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Information and Communication Technologies in the Professional Development of Vocational School Teachers²

Extended summary

The paper discusses the professional development of the vocational secondary school teachers (VSST) supported by information and communication technologies (ICT). The VSST are partners in the work, demonstrators of the knowledge management organization, key drivers and implementers of educational reform, and the most important subjects that affect student achievement. In order to achieve all the roles, the VSST need to enhance their own knowledge through active participation in the multidisciplinary, continuous, planned social process of professional development aimed at improving the performance of their work and the social position of their profession. This process represents a change in practice mediated by individual learning through various activities, by learning through collaboration and by giving meaning to what has been learnt. The opportunities for the active, participatory, professional development of the VSST are supported by ICT, especially through possibilities to engage in colle-

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gial dialogue in online communities and to exchange educational resources for teaching, learning, and training. In such communities, knowledge sharing takes place at three levels through the exchange of specific resources, active participation by contributing to the community, or through passive participation in the exchange of practical experiences.

The aim of the qualitative research was to examine the vocational training of the VSST through ICT, as well as to answer the following questions: What is the educational preparedness of VSST for the use of ICT in their own professional development? What is the attitude of the VSST towards using ICT in their professional development? What form of ICT is used by the VSST in their professional development? Based on this conceptual framework, a qualitative research was conducted on the sample of 40 VSST in the territory of the Republic of Serbia (twenty men and women respectively) who teach various subjects. All teachers were between the ages of 30 and 45. Twenty teachers have over 10 years of work experience; all of them are computer literate. The remaining twenty teachers have less than 10 years of work experience, all of them use ICT for their own professional development; 18 of them design ICT tools for their own needs, while 10 of them design ICT tools for formal and informal, publicly available professional development.

A semi-structured interview covering eight questions was used to collect the data. Interviews took an average of 40 to 50 minutes. The interview audio recordings were made and transcribed. Anonymity was guaranteed to interviewees. The interview transcripts underwent a thematic analysis and the thematic grouping of the data. Data encoding was done in two cycles. In the first cycle, the collected data were grouped into three subcategories: (a) IT literacy, (b) the attitude of the VSST towards their own professional development supported by ICT, and (c) forms of professional development supported by ICT that are preferred by the VSST. In the second cycle we classified, prioritized, integrated, synthesized, abstracted and conceptualized the obtained data.

The findings indicate multiple types of narratives that vary with the length of work experience. All teachers have a positive attitude towards the use of ICT in their own professional development, they are trained for the usage of ICT, but the scope and intensity, as well as the preferred forms of ICT usage differ among them. However, it was found that the interest of VSST in the ICT-supported professional development is not consistent. Teachers with more than 10 years of work experience prefer more traditional forms (e-mail, interactive platforms, discussion forums, web conferences), while their colleagues with less work experience prefer more complex, innovative forms of the ICT-supported professional development (collaborative webinars, personal learning environment, personal educational networks).

The obtained findings vary due to a complex mix of psychological, socio-economic, pedagogical and andragogical factors. The dominant psychological factors observed in the narratives include: psychological vulnerability during the period of unemployment, motivation for continued learning triggered by unemployment, and the fear of social exclusion. The dominant socio-economic factors in the narratives were the age, the level of previous education, the social context and financial status of teachers during the period of unemployment. The especially important pedagogical and andragogical factors that determine these differences are the availability and flexibility of professional development activities, timely feedback, a critical at-

titude towards the learnt matter, and the awareness of the persistent development of the teaching-related knowledge.

It would be very interesting in a subsequent quantitative or mixed methodological study to examine the reasons why these differences occur. Furthermore, the promotion of the ICT-supported opportunities for the professional development of the VSST, along with an intensive information provision and education about them, as well as an increased transparency and a more intensive integration of the complex forms of the ICT-supported formal programs for the VSST could be important factors in the practice of teachers' professional development.

Keywords: vocational secondary school teachers, professional development of teachers, information and communication technologies.

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