

TECHNICS AND INFORMATICS IN EDUCATION 6th International Conference, Faculty of Technical Sciences, Čačak, Serbia, 28–29th May 2016

TEHNIKA I INFORMATIKA U OBRAZOVANJU

6. međunarodna konferencija, Fakultet tehničkih nauka, Čačak, Srbija, 28–29. maj 2016.

UDK: 371.136:001.818]:373.3 Professional paper

Applying e-portoflio for improving the monitoring process and evaluation of teachers' work in elementary schools

Snežana Đorđević¹, Sanja Puzović² and Vladan Paunović²

¹ Primary School "Sveti Sava" Batočina, Serbia

² University of Kragujevac, Faculty of Technical Sciences Čačak, Serbia
e-mail snezana.bat@gmail.com, sanja.puzovic@ftn.kg.ac.rs, vladan.paunovic@ftn.kg.ac.rs

Abstract: The paper presents the contribution of the e-portofolio application in the process of evaluation of teaching work as the basis of evaluating the working process itself and the effects of improving competences of teachers. For evaluation it is important to set in advance the criteria and indicators on the basis of which the work of teachers will be evaluated. Monitoring of teaching work is the important element in the process of evaluating their work and its aim is to identify the potential problems and include teachers in training programmes. The importance of this process is reflected in obtaining the clear picture of the achievement level of the objectives and tasks planned and in development of teachers. The process of work monitoring and vocational training of teachers can be successfully conducted using the planned managing of documents through teaching record – portfolio. Portfolio has a long tradition in education and teaching work, today it is also available in electronic form. The importance of applying portfolio is analysed using the example of elementary school "Sveti Sava" in Batocina.

Key words: portfolio, vocational training of teachers, evaluation

1. INTRODUCTION

Modern conditions demand the use of technical and informational innovations in order to achieve the quality of work and development of students' and teachers' competences. Today is unacceptable that a teacher is out of ICT progress and its application, because then he would be "unable" to perform his professional function. Education, as the most powerful driving force in society imposes the need for permanent education and self-improvement of teachers allowing greater independence in planning and realization of the educational process. Techniques and means of informational and communication systems have a greater and more significant applications in education, teachers' work and its evaluation, which requires proper training and motivation of teachers for its use.

Portfolios have strong tradition within teacher education and have been used for a variety of purposes including supporting and documenting profesional learning and development and meeting registration requirements (Wray, 2008; Barton & Collins, 1993; Grant & Huebner, 1998; Ryan & Kuhs, 1993).

2. THE ROLE OF MONITORING AND EVALUATION OF WORK IN VOCATIONAL TRAINING OF TEACHERS

Professional development of people working in education is a comprehensive process which includes creating conditions and developed strategy at the level of community for a planned and continuous process of vocational training and their own professional development. In this way teachers are becoming the part of the process of improving the quality of educational practice (Grandić & Stipić, 2011). Professional development of teachers involves increasing teacher awareness of what works, how it works and how it can improve its work (Bjekić & Zlatić, 2006). In teacher education, e-portfolios raise issues including the best ways to intergrate these into preservice teacher learning, working with the under pinning pedagogies, and how best to support and assess preservice teacher learning using the new technology (Wray, 2007).

The quality of education of students largely depends on system of knowledge, abilities and skills of teachers, ie. on professional competencies. Teachers' professional competencies or the key abilities are classified in four groups (Code on competency standards for the teaching profession and their vocational training ("Official gazzette RS – Education gazzette", no. 5/2011): educational area competence, subject and teaching methods; teaching and learning competence; competence for supporting development of students' personality and communication and collaboration competence.

Monitoring the work of teachers is an important element in the process of evaluation of their work and its goal is to identify potential problems and to include teachers in training programmes. The importance of this process is reflected in obtaining the clear picture of the achievement level of the objectives and tasks planned and in development of teachers .

The process of work monitoring and vocational training of teachers can be successfully conducted using the planned managing of documents through teaching record - portfolio. The heart of the portfolio are examples of the teachers, but not just on what teachers say about their work, but the facts and examples of what they have actually done (Edgerton et. al, 2002). Portfolio has a long tradition in education and teaching work, today it is also available in electronic form. The advent of information and communications technology (ICT) not only creates new demands for teachers skills in this area, but also provides opportunities for using an electronic version of the portfolio (Strudler & Wentzel, 2005).

3. E-PORTFOLIO SUPPORT IN MONITORING AND EVALUATION OF TEACHERS' WORK

ICT have become an integral part of the educational system as a support for teachers during teaching and for professional improvement. The complete professional development of teachers can be represented through cumulative auto record which would provide functioning of the so-called evaluation circuit (Živković, 2000). E-portfolio is that kind of record (teaching portfolio).

Through e-portfolio teachers present their ideas and achievements as an integral part of their work, as well as the results of the self-evaluating and self-assessing process. E-portfolio as a collection of teachers' data, papers, achievements, awards and trainings, represented in digital format, is necessary to be filed continuously and systematically.

Teachers in elementary school "Sveti Sava" in Batocina in their work use e-portfolio "Fig. 1".



Figure 1. Front page of the e-portfolio of teachers in elementary school "Sveti Sava" in Batocina

Portfolio of elementary school "Sveti Sava" in Batocina contains the following information: CV; vocational training; teacher as a seminar leader; personal competence evaluation (according to the indicators in Code on competency standards for the teaching profession and their professional development ("Official gazzette RS – Education gazzette", no. 5/2011); personal competence evaluation (according to the indicators in Code on continuous professional development and acquiring teaching vocation ("Official gazzette RS", no. 85/2013.86/15); external evaluation of teachers' work; professional accomplishments; examples of good practice in working with pupils; examples of good practice in working with parents; additions to the self-assessment of teaching and learning field; significant results of methodical work (plans, preparations, additions on specific working methods, teaching resources...); annual overview of the accomplished vocational training and a personal plan of further vocational training; "My beginnings to remember"; "I want to keep from forgetting"; "My personal corner in the portfolio" "Fig. 2".

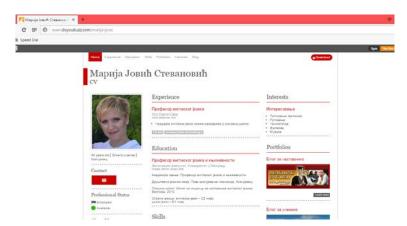


Figure 2. CV in e-portfolio of teachers in elementary school "Sveti Sava" in Batocina

Portfolio of elementary school "Sveti Sava" in Batocina provides the teachers an opportunity for saving, selecting and editing data of achievements and making effort in working with students; systematization of indicators of professional status and teachers'

vocatioval education; presenting their own work available to the external evaluators and interested professionals; displaying teaching competences necessary for acquiring the vocation of pedagogical advisor. "Fig. 3".



Figure 3. The opportunities provided by e-portfolio

E-portfolio provides a particular opportunity for creating blogs. Blog aims to instruct pupils to additional sources of knowledge, to display the work and dedication of students and to educate them in terms of technology. Teachers edit their blog partially on theirown, and partially in interaction with their students, their needs and interests. The displayed e-portfolio of teachers in elementary school "Sveti Sava" in Batocina owns blogs: Online classroom "Fig. 4", Reaching-English, Webcyclopedia, A Click to knowledge, St. Sava – Badnjevac, Professional orientation...



Figure 4. Online classrooms blog

3.1 Portfolio support in the process of work self-evaluation

Self-evaluation is a continuous process of implementation, analysis, adjustment and work improvement carried out in teaching practice contributing to the quality of school work. Self-evaluation is based on questions: How have we done something? Whether it could have been better? What can be improved? Which goals have been achieved, and which

have not? What else we need to know so that the achievements in the next self-evaluation are better? How do we contribute to improving the quality of school work by improving our own work?

The process of self-evaluation is carried out in accordance with the criteria of the continuous vocational training Code (September, 2013 and amendmends, October 2015), which defines the obligation of creating a portfolio. Criteria are part of the Code that regulates the way of progressing and acquiring the vocation of pedagogical advisor, independent, high and senior advisor.

In e-portfolio of elementary school "Sveti Sava" in Batocina are given the self-evaluation forms made according to the indicators of both documents, so that each user can opt for the first, second or both ways of self-evaluation. "Fig. 5".

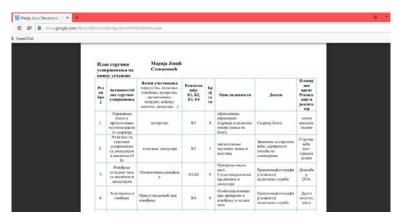


Figure 5. Self-evaluation pages in e-portfolio

4. CONCLUSION

The paper highlights the importance of applying e-portfolio in the process of monitoring and evaluating teachers' work, esspecially in modern conditions characterized by the intense development of ICT and their increasingly frequent use in educational processes and in developing teachers' competences.

The use of e-portfolio provides the possibility for efficient monitoring of continuous process of teachers' vocational trainings and evaluation of their work throughout their whole working life.

Expiriences of teachers in elementary school "Sveti Sava" in Batocina confirm the benefits of planned record keeping through teaching record in electronic form – e-portfolio. By using e-portfolio in this educational institution the educational process has been improved, while the process of monitoring and evaluating teachers' work has become more efficient, with positive effect on their vocational training.

REFERENCES

- [1] Barton, J., & Collins, A. (1993). *Portfolios in teacher education*, Journal of Teacher Education, vol. 44, No. 3, pp. 200-210.
- [2] Bjekić, D. i Zlatić, L. (2006). Komunikaciona kompetencija nastavnika tehnike, Zbornik radova Tehničkog fakulteta u Čačku, pp. 471–478.

- [3] Edgerton, R., Hutching, P. & Quinlan, K. (2002). The teaching portfolio: *Capturing the scholarship of teaching*, Washington, D. C. American Association of Higer Education
- [4] Grandić, R. & Stipić, M. (2011). Profesionalni razvoj nastavnika put do kvalitetnog obrazovanja, Pedagoška stvarnost, vol. 57, No.(3–4), pp. 198–209.
- [5] Grant, G., & Huebner, T. (1998). *The portfolio question: A powerful synthesis of the personal and professional*, Teacher Education Quarterly, vol. 25, No. 1, pp. 33–43.
- [6] Code on competency standards for the teaching profession and their professional development, "Official gazzette RS Education gazzette", no. 5/2011.
- [7] Code on continuous professional development and acquiring teaching vocation, "Official gazzette RS", no. 85/2013.86/15.
- [8] Ryan, J., & Kuhs, T. (1993). Assessment of pre-service teachers and the use of portfolios, Theory Into Practice, vol. 32, No. 2, pp. 75–81.
- [9] Strudler, N., & Wetzel, K. (2005). *The diffusion of electronic portfolios in teacher education: Issuesof initiation and implementation*, International Journal of Technology and DesignEducation, vol. 37, No. 4, pp. 411 433.
- [10] Živković, P. (2000). *Usavršavanje samovrednovanja nastavnika (samovrednovanje kao usavršavanje)*, Pedagoška stvarnost, Novi Sad, br. 1-2.
- [11] Wray, S. (2007). *E-portfolios in a teacher education program*, E-Learning, vol. 4, No. 1, pp. 40–51.
- [12] Wray, S. (2008). Swimming upstream: Shifting the purpose of an existing teaching portfoliorequirement, The Professional Educator, vol. 32, No. 1, pp. 44-59.