

WCETR 2011

Computer information technology in the function of (permanent) high quality informal education of the teachers

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Elsevier use only: Received date here; revised date here; accepted date here

Abstract

Mission of every professional, pedagogical, competent person for educational activities in line with the changes in social and cultural spheres of life and work is to promote and stimulate young people's intellectual, social, emotional, personal, interpersonal, information capabilities and values. So, the teacher today is put before the more complex problems and tasks that are required to promote personal knowledge, skills and competences, to participate in informal, continuous learning, to support professional and career development, to be in search of new learning educational strategies in order to meet the educational and information challenges, easier to adjust the system changes, to improve the school and enable greater quality in the teaching process.

The programs in the field of ICT (text processing, table calculation, presentation, computer graphics, communication on the Internet), treat one more segment of the communication and therefore the teacher should strive to acquire quality information and technology education where rules exist which contribute the teacher to get the epithet literate personality and will be able to use them in their professional development.

The aim of this paper is to find out what is it like and how can the quality of formal education be raised in the application of ICT in the teaching process? Do current models of informal education are quality and do they motivate the teacher enough in continuous lifelong education? What are the objective disadvantages?

Keywords: ICT, permanent education, informal education, job improving, changes

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"The ideal goal of science is to work on its technical and perceived perfection in order to make the next generations happier than we were" (Monteskje, cited from Knezevic, 1991, p.109-110)

The started process of change in the education is aimed at greater effectiveness and quality of the teaching process. In the middle of all these reforms is the teacher as a participant and realizer of the changes, promoter and coordinator of the teaching practice, pedagogical leader in teaching and learning.

Teaching profession has long been regarded as a lonely profession. The professional teacher's insulation prevents the improvement of the effectiveness of the teaching process as well as its permanent professional quality and vocational training.

The conceptual structure of traditional teaching fosters working style in which the teacher dominates with his activities

- Traditional and congenial school culture is built (where the teaching profession is a lonely, isolated, overburdened profession without enough time and desire for cooperation and teamwork.)
- contribution absence of optimal utilization of emotional, spiritual and personal resources
- neglecting the students success lack of professional and pedagogical knowledge (from the psychological-structural theories of learning and teaching, ICT, ignorance of the latest amendments to the legislation, normative acts, programming fundamentals, the school curriculum, low level of verbal, writing and information literacy)
- absence of professional development (undefined models of professional development, lack of expertise and challenge in learning and teaching, frequent criticism)
- Seminars are often ineffective, short.
- absence of dissemination, maintenance, construction of the ideas in the classroom after the seminars
- Slavery of the traditionalism, uniformity and monovalent in the way of work, stereotype in the application of educational technology.

"The school is worth as much as the teacher. Thus important part of any school reform is increasing the education of the teacher" (Disterveg, cited from Cvetkovic, S., 1990, p. 226-230)

Professional and personal development of the teacher

The reconstruction of pedagogical theory and practice gives new contemporary thinking about the complex role of the teacher. Quality school promotes a broad list of redefined competences of the teacher, namely the teacher is expected to:

- has high human, ethical and professional qualities;
- promotion of the human, multicultural, European and democratic values in education;
- monitoring, promoting, evaluating the achievements and success of students;
- promotion of permanent education (PEO), a process aimed at professional and personal development (to motivate teachers to participate in educational forms of PEO, to structure seminars, to disseminate and realize the ideas of seminars in the classroom, to demonstrate and present the knowledge through academism in the process of teaching, to accept and apply new teaching techniques, to teach the material with informative, technological, digital and linguistic expertise);
- Acceptance of a new way of working. The teacher to know how to apply action research, to apply their knowledge in using the electronic diary, electronic portfolio, electronic applications, digital content;
- initiating capabilities and coordinating the elements of interactive influence for optimal utilization of emotional and spiritual human resources in the classroom (teacher to animate team work, to share their own experience on the level of professional assets, acceptance of a defined standard of assessing the results of monitoring and evaluation of the teaching process, self-assessment, analysis of pedagogical documentation, restore information from students, parents);
- Focus on differential, planned, rapid, individualized, informative teaching.

The teacher to provide developing positive learning experiences through the promotion of cooperative, competitive, individualized, project learning, learning through work.

ICT and the need for permanent education

In FYR Macedonia in the period 1989-2011, the Ministry of Education and the Bureau of Education realized numerous projects, programs, and seminars, workshops in the field of information knowledge in preschool, primary and secondary education. In the professional training of teachers are often included international foundations, institutions, accredited institutions. Important projects that have been realized are: Active teaching- interactive learning (1990), Draft Program for ICT in education (2005-2015), Draft Strategy for Development of Informatics Society, E-School (2003-2008), Macedonia Connects (2004 -2007), Modernization of Education (2004-2009), Computer for Every Child (2006-2015).

Modern technology applied in education provides communication, applying, creating, processing and storage of data and their further use. Today commonly used term is - IKT - (Information Communication Technology) denoting ICT. Today, in Macedonia's current campaign - Computer for every child - in parallel, each classroom is equipped with appropriate technology for the application of ICT; teachers are put in a position to implement the teaching with this technology. Therefore it is necessary to have appropriate knowledge and skills for effective implementation of the teaching process. Through the application of ICT in the teaching process, teachers are offered opportunities for their development; consequently it is necessary to meet certain standards in educational practice:

- creation and implementation of the priority system and national education policy in Macedonia for professional development of teachers;
- quality diversification of the knowledge of teachers as a result of rapid expansion of information technology in education, training and monitoring the educational needs of teachers for effective participation in improving quality and raising the efficiency of the teaching process;
- increasing the educational motivation and material stimulation of teachers with the introduction of objective reality feasible legislative changes for career advancement;
- creating optimal conditions for PEO teachers, equal unselected access to educational opportunities for all teachers in the education process, providing qualitative, flexible, coherent national curriculum for professional training of teachers, use of different models, forms of non-formal education training, defining indicators for successful identification of the competencies of teachers;
- expanding the network of accredited providers of educational services from private, governmental and public sector that will provide an opportunity for certified, quality PEO of teachers in primary and secondary education;
- clearly defined changes and amendment to the law on primary and secondary education and entering the protective mechanisms of political influence in its implementation in terms of objective regulation of the pursuit of teaching profession;
- taking responsibility from the local government on issues related to quality of schools' work, and thus the quality of performance by the teaching staff;

Educational reality

In order to come to the knowledge of the opinions and attitudes of teachers about what and how you can raise the quality of PEO through applying ICT in our educational practice, what are their thoughts on the offered models, forms of informal education, possible shortcomings, the research technique of unstructured interview was used. Talks with teachers were conducted during the school year 2010/11. Usually the talks were informal, a free kind of open conversation, discussion.

In the communication informal protocol was used for which the respondents were informed. The protocol consisted of several sections containing informal, flexible topics: general information for students, the application of ICT in teaching, problems in implementation, and the need for PEO, forms of education about certain software programs, the effects of professional training, benefits, and inconsistencies.

The basic structure of the sample consisted of pupils from primary schools in the municipality Bitola. By wish from the subjects of the sample the initials of their name and surname were given. The first question asked of respondents' thinking about the kind of problems encountered in the implementation of the program contents through applying ICT, whether the professional and methodical preparation of ICT is sufficient to realize the teaching contents, what principles, methods, strategies of work are used in teaching practices and what are the priority competencies of the teacher.

AG “Yes, I think the current professional and methodical preparation of ICT in elementary school are sufficient to deliver the program, in the teaching practice I often use different methods, forms, strategies to work, while as a priority competence of the teacher I think it is the rule with information literacy as WORD, EXEL, INTERNET EXPLORER, POWER POINT.

T.P. "A more organized form of training, sharing the experience of ICT.

The so far forms of training are insufficient, ineffective with weak methodically ready trainers, which are most commonly selected by the school head, confused, inexperienced, not able to effectively disseminate the acquired knowledge.

While on the question about teachers' competencies, the respondent believes that the teachers are partly enabled to apply the ICT in the implementation of the curricula.

Teachers with longer professional internship consider that the current training of ICT in our school practice is not enough, coherent programs for PEO are needed, teamwork, cooperative learning, sharing the experience in the classroom with the students, increased motivation, taking personal responsibility for self-development, while teachers with less work experience feel that the so far way of professional training is enough.

On the following questions we asked opinion from the respondents about the forms of PEO in the pedagogical practice, through which forms of learning they have been educated about certain software programs, the frequency of use of the ICT technology in the implementation of the curriculum and from which instructional subjects.

Common for all thinking is that they considered that the only form of informal education are the seminars, trainings usually implemented in the schools, the educational software and operating system Tool Kid Edubuntu, all participants have expectations of better organized and structured seminars while the expert advice, chats, discussion on ICT in the teaching in schools do not exist.

The most common appliance of ICT is in the teaching subjects: language, learning about the environment and art education. On the question how often they apply the ICT in the implementation of curriculum subjects the respondents have been divided, while some do it often, another group of respondents rarely apply the ICT in the implementation of the curriculum, mostly for technical reasons, unavailability or defects of computers. The following discussed topic refers the issues concerning the implementation of pedagogical documentation with ICT and how much the new ways of working facilitates the pedagogical practice.

V.A. "I can say that the application of ICT in the educational preparation of documentation much facilitates my job, on the contrary I believe that the traditional method of preparing the pedagogical documentation is more flexible, aesthetic and ethically more accessible.

MG "I do the pedagogical documentation electronically which gives me bigger efficiency in the performance.

As possible inconsistencies and solutions from the application of ICT in the teaching, respondents cited the following:

- To promote the PEO as team school culture, focused on acquiring new knowledge, skills, competencies, sharing experiences in order the teacher to easily adapt to the change;
- To improve the quality of organizing and structuring the workshops, seminars to be effective, professional, the exchange of ideas to be on the level of professional council, teaching advice, parent meetings;
- To implement a standardized system of organized patterns of informal learning of teachers in the school curriculum with openness for continuing education, mobility, certification, successful career, learning culture.
- Integrating the ICT in all subjects as an interactive new way of working that gives the opportunity learning to be interesting, creative, logical to the student;
- Schools to have equipped IT labs, instead of a computer before each child with a permanent technical support;

CONCLUSION

"The real teacher has never had enough training. It is happiness and unhappiness of our profession. The knowledge of the teacher requires continuous adjustment of the progress which the science makes it with increasing speed " (Max Resner, cited from Panovic.M.1990, p.74-76)

The permanent education of the teachers is a multidimensional process aimed at:

- Unselective, equal access to the educational mobility to all teachers without discrimination of age, sex, political affiliation across all organized forms of informal education;
- Improving the quality and quantity in the educational process;
- Expansion and new alternative ways of working, learning, practice, content, values;

- Interactive, positive impact on the behavior, opinions, attitudes, behaviors of the entities involved in the educational process;
- Optimal utilization of human emotional and spiritual resources;
- Expansion of an organized network of informal education with accredited providers of educational services in multimedia learning, working, home learning, team learning, voluntary activities;
- Increasing the responsibility and engagement of the local community towards the schools for permanent education;

REFERENCES

- Cvetkovic, S.(1990). Vrednosne orijentacije nastavnika osnovne skole, Beograd: *Inovacije u nastavi*, 226-230
- Knezevic, B. (1991). Informatičke osnove izgradnje mreže za sveobuhvatno koriscenje znanja u obrazovanju, Krusevac: *Inovacije u nastavi*, 2, 109-112
- Panovic, M. (1990). Pedagoska klima и stavralacka djelatnost nastavnika, Krusevac: *Inovacije u nastavi*, 74-78
- Закон за основно образование, пречистен текст, *Службен весник на Р.М. бр.108/2008*