more than one competency, and act as a linking flesh. The emphasis is on the original work of learner, while the evidence was used to support or illustrate the case being made. The *cake mix* approach is chosen when evidence from theory and practice is integrated into the portfolio and the whole ('cake') is assessed. Narrative form combines elements. Reflective commentary is aimed to demonstrate the learner's critical and analytical skills by considering how they achieved what they have, how the evidence supported this, and what they had learnt. Form of a *cake* is a sum of its individual parts, and it is the whole that is assessed rather than the ingredients. Reflectivity, practice and professional development is likely to be features of this model.

Figure 1. Four models of portfolios by Endacott et al. (2004)



Source: Based on R. Endacott et al. (2004, 252-253)

Use of an e-portfolio in Higher Education has been a great technological innovation. For learners, e-portfolio fosters deep-learning, emphasizes reflective learning practice and involves learners to take more active role in learning. For academics, e-portfolio is an assessment tool for both summative and formative assessment methods, a means for assessing learner's achievements and progress. But, how an e-portfolio could be use in continuing professional education?

Continuing professional education differ from HE accredited programs in many ways, mainly in lacking formative quality control, its voluntary mode of use and lack of external accountability. CPE program tends to maintain and enhance the knowledge, expertise and competence of professionals throughout their careers, according to a plan formulated with regard to the needs of the professional, the employer and society. Recent radical changes that affect workforce security in 'job for life' expectation, have multiple outcomes on career planning. Professionals accept reality that there is no safe job, that they must be open to potentially multiple careers instead of deeper specialisation in one single field, and that they must plan their own portfolio careers with horizontal development with little opportunities for vertical hierarchical promotion (Middlehurst and Kennie, 1994). In that regard, continuing professional education, which links education and practice and aims to maintain competence to practice become essential for professional survival. Providers of CPD will take substantial steps toward creation of mandatory and structured CPD opportunities for professionals. CPD portfolios or PDP (professional development plan) portfolios are wildly recommended for professional in all range of sectors.

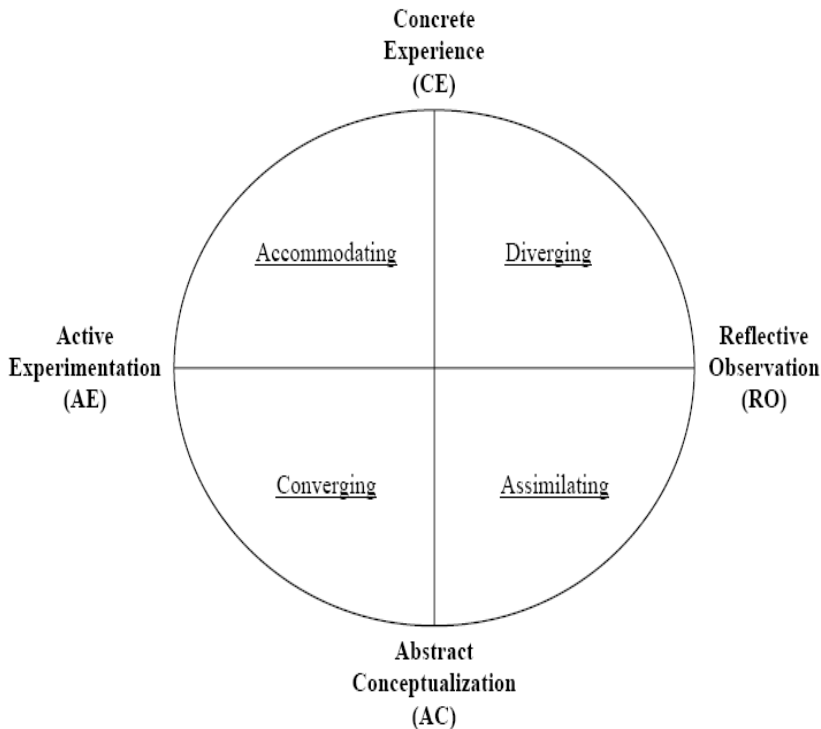
As a showcase of using portfolio for assessment of professional development in library and information science is a case of licensing membership for Chartered Information and library professionals (CILIP) in Great Britain. Watson (2008) indicates that portfolio, apart from being a means of presenting learner's professional competence, is a tool for personal development planning, concerning with current or future job roles, and should include additional activities that the individual undertakes outside the work-based environment. She discusses the portfolio assessment criteria which are in use in CILIP, stressing five objectives of good portfolio practice: reflective writing, curriculum vitae, professional development plans, professional statements and supporting evidence.

Reflective writing is the formal, or informal, recording of learner's thoughts. Most writers on reflective practice refer to Kolb's model of experiential learning (Figure 2).

Experiential learning is learning from direct experience. The idea of experiential learning is old as a Confucius sentence "tell me and I will forget, show me and I may remember, involve me and I will understand." Theory of experiential learning is heavily drawn on the work of John Dewey, Jean Piaget and D. A. Kolb. Learning from experience is individual process of a learner, process that requires or involves no teacher. But to transform an experience to knowledge,

some abilities are required: the learner must be willing to be actively involved in the experience; the learner must be able to reflect on the experience; the learner must possess and use analytical skills to conceptualize the experience; and the learner must possess decision making and problem solving skills in order to use the new ideas gained from the experience. Reflective writing about learning experience must go beyond descriptive writing, and must be evidence of learner's reflective thinking, his ability to analyse and synthesize.

Figure 2. The Experiential Learning Cycle and Basic Learning Styles (Kolb, 1984, 141).



Source: David A. Kolbe et al. (2000, 39)

Curriculum vitae (CV) is also an important statement about how we see ourselves and what image of ourselves we project to others. A good thought-through CV enables to identify key moments in career and in development.

CPD is not something that just happens in an unstructured way, but that we should be pro-active in determining our goals and how we are going to reach them. CPD should be planned in such a way that our knowledge and skills are enhanced and improved by a program of varied developmental activities. Pro-

professional development plans provides direction, sets out objectives, identifies potential areas of development.

Personal statements are the most important element in CPD portfolio. It is like an executive summary in a report. By reading personal statement it must be immediately understood what portfolio presents. With personal statements we show evidence of analysis, evaluation and review of our knowledge and experience.

Supporting evidence is the largest part of CPD portfolio. Over the qualifying period we will collect a great deal of evidence of our professional developmental activities. There could be lot of types of evidence. The common items include: reports, published articles, presentations, performance reviews, photograph of exhibitions, minutes of meetings, notes from conferences or visits, web pages, diaries, blogs, letters, etc.

Based on developed practice of using portfolio assessment of prior learning, CILIP is heading to implement e-portfolio in near future.

### **Constructing a model**

Library and information professionals in Croatia are aware of great importance of continuing education. As Herbert White (1986) has noted, academic degree is not so much a qualification for a particular position, as it is a qualification for entry into the profession. Affected by dynamic environment of information technology, scientific innovations and mass production of information, library professionals change their professional routines and challenge daily their knowledge, skills and competencies. New knowledge and new skills is being learnt by evidence-based and work-based learning, non-formal and informal learning.

National program of continuing education for librarians and information professionals in Croatia is provided by The Training Centre for Continuing Education for Librarians in Croatia, founded in 2002 in National and University Library. Centre has been financially supported by Croatian Ministry of Culture. Program board, responsible for annual program scheme, consists of representatives from cofounder's institutions: National and University Library, Information Science Department of University of Zagreb Philosophy Faculty, Zagreb Public Libraries and Croatian Library Association. Short, one-day courses tend to refresh prior knowledge as to further new library or information skills. Program is developed for all types of library; academic, special, public and school libraries; and organized in Zagreb as in another eighteen cities in Croatia. Last year, in 2008, Centre profound 500 hours of education for 1570 participants. At accomplishment of course, participants receive Certificate for participating in continuing education. Any kind of assessment or recognition process has not been in use. Library schools in Croatia also provide continuing education programs, and several major conferences are organized every year around LIS topics.

By one-year research project, "Lifelong learning for librarians", granted by The National Foundation of Science, Training Centre will integrate outcomes-based education in defining competency-based learning outcomes at unit and program level. Learning outcomes are statements about what learner will know, understand or be able to do after accomplishment of a learning program. Outcomes-based CPD will ensure high and sustainable competence standards for the library and information profession. Competence standards will help librarians to plan their professional development, to take an active part in continuing learning. On the other hand, competence standards will serve as a reference base for assessment and self-assessment process.

In summer 2009 University computer centre – SRCE implemented Moodle Community learning management system with integrated Mahara e-portfolio module. While SRCE maintains Moodle for academic users from University of Zagreb, Moodle Community was designed to serve large public community. One of stated aims declared by its E-learning Strategy (2007) is to establish and maintain an e-portfolio system - "a system of unified (interoperable) recording of the qualifications and experiences obtained in the course of education should help students not only in achieving mobility during their studies, but also in getting adequate jobs and starting professional career." Moodle Community LMS would be most suitable for librarians to participate in professional development e-learning program regardless of type of library he/she is working in. SRCE maintained Moodle learning management system for academic community, while Moodle Community would be suitable for community in general. Similarly, Minnesota's *eFolio* allows citizens of Minnesota to create a 'living showcase' of their education, career and personal achievements.

Maintaining a CPD Portfolio based on pro-forma e-portfolio system Moodle Community would be recommended for all participants in Training Centre who wish that theirs learnt knowledge in CPD will be assessed. Assessment criteria will be in use to assemble and display, for verification, the annual evidence for CPD of librarians. Self-presenting with a CPD e-portfolio is evidencing rather yours professional competencies than just your qualifications.

## **Conclusion**

Last ten years e-portfolios have been used in Higher Education as an alternative assessment tool. Despite of diversity of theirs structure and use, e-portfolios are means of presenting learner's professional competence, and a tool for personal development planning. Using an e-portfolio to maintain a record of achievements enables learner to reflect upon experiences and plot a development path for skills that will also help support learner in planning further career path. In the library and information profession the range of skills acquired by professionals can be extremely broad and may include aspects of building management, finance, personnel management, computing, teaching as well as some of the more traditional skills such as cataloguing and information retrieval. This



diverse set of skills makes the use of an e-portfolio by each individual imperative, to enable one to keep track of one's development in all areas. E-portfolio enables deep learning, evidence-based reflective writing, and summative and formative assessment. Like lifelong learning tool, e-portfolios gather evidence of learning experiences in formal, informal and non-formal learning. Thus, it is a most suitable for creating professional development plan and making records of continuing education.

National CPD program for librarians will integrate outcomes-based education in defining competency-based learning outcomes at unit and program level. Outcomes-based CPD will ensure high and sustainable competence standards for the library and information professionals in Croatia. Application of quality and competency standard will serve as a reference base for assessment of prior learning, which for an e-portfolio is its most appropriate tool. Recommendation of theoretical findings in aspect of assessment of prior learning and e-portfolio provide valuable information how to implement assessment of prior learning practices and procedures in CPD program. Implementation of CPD e-portfolio for library and information professionals in Croatia would be turn to more structured, mandatory and competency-based continuing professional development opportunity.

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