

UDC: [37.091.113-051:378.046-021.68]:004 (043.5)

DOI: <https://doi.org/10.24195/2414-4665-2017-4-21>**Nataliia Mukan,***Doctor of Pedagogy, professor,**head of the Department of Foreign Languages,***Marharyta Noskova,***PhD (Candidate of Pedagogical Sciences), associate professor,**Department of Pedagogy and Social Management,***Inesa Baibakova,***PhD (Candidate of Pedagogical Sciences), associate professor,**Department of Foreign Languages,**Lviv Polytechnic National University,**12, Stepana Bandery Str., Lviv, Ukraine*

THE FORMATION OF SCHOOL PRINCIPALS' READINESS TO USE INTERNET TECHNOLOGIES IN THEIR WORK IN THE SYSTEM OF CONTINUOUS PEDAGOGICAL EDUCATION

The article deals with the theoretical and experimental study aimed at examining organisational and pedagogical conditions of school principals' professional preparing for using Internet technologies in their work. The research paper offers a model of school principals' Internet-readiness formation and the mechanism of its implementation into the system of continuing pedagogical education. The criteria, indicators and levels of school principals' Internet-readiness are developed and presented; the pedagogical experiment is described. The paper also defines the notion of "Internet readiness" through the example of school principals' readiness to use Internet technologies in their work" and singles out its components. The notions "Education 2.0" and "professional development of school principals in terms of using Internet technologies" are accurately defined and the necessity to develop and approve Information and Communications Technologies (ICT) standards for teachers and principals is substantiated.

Keywords: *system of continuing pedagogical education, professional development, school principal, professional activities, Internet technologies, Internet-readiness, Web 2.0, Education 2.0, ICT-literacy, ICT-competency.*

Introduction

Nowadays education aims to prepare people for effective work and life in the contemporary knowledge-based society. The major task of educational institutions is to prepare students for facing challenges of economic, social, multicultural character arising in everyday life [14]. One of the distinctive features of the present-day society is its informatisation (global use of information technologies). Computers and information technologies (IT) are being created and improved with the aim to help people think, act and learn effectively. They not only broaden the professional potentialities but also require mastering new types of knowledge and expertise in the process of continuing professional development.

Professional development is regarded as a many-faceted phenomenon, its main characteristics correspond to a holistic, dynamic and open system, the major attributes of which are an appropriate structure, goal and objectives, content, methods and forms that are focused on mastering professional knowledge, development of competency from the initial stage of professional pedagogical training through career cycle as well as implementation of the system of mastering competency [13]. It is also the process that embraces professional training at a higher educational institution, induction and continuing improvement of pedagogues' competency through career cycle.

Currently, education informatisation is part and parcel of reforms in the field of education. Today the school informatisation is an irreversible process of organisation of teaching, which determines the content and learning strategies; it prepares students for living in the informational society. The leading role in this process belongs to school administration.

The success of the above-mentioned process depends mostly on education modernisation as well as professional development (PD) of school principals in the system of continuing pedagogical education (CPE). In order to keep it on a proper level, it is necessary to keep correcting the theoretical and practical PD content, to pay more attention to the informational constituent in the CPE system, management and the ways of its realisation in the system of CPE, in particular. Various models of IT implementation (especially Internet technologies) into the educational process of school and development of the corresponding competency of school principals in the process of PD in the system of CPE on a long-term basis are still understudied. During the last decade much attention of the state, scholars and practitioners has been focused on studying and searching for effective systems for practical application of IT in the work of educational authorities, the academic process, CPE system, which is of highest priority taking into consideration the desire of Ukraine to join the EU and integrate our national educational system

into the European environment. Internet technologies are being integrated into public education in the process of school principals' work and the CPE system is being implemented in the process of their PD on the basis of standard legislative documents: Laws of Ukraine: "On Higher Education" (2014); "On National Informatisation Programme in Ukraine" (1998); "The Main Principles of Informational Society Development for 2007-2015" (2007); "School Informatisation Conception" (1998); Standard Statute on Educators' Evaluation (2010); National Projects "Open World" (2012), "One Hundred Percent" (2012); Educational Programmes of Microsoft and Intel Corporations.

The studies of regulatory, legal and resource framework of the research, the need for studying school principals' readiness to use Internet technologies have made it possible to distinguish some contradictions between:

- real life computerisation, school informatisation process and the level of school principals' readiness to use Internet technologies in their work;
- regulatory and legal support of school informatisation process and the absence of developed standards regarding ICT-competency of school principals;
- objective needs for the formation of school principals' Internet-readiness with the help of PD innovation forms and methods and the real state of the process of training school principals in the system of CPE.

The review of scientific literature has shown that scientists all over the world investigate various aspects of this issue. There is a growing body of research that recognises political, social, cultural, and economic features of PD (L. Darling-Hammond, M. Tight). N. Dana Fichtman, S. Zepeda, M. Rees, A. Ross study PD content. V. Bykov, N. Klokar, V. Oliynyk, N. Mukan highlight different aspects of PD. J. Brown, R. Hurevych, J. Lupart, N. Morze, Ye. Patarakin, I. Robert analyse pedagogical educators' training for modern IT implementation in the educational process of public school. V. Bykov, M. Holovan, M. Zhaldak, L. Kalinina, O. Ovcharuk study the conditions for the formation and development of information competency and information culture of teachers and school principals. L. Zabrodska, V. Kukharenko, V. Luniachek investigate the application of information technologies in school management, as well as in teaching. M. Kademiia, S. Lytvynova research information environment of educational establishments. V. Bereka, L. Vashchenko, V. Maslov, N. Nychkalo, O. Pometun, N. Protasova, O. Savchenko, S. Sysoieva, T. Sorochan, R. Shyian study competency-based approach in the professional training of school principals, the ways of its introduction into CPE practice. L. Danylenko, H. Yelnykova, L. Parashchenko, S. Peipert, T. Shamova highlight the professional development of innovation school managers.

The aim of the article is to describe the ways of developing school principals' readiness to use Internet technologies in their work.

According to the aim, we have defined the following objectives: to present coverage of the problem and the main research notions; to determine components, criteria and levels school principals' readiness to use Internet technologies in their work; to clarify, substantiate and check experimentally organisational and pedagogical conditions; and to present the model of school principals' PD in terms of the use of Internet technologies in their work in the CPE system.

The research hypothesis lies in the fact that school principals' PD in terms of integrating Internet technologies in their work will be effective under the following conditions: enhancement of school principals' motivation for using Internet technologies in their work, stimulation to self-studies and creation of personal information environment that is a part of educational information environment (EIE) of public school; providing school teachers with computers and Internet; competency approach realisation in principals' PD in terms of using Internet technologies in their work; creating academic, methodological and programme support of principals' PD in terms of using Internet technologies in their work taking into consideration IT development, students' professional needs and public demand.

Research methods

According to the aim and objectives of our research, we used theoretical (content-analysis, systematisation and generalisation, factor and criterion method modelling), and applied (diagnostic, prognostic methods, pedagogical experiment, mathematical analysis and statistical methods, quantitative and qualitative analysis) research methods.

Discussion

Based on the system, terminological and content analysis of scientific literature we have outlined a scope of basic research notions: "educational technology", "innovative educational technology", "information technologies", "network education", "education 2.0", "professional development of school principals in integrating Internet technologies" and their interrelationship, the characteristics and types of Internet technologies, their meaning in school principals' work.

Lately, the terms "educational technology" and "innovative technology" have been often used in the research but there is no common approach to the interpretation of their essence. In the scientific literature, the following definitions are offered: a certain system project being realised practically (O. Popova) [9]; according to O. Kozlova, it is radical renewal of instrumental and methodological pedagogy and methodology means on condition of preserving consistency regarding pedagogical science and school practice, a set of technological procedures that provide the professional activity, final result [4]; V. Palamarchuk underlines that these are methods, strategies and means of teaching [8]; T. Shamova argues that this is a system of teachers and students' joint designing, organising and correcting activities aimed at achieving specific result [10].

In the latest research studies, there has appeared a term “innovative educational technology”. According to N. Klokar, it includes purposeful systematic and successive methods, strategies of implementing pedagogic actions and means that involve the entire educational process [3]. O. Popova claims that it is a complex integrated process that includes subjects, ideas, and ways of innovation activity organisation and provides the effectiveness of innovation [9]. We agree with the definition suggested by L. Danylenko: it is “a new totality of forms, methods and means of teaching, education and management that adds substantial changes to the teaching process result and is considered as a multi-component model that involves teaching, educational and managerial innovation technologies” [1, p. 59].

According to UNESCO, information technologies are a complex of interdependent scientific, technological, engineering disciplines that study the methods of effective organisation of people’s work on information working out and saving; they also consider computer techniques and the methods of organisation and interaction with people and industrial equipment, practical issues and related to them social, economic and cultural problems [2].

Currently, the terms “computer technologies”, “information and communication technologies” are being used as synonyms to “information technologies” (IT). It should be noted that Internet technologies is a part of IT. Internet technologies are services that provide all the types of activity in the Internet. Recently, they have been actively developed and introduced in the educational process of public schools.

Hence, modern Internet technologies have become an integral part of educational technologies; they are used as the tools of teaching material visualisation, educational information storage, transferring knowledge and skills, as information presentation technologies, etc. Internet technologies serve as an effective means in the managerial activity as they create conditions for the effective Internet information processing; it is the attribute, subject and the instrument used at any level of managerial activity. The emphasis is laid on Internet technologies that provide various actions with information (distribution, editing, deleting, search, etc.) carried out by Network users, namely, Internet services (email, cloud virtual offices, calendar, Internet-maps, chats, services for images and video processing, etc.), Internet resources (blogs, sites, portals etc.), Internet systems that help to work on the net (browsers, search engines etc.), varieties and possibilities of their use in managerial activity.

As for the notion “education 2.0”, throughout this paper it will refer to a new phenomenon in pedagogy that is based on connectivism principles, reflects the changes taking place in the educational system in general, in the approaches to the organisation and implementation of the teaching process and essential changes in the roles of this process’ participants: those who study and those who teach according to the society’s demands and requests that encourage lifelong cooperation, self-perfection and self-

study with every participant choosing his/her own academic trajectory.

Systematisation of the phenomenon “school principals PD in the CPE system” applied to different types of activity based on terminological analysis of their essence and structure enabled us to formulate the definition of the researched notion “school principals PD in terms of using Internet technologies”. In the article this term will be used to refer to the total dynamic process of the development of special knowledge and skills (informational management, informatisation, informatiology, social informatics, the theory of innovative technologies, network education, etc.), experience of work with a computer and Internet environment, value attitude to the information technologies, which provide Internet-readiness formation as well as the opportunity to organise studies and self-studies, to enhance the effectiveness of school’s performance.

The study of regulatory and legal framework for Internet technologies implementation into education has shown that a number of normative and legal acts have been approved in Ukraine. They define and regulate the informatisation and IT implementation into the educational process as a constituent part of Euro-integration state policy, creating conditions for the equal access to high-quality education, personality-oriented approach to meeting the citizens’ educational demands. However, the fulfilment of goals and tasks prescribed by the legal acts regarding IT introduction are being impeded at the regional level because of absence or imperfection of their realisation mechanisms. The results of the analysis of regulatory and legal framework regarding educational field confirm the necessity of considering the interconnection between IT-preparation of school principals in the CPE system and the necessity for Internet technologies application in their work.

The analysis of software and methodological support of school principals PD in the Regional Postgraduate Pedagogical Institutes (RPPI), which represent one of the components of the CPE system, has proven that in 17 out of 25 RPPI a small amount of teaching load is allotted for IT studies. The overview character of their content, leaving IT development behind in the process of PD is very distinctive. It is clear that the studies duration and content of school principals PD are different. The most typical form of PD is full-time studies compared to part-time or distance learning that is used in some RPPI; personal needs and the true level of ICT-literacy and ICT-competency are not taken into consideration. We underline the absence of the unified strategy or programme for state educational policy realisation, integral system of school principals’ preparation in the system of CPE for using Internet technologies in their work.

The term “readiness of school principals to use Internet technologies in their work” is generally understood as the integrated characteristics of a personality in the structure of which social-motivational, knowledge-operational, value-creative components are being highlighted. Their realisation in the professional activity facili-

tates effective school management, implementation of goals and objectives. Based on the duties of school principals the following components of readiness should be distinguished:

- socio-motivational (social component meaning the need for mastering and applying Internet technologies, understanding their advantages and disadvantages, pedagogical and managerial capacity; self-evaluation, self-motivation, self-control);

- knowledge-operational (knowledge of management activity technologisation and the place of IT in the system of school management, informatisation of the teaching process in school in general based on such knowledge application, adequacy of acquired knowledge in PD programmes, the ability to define and substantiate IT application validity at different stages of school management, providing high-quality teaching, the ability to develop independent strategy of school development with IT application; the ability to react to all significant technological changes for the school in time;

- value-creative (value attitude to the technologisation of work, the ability to solve creative managerial tasks using IT; using Internet resources creatively in school management, studies and self-studies, understanding science and engineering achievements in academic process and school management).

We have made an assumption that effective combination of three components defines readiness of school principals to use Internet technologies in their work.

The criteria of school principals' readiness to use Internet technologies in their work have been defined on the basis of knowledge, reproduction, activity and creativeness. The criteria are agreed with the ICT-literacy and ICT-competency characteristics of a teacher, formulated in UNESCO Recommendations [11] and ICT-standards for teachers [12].

Criteria and their indexes distinguishing made it possible to define the levels of school principals' readiness to use Internet technologies in their work:

- unsatisfactory: a school principal does not possess the knowledge and skills of using IT in the work; he/she does not see the advantages of IT application, is unable to assess adequately the teachers' activity regarding IT application and Internet technologies in the teaching process, in particular; the principal's activity is limited to collecting information as to teachers' work via IT and informing the staff of it; has a basic level of ICT-literacy;

- elementary: a principal is a beginner in ICT-literacy, understands the advantages and resources of IT, sometimes tries to use a computer and the Internet for solving professional problems asking more ICT-literate and ICT-competent colleagues for help; he/she is able to clarify crucial moments of IT use in teachers' work, to focus the attention of the pedagogical staff on them, to transform partly the received information about the staff work in the sphere of IT related to individual professional qualities of every teacher;

- intermediate: a principal has a knack of working

with a computer, uses it systematically with the professional aim, demonstrates the elementary level of ICT-competency, understands advantages and disadvantages of IT, is able to simulate some processes of school activity using IT, in particular, Internet technologies, to involve the staff regarding only some issues of the teaching process, to plan the work in the sphere of IT for the short-term perspective;

- upper-intermediate: a principal uses a computer confidently in the professional sphere, understands the advantages of Internet technologies as an instrument, environment and platform for academic process realisation and management; stimulates teachers and students to use IT, is able to stimulate school development to use modern IT in the framework of modern educational problems;

- advanced: a principal uses IT as an instrument for solving professional tasks, assesses adequately the activity of the teaching process participants regarding using IT, in particular, Internet technologies in the professional activity, focuses on actual tendencies of IT development taking into consideration the school specifics and its development in future, is able to propose the perspective school development model based on studies of all the tendencies of society's progress, IT in particular, to be a leader, adviser and consultant of implemented changes.

Scientific literature review and the experience in PD organisation programmes have made it possible to define organisational pedagogical conditions for school principals PD in terms of using Internet technologies in their work.

The first organisational pedagogical condition is enhancing the principals' motivation to use Internet technologies in their work that is being integrated into educational information environment of school conditioned by the rapid tempo of IT and digital society development that forms social demand for school principals' PD with the high level of information culture in the CPE system. A modern school principal is supposed to be able to use IT, in particular, Internet technologies, introduce them into the teaching process; the driving force of it should be the motivational component (external and internal motivation) and his/her personal qualities as an innovative school activity organiser. Internet technologies 2.0 are an effective instrument for meeting professional needs of the principal who deals with information and academic community.

Social networks Web 2.0 that operate in the framework of decentralisation, syndication, interactivity, and transparency determine the development of the innovative processes in school and stimulate the creation of common educational information environment. This, in turn, stimulates the informatisation process. Integration of information environment under such conditions takes place on several levels: personal, collective (a group of people), school, territorial level, etc. So, a new system of interrelations is being built among the participants of the educational process on different levels of its existence. Priori-

ties of horizontal (non-archaic) relations for the fulfilment of teaching needs that create conditions for the development of all-embracing educational information environment in the hierarchy “a person who studies (teaches) to the state educational system” must be chosen. Implementation of these conditions is possible due to using interactive technologies online, creative assignments that encourage principals to organise collaborative work with the documents in the Internet-services (creating Google-calendar, documents templates), abiding to the principles of subject-subject interaction in the Internet-services environment (group and pair work, mutual assessment and comments on colleagues’ work, joint creation and filling out of documents), practical assignments that stimulate the processes of information search and its critical comprehension.

The second organisational pedagogical condition – providing teachers with computers and Internet connection – is aimed at creating technical conditions of the effective use of Internet technologies in school principals’ work. In the first decade of the 21st century, every year the number of Internet users was constantly growing in Ukraine, the sphere of Internet technologies use was expanding. By March 2014, (the situation now is the same) the majority of Internet users of Ukraine lived in the cities with the population of about 500.000, i.e. big cities do not determine the consumer market of Internet services in the country at the moment. One of the reasons for the absence of mass stable positive results in the sphere of Internet technologies availability in the educational process of Ukrainian schools is equalisation of the notions “computerisation” and “informatisation” by the school management; insufficient computerisation of schools, which leads to uncoordinated actions of local educational authorities, schools’ unreadiness for active use of IT.

The third organisational pedagogical condition is related to the competency approach implementation in school principals’ preparation for using Internet technologies in their work. It is focused on ICT-literacy, ICT-competency development in accordance with the national ICT-standards for teachers based on UNESCO Recommendations. Such standards and qualification have been already created and introduced into national educational systems by other EU countries. The teaching process and PD of school principals in the CPE system have to be based on ICT-literacy and ICT-competency. It should be focused on the formation and development of school principals’ information culture; be consistent, gradual; include different forms and methods of training: from group studies to personal programmes. One of the fundamental results of training in the CPE system should be the

principals’ conscious need for consistent improvement of their level moving from ICT-literacy to ICT-competency, and to the development of personal information culture in the process of self-education and self-development. This condition could be implemented due to individual study strategy, choosing appropriate tasks taking into account already school principals’ ICT-literacy and ICT-competency formed before.

The implementation of the fourth organisational pedagogical condition – creating methodological and software support of principals’ preparation for using Internet technologies in their work taking into account the IT development, students’ professional needs and social demand – was based on the mastering of theoretical and practical modern Internet services.

N. Noskova [7] has developed the author programme “The use of Google services in the managerial activity of school principals”, which has been also tested together with organisational and pedagogical conditions.

According to research tasks and outlined organisational pedagogical conditions, the model of school principals’ preparation for using Internet technologies in their professional activities in the CPE system has been developed (Fig.1). It embraces five interrelated components: purpose-oriented, methodological, content-based, teaching-technological, and result-based. Each of them has its own structure and elements that in a complex give an idea of principals’ preparation for using Internet technologies in their work in the CPE system.

With the aim of checking research hypothesis, a pedagogical experiment was carried out. It was conducted in three stages during 2012-2014 at the premises of Lviv [5], Dnipro, Volyn, Zaporizhia, and Kirovograd RIPPE involving 915 school principals (experimental group (EG) included 390 respondents and 525 respondents formed control group (CG)). The school principals from the experimental group were trained according to the PD programme of Lviv RPPI; the control group was divided into two subgroups: 465 school principals were studying according to the PD programme of Lviv RPPI, 60 respondents from other regions of Ukraine were studying according to the developed distance course programme in the framework of the 2nd International online conference “New perspectives of ICT in education” (Kyiv, 2014).

The majority of the respondents, according to the questioning, had personal computers (99.74%) and access to the Internet at their working places (72.56%) and at home (100%). 99.23% participants of the experiment acknowledge the need for studying Internet technologies, the possibility to use them in their work.

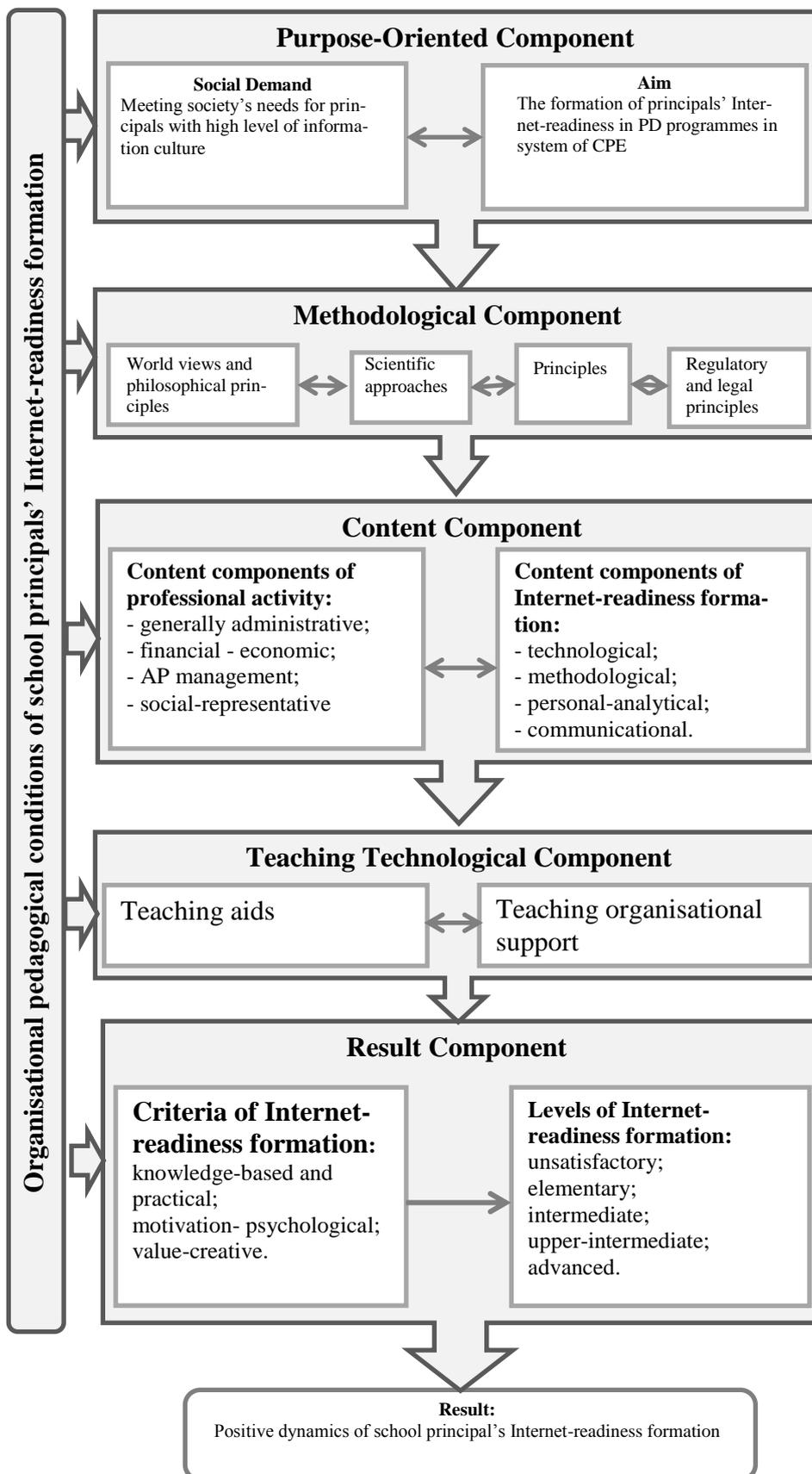


Fig. 1. The model of school principals' PD in CPE system in terms of using Internet technologies in their professional activities

In the process of research according to the two-level assessment system, principals' readiness to use Internet technologies in their work at the ascertaining stage of the experiment (EAS) has been assessed.

It has been found that discrepancy in the indicators of school principals' readiness, according to the results obtained in the self-assessment and expert assessment, is caused by misbalance between the level of the social-motivational component formed under the influence of social phenomena (satisfactory and high level was demonstrated by 76.93% of EG respondents) and knowledge-activity-based component (satisfactory and high level was

demonstrated by 35.13% of EG respondents), which is based only on the process of studies, self-studies and self-development.

At the formative stage of the experiment (EFS), the research was carried out in the EG according to the course of studies "Google services use in the managerial activity of school principals"; in CG it was carried out with the use of traditional methodology.

Master data regarding school principals' readiness levels in the control and experimental groups at the EAS and EFS are presented in Table 1.

Table 1.

The level of Internet-readiness of school principals from the control and experimental groups at ESS and EFS (915 persons)

Levels of Internet-readiness formation	Control group (525)				Experimental group (390)			
	C _{InR} EAS, abs	%	C _{InR} EFS, abs	%	C _{InR} EAS, abs	%	C _{InR} EFS, abs	%
Unsatisfactory	10	1.9	4	0.8	1	0.3	0	0
Elementary	41	7.8	43	8.2	34	8.7	2	0.5
Intermediate	295	56.2	196	37.3	236	60.5	70	17.9
Upper-intermediate	147	28	228	43.4	105	26.9	246	63.1
Advanced	32	6.1	54	10.3	14	3.6	72	18.5

Due to the implementation of the developed organisational pedagogical conditions and as a result of studies according to the full-time/distance course programme, the indexes of the formation school principals' Internet-readiness components in the EG appeared to be higher than that of school principals from the CG. In particular, the indexes of upper-intermediate and advanced levels of readiness were higher than in the CG by 19.7% and 8.2% respectively. The number of school principals of the EG with elementary and intermediate levels of readiness reduced compared to EAS by 50.8% totally, in the CG – by 18.5%. There were no school principals with unsatisfactory level of readiness at the EFS in the EG; in the CG, there were only 4 persons (0.8%). The full-time/distance form of studies proved to be effective according to the results of the experiment and respondents' evaluation irrespective of their readiness level.

The experiment results were processed with the help of Pierson non-parametric criterion (χ). The calculation results proved uniformity of the groups at EAS ($\chi^2_{emp} EAS = 8.925 < \chi^2_{cr} (p \leq 0.05) = 9.488$), and also validity of the carried out experiment. The changes in the indexes of principals' readiness levels confirmed the effectiveness of the recommended organisational pedagogical conditions for the preparation of school principals to use Internet technologies in their work in the CPE system, namely, on condition that $\chi^2_{emp} EFS = 86.117 > \chi^2_{cr} (p \leq 0,01) = 13.345$.

The results of the work done give ground to state that the aim has been reached, the tasks have been fulfilled and the hypothesis has been confirmed.

Conclusions

Based on the research results, the following conclusions can be drawn.

1. The regulatory and legal framework regarding informatisation and preparation of school principals to use Internet technologies in their work showed the existence of certain problems and discrepancies. The regulatory framework in the sphere of informatisation is functioning unsatisfactorily, the processes of informatisation, creation of effective educational environment are going on slowly and inefficiently. Having applied comparative and content analysis of national and foreign the regulatory and legal framework in force regarding informatisation issues and ICT-implementation into school's activity, we have revealed direct interrelation between the process of school informatisation and school principals' readiness to use ICT.

2. Readiness of school principals to use Internet technologies in their professional activity consists of components (social-motivational, knowledge-activity-based, value-creative); is based on criteria (knowledge-based, reproductive, activity-based, creative); and can be demonstrated at the following levels: unsatisfactory, elementary, intermediate, upper-intermediate, advanced.

3. We have developed and implemented the following organisational pedagogical conditions for school principals' PD in terms of readiness to use Internet technologies in their work: enhancement of motivation for using Internet technologies, self-study and creating personal information environment that is integrated into the educational information environment of a public school; providing the school principals with computers and Internet connection; applying competency approach in PD of

school principals; methodological and software support of PD with consideration of IT development, students' professional needs and social demand. The effectiveness of the proposed organisational and pedagogical conditions was tested on the basis of the developed model. The latter consisted of four components (purpose-based, methodological, technological, result-based).

4. In the framework of the designed model, the author's programme of full-time/distance course "The use of Google services in managerial activity of school principals", its methodological and software support has been designed and experimentally tested.

Due to the implementation of the developed organisational pedagogical conditions and as a result of studies according to the full-time/distance course programme, the indexes of the formation school principals' Internet-readiness components in the EG appeared to be higher

REFERENCES

1. Danylenko, L.I. (2004). *Upravlinnia innovatsiinoiu diialnistiu v zahalnoosvitnikh navchalnykh zakladakh [Management of innovative activity in secondary schools]*. Kyiv: Milenium [in Ukrainian].
2. *Informatsiini tekhnolohii – znachennia terminu. Pohliad z tochky zoru naukovykh i derzhavnykh standartiv [Information technologies – the meaning of the term. The view from the perspective of scientific and government standards]*. (n.d.). Retrieved from: <http://www.setlab.net/?view=what-is-IT> [in Ukrainian].
3. Klokar, N. I. (1997). *Psykholoho-pedahohichna pidhotovka vchytelia do innovatsiinoi diialnosti [Psychological and pedagogical training of teachers for innovative activity]*. *Candidate's thesis*. Kyiv: NAPS of Ukraine: Institute of pedagogy and psychology of professional education [in Ukrainian].
4. Kozlova, O. H. (1999). *Pidhotovka vchytelia do innovatsiinoi diialnosti v systemi pislidyplomnoi osvity [Teacher's training for innovative activity in the system of postgraduate education]*. *Extended abstract of candidate's thesis*. Kyiv: NAPS of Ukraine: Institute of pedagogy [in Ukrainian].
5. Noskova, M. V. (2015). *O hotovnosti rukovoditelei shkol k ispolzovaniiu internet-tekhnolohii v professyonalnoi deiatelnosti [About school principals' readiness to use internet technologies in professional activity]*. *Molodyi vchenyi – Young scientist*, 8 (88), 1017-1020 [in Russian].
6. Noskova, M. V. & Kalinina, L. M. (2013). *Google-servisy dlia vchytelia. Pershi kroky novachka [Google-services for teacher. The first steps of a beginner]*. Lviv: ZUKTs [in Ukrainian].
7. Noskova, M. V. (2015). *Pidhotovka kerivnyka zahalnoosvitnoho navchalnoho zakladu u systemi pislidyplomnoi osvity do vykorystannia internet-tekhnolohii u profesiinii diialnosti [Training of secondary school principals in the system of postgraduate pedagogical education to use internet technologies in their professional activities]*. *Candidate's thesis*. NAPS of Ukraine: Institute of pedagogy.
8. Palamarchuk, V. F. (1987). *Systemnyi pidkhid do vprovadzhennia pedahohichnykh idei u praktyku roboty shkoly [Systemic approach to pedagogical ideas implementation into school activity]*. *Radianska shkola – Soviet school*, 12, 16-20 [in Ukrainian].
9. Popova, O. V. (2001). *Stanovlennia i rozvytok innovatsiinykh pedahohichnykh idei v Ukraini u XX stolitti [The formation and development of innovative teaching ideas in Ukraine the XXth century]*. Kharkiv: "OVVS". [in Ukrainian].
10. Shamova, T. Y., Kapustyn, N. P. & Tretiakov, P. Y. (2002). *Upravlenie obrazovatelnyimi sistemami [Management of educational systems]*. Moscow: VLADOS [in Russian].
11. *ICT Competency Framework for Teacher, Version 2.0. UNESCO*. (2011). Retrieved from <http://unesdoc.unesco.org/images/0021/002134/213475e.pdf>. [in English].
12. *ICT Competency Standards for Teachers: Competency Standards Modules, version 1.0. UNESCO*. (2008). Retrieved from: <http://unesdoc.unesco.org/images/0015/001562/156207e.pdf>. [in English].
13. Mukan, N. & Kravets, S. (2015). *Methodology of Comparative Analysis of School Teachers' Professional Development in Great Britain, Canada, the USA*. *Comparative professional pedagogy*, 5 (4), 39-45 [in English].
14. Mukan, N., Myskiv, I. & Kravets, S. (2016). *The model of unification and the model of diversification of school teachers' continuing professional development*. *Comparative Professional Pedagogy*, 6 (1), 7-13 [in English].

ЛІТЕРАТУРА

1. Даниленко Л. І. Управління інноваційною діяльністю в загальноосвітніх навчальних закладах : монографія / Л. І. Даниленко. – К. : Міленіум, 2004. – 358 с.
2. Інформаційні технології – значення терміну. Погляд з точки зору наукових і державних стандартів [Електронний ресурс]. – Режим доступу : <http://www.setlab.net/?view=what-is-IT>.
3. Клокар Н. І. Психолого-педагогічна підготовка вчителя до інноваційної діяльності : дис. ... кандидата пед. наук : 13.00.04 / Наталія Іванівна Клокар. Ін-т педагогіки і психології професійної освіти АПН України. – К., 1997. – 227 с.
4. Козлова О. Г. Підготовка вчителя до інноваційної діяльності в системі післядипломної освіти : автореферат дис. на здобуття наук. ступеня канд. пед. наук : спец. 13.00.01 «Загальна педагогіка та історія педагогіки» / О. Г. Козлова. – Інститут педагогіки АПН України. – К. – 1999. – 20 с.
5. Носкова М. В. О готовности руководителей школ к использованию интернет-технологий в профессиональной деятельности / М. В. Носкова // Молодий вчений. – 2015. – № 8 (88). – С. 1017-1020.
6. Носкова М. В. Google-сервіси для вчителя. Перші кроки новачка / Л. М. Калініна, М. В. Носкова. – Львів: ЗУКЦ, 2013 – 182 с.
7. Носкова М. В. Підготовка керівника загальноосвітнього навчального закладу у системі післядипломної освіти до використання інтернет-технологій у професійній діяльності : дис. ... кандидата пед. наук : 13.00.04 / Маргарита Вячеславівна Носкова. – Київ: Інститут педагогіки НАПН України, 2015. – 332 с.
8. Паламарчук В. Ф. Системний підхід до впровадження педагогічних ідей у практику роботи школи / В. Ф. Паламарчук // Радянська школа. – 1987. – № 12. – С. 16-20.
9. Попова О. В. Становлення і розвиток інноваційних педагогічних ідей в Україні у ХХ столітті / О. В. Попова. – Харків : «ОВС», 2001. – 256 с.
10. Шамова Т. И. Управление образовательными системами / Т. И. Шамова, Н. П. Капустин, П. И. Третьяков. – М. : ВЛАДОС, 2002. – 320 с.
11. ICT Competency Framework for Teacher, Version 2.0. UNESCO, 2011 [Електронний ресурс]. – Режим доступу: <http://unesdoc.unesco.org/images/0021/002134/213475e.pdf>.
12. ICT Competency Standards for Teachers: Competency Standards Modules, Version 1.0. UNESCO, 2008 [Електронний ресурс]. – Режим доступу: <http://unesdoc.unesco.org/images/0015/001562/156207e.pdf>.
13. Mukan N. Methodology of Comparative Analysis of School Teachers' Professional Development in Great Britain, Canada, the USA / Nataliya Mukan, Svitlana Kravets // Comparative professional pedagogy. – 2015. – Vol. 5, Issue 4. – P. 39-45.
14. Mukan N. The model of unification and the model of diversification of school teachers' continuing professional development / Nataliya Mukan, Iryna Myskiv, Svitlana Kravets // Comparative Professional Pedagogy. – 2016. – Vol. 6, Issue 1. – P. 7-13.

Наталія Василівна Мукан,

*доктор педагогічних наук, професор,
завідувач кафедри іноземних мов,*

*Маргарита Вячеславівна Носкова,
кандидат педагогічних наук,*

доцент кафедри педагогіки та соціального управління,

Інеса Макаріівна Байбакова,

*кандидат філологічних наук, доцент,
доцент кафедри іноземних мов,*

*Національний університет «Львівська політехніка»,
вул. Степана Бандери, 12, м. Львів, Україна*

ФОРМУВАННЯ ГОТОВНОСТІ ДИРЕКТОРІВ ШКІЛ ДО ВИКОРИСТАННЯ ІНТЕРНЕТ-ТЕХНОЛОГІЙ У ПРОФЕСІЙНІЙ ДІЯЛЬНОСТІ У СИСТЕМІ НЕПЕРЕРВНОЇ ПЕДАГОГІЧНОЇ ОСВІТИ

Характерною ознакою сьогодення є зростання темпів змін у сучасному суспільстві та його інформатизація. Впровадження Інтернет-технологій у навчальний процес школи і пов'язані з цим формування і розвиток відповідних компетенцій директорів шкіл у процесі професійного розвитку у системі неперервної педагогічної освіти впродовж тривалого часу залишаються актуальними для наукових досліджень. Метою статті є аналіз готовності директорів шкіл до використання Інтернет-технологій у своїй професійній діяльності. У процесі дослідження використовувалися теоретичні (контент-аналіз, систематизація та узагальнення, моделювання, факторно-критеріальне моделювання, системно-узагальнювальний) і прикладні (діагностичний, прогностичний, педагогічний експеримент, математичний аналіз, статистичний, кількісний і якісний аналіз) методи. Термін «готовність директорів шкіл до використання Інтернет технологій у професійній діяльності» слід розуміти як інтегративну характеристику особистості, у структурі

якої виділяють соціально-мотиваційний, знаннєво-діяльнісний, ціннісно-креативний компоненти. Ефективне поєднання трьох компонентів визначає готовність директорів шкіл до використання Інтернет технологій у своїй роботі. Виокремлення критеріїв та їх показників дало змогу визначити рівні готовності директорів шкіл до використання Інтернет технологій у професійній діяльності: незадовільний; низький; задовільний; достатній; високий. Ми визначили організаційно-педагогічні умови професійного розвитку директорів шкіл для підготовки до використання Інтернет технологій у своїй роботі. З метою перевірки гіпотези дослідження нами проведено педагогічний експеримент, що проводився у три етапи на основі Львівського, Дніпропетровського, Волинського, Запорізького та Кіровоградського ІІПО. Результати педагогічного експерименту свідчать про готовність директорів шкіл до використання Інтернет технологій у своїй роботі. Розроблена авторська модель очного/дистанційного курсу «Використання Google-сервісів в управлінській діяльності керівника загальноосвітнього навчального закладу», її методичне і програмне забезпечення перевірені експериментально. Обґрунтовано вибір сервісів Web 2.0 як основи освоєння директором школи Інтернет технологій.

Ключові слова: система неперервної педагогічної освіти, професійний розвиток, школа, професійна діяльність, Інтернет-технології, Інтернет-готовність, Web 2.0, ІТ-грамотність, ІТ-компетентність.

Submitted on March, 29, 2017

UDC: 37.013.42:377-026.42

DOI: <https://doi.org/10.24195/2414-4665-2017-4-21>

Oksana Vasiuk,

*Doctor of Pedagogy, associate professor, Department of Pedagogy,
The National University of Life and Environmental Sciences of Ukraine,
15, Heroiv Oborony Str., Kyiv, Ukraine*

FUTURE SOCIAL CARE TEACHERS' PROFESSIONAL FOCUS MATURITY

The paper aims to reveal the level of future social care teachers' professional focus maturity in terms of studying at higher educational institutions. The experiment involved 393 students of 1st-4th years of study majoring in "Social education" of Chernihiv National T. G. Shevchenko Pedagogical University (Chernihiv), The National University of Life and Environmental Sciences of Ukraine (Kyiv), Mykolayiv National University named after V. Sukhomlynskyi (Mykolaiv). The assessment of future social care teachers' professional focus was carried out by means of the method of expert evaluation. Besides, the method of the integral score calculation was also applied. The results were processed by means of the computer program "Statistics in education". The analysis of the research results has shown that the level of professional focus maturity of future social care teachers develops in the process of studying at a university. It can be explained by the fact that positive dynamics of students' professional focus maturity is influenced by the gradual increase of the number of disciplines of professional sphere and internship (practice) according to the year of study. The research results have shown that the level of the future social care teachers' professional focus maturity does not meet modern requirements which means that the process of its formation at higher educational institutions is carried out improperly. That is why it is necessary to develop a technique for the formation of future social care teachers' professional focus, which is planned to be performed in our further research works.

Keywords: professional focus, social care teacher, the level of maturity, higher educational institution, student.

Introduction

The work of future specialists in socio-economic field, in particular, social care teachers, is focused on solving different kinds of human problems. It requires the higher educational institutions graduates to have profound knowledge, mature personal and professional skills. In this aspect the properly organized and managed professional training aimed at the formation of their professional focus is considered to be of particular importance.

Professional training of specialists in socio-pedagogical field is studied in the following directions: didactic foundations of preparing students for socio-pedagogical work (S. Kharchenko), management of social

education quality (M. Yevtukh), formation of professional competence (V. Malinkina, V. Petrovych), professional focus (O. Moskaliuk), professional and pedagogical culture of future social care teachers (O. Homoniuk, T. Spirina), professional training of social care teachers in terms of lifelong education (V. Polishchuk), content of professional training of social care teachers in foreign higher educational establishments (Z. Aksiutina, S. Kohut, O. Pavlishak, O. Pryshliak), practical training of future socio-pedagogical workers in higher educational institutions (B. Shyfor, L. Jankins, Z. Falynska), professional focus on the occupation of socio-pedagogical sphere and pre-professional training of future social care teachers