

The structural model of the pedagogy students' readiness for professional activities in the educational environment

Regina Baltusite¹ Dr.paed., Mg. philol.; **Irena Katane**² Dr. paed., Mg. art.
Latvia University of Agriculture, Institute of Education and Home Economics^{1,2}, Latvia
rilagora@inbox.lv¹, Irena.Katane@inbox.lv²

Abstract: The article deals with the structural model of the pedagogy students' readiness for professional activities in the educational environment. When developing the conception of pedagogy students' practice, educational ecology was chosen as the methodological basis. Educational ecology is one of the trends of human ecology: an integrative, interdisciplinary science trend of natural, social sciences, and the humanities that studies the development of a human being as an individual and/or social systems within the interaction with the multidimensional environment in its holistic perspective by ensuring the multi-aspect view on education. The structure of readiness for professional activities is formed of two basic components – psychological readiness and competence based readiness. A school needs educators, who: are aware of a teacher's mission under the changing circumstances nowadays; perform their teachers' duties in good faith; are creative teachers; set the requirements not only towards others, but are also self-rigorous; respect their colleagues, pupils, their parents and themselves in a modern school; are aware of their public accountability for the new generation's desire and ability to find its place in the life, for the destinies of their pupils in the future; are able to step beyond the borders of their profession and to look into at least nearest future, and to have good knowledge not only of their field, but also other spheres in order they could discuss the wholeness of an object, a phenomenon with their pupils. During the lifetime an individual integrates into different kinds of environment. However, a human being is not only an element of environment, but he also interacts with it. For the pedagogy student those are the higher education institutions and school environments, where the readiness for professional activities is developed. Therefore the pedagogical practice is particularly significant within the process of the prospective teacher's professional development. During this practice the student learns to apply knowledge, acquired during theoretical studies, for the professional activities, within the process of professional development, developing his pedagogical skills, where the professional competence is of particular importance. During the pedagogical practice there is attitude formed towards the chosen profession; within the process of professional identification the affiliation to the educator's profession, the school as an educational environment is developed.

Key words: ecological approach, competence, model, readiness for professional activities.

Introduction

In the modern world an individual faces new and rapidly changing situations that require a complex approach to the dealing with problems, but this, in itself, sets the requirement to have new knowledge and skills. During the pedagogical practice the prospective teacher, still being a student of a higher education institution, faces a direct interaction with the environment of his professional activities. Therefore the pedagogical practice is particularly significant within the process of the prospective teacher's professional development. During this practice the student learns to apply knowledge, acquired during theoretical studies, for the professional activities, within the process of professional development, developing his pedagogical skills, where the professional competence is of particular importance. During the pedagogical practice there is attitude formed towards the chosen profession; within the process of professional identification the affiliation to the educator's profession, the school as an educational environment is developed.

In order the professional readiness of pedagogy students as prospective teachers would meet the modern requirements, it is necessary to ensure the teaching-learning environment, which is student-friendly, appropriate and facilitates their professional readiness. There have been studies performed for several years at the Institute of Education and Home Economics of the Latvia University of Agriculture; the studies are based on the ecological approach in education and are closely related to

the improvement and further development of the conception of pedagogical practice (Katane, Baltušite, 2007; Katane, 2007b; Katane, Kruglija, 2009; Baltušite, 2012; Baltušite, 2013).

The aim of the article: to describe the developed *Structural Model of the Pedagogy Students' Readiness for Professional Activities in the Educational Environment* which could facilitate the development of pedagogy students' as prospective teachers' readiness for independent and responsible professional activities in the school environment.

Methodology

There are four conceptual approaches in our research. They are the following: 1) *professional activity approach*; 2) *competency based approach*; 3) *structural approach*; 4) *ecological approach*.

- **The Professional Activity Approach.** In our research there have been analysed and evaluated results of the theoretical research on the teacher's profession (Adey, Hewitt, 2004; Dauge, 1928; Students, 1998), activity (Argyris, Shön, 1978; Čehlova, 2002; Davidson, 1980; Vygotsky, 1981; Гальперин, 1985; Леонтьев, 1982), the teacher's professional activity – pedagogical activities – structure, functions, roles (Giesecke, 1997; Johnson, 2000).

Job, profession is an important base for the perspective of an individual's life, his self-realization, self-expression in the context of lifetime activities. Professionalism – the totality of an individual's personal characterizations that is necessary for the successful pedagogical activities (Никитина, 2006; Никитина, Железнякова, 2002). Many scientists consider the teacher's profession to be an art (Dauge, 1928; Students, 1998).

- **The Competency Based Approach.** In the works of many scientists there have been substantiated several types of competences by classifying competences and by defining and substantiating one or several competences according to the problem under research. While analysing and evaluating scientific publications, there were identified the following *types of competences*: special, professional competence (Beck, Brühwiller, 2007; Briede, 2009; Strode, 2010); methodological competence (Кузьмина, 1990); personality's competence (Bankauskienė, 2007; Briede, 2009); social or communicative competence (Briede, 2009; Зимняя, 2004); diagnostics competence (Nieke, 2002); psychological competence (Rutka, 2008; Кузьмина, 1990); cognitive competences (pupil's cognitive, research activities, reflection and learning skills) and functional competences (competences for: ICT use; creation of the developmental conditions of an organization; the planning and development of the content of subject; management of teaching-learning process) (Bankauskienė, 2007); emotional competence (Рейнолдс, 2003); ecological competence (Roga, 2010; Эрдынеева, Кадашникова, 2009); tolerance as a competence (Petere, 2011); meta-competences (Briede, 2009); cognitive, functional (work, teaching, social activities), individual (how to behave in a particular situation) and professional's ethics competence (Bankauskienė, 2007) .

Competence of ethics is included into the classifications of competences, given by many scientists (Bankauskienė, 2007; Briede, 2009; Giesecke, 1997).

K.O.Bauer (Bauer, 2005) emphasizes the significance of professional independence alongside with the didactic competence and an individual's professional development, where the individual is ready to rewrite his/her professional biography on an ongoing basis.

Competence of reflection is very important for the teacher's work (Briede, 2009; Кепаите, 2008; Nieke, 2002; Кузьмина, 1990).

- **The Structural Approach.** Several scientists substantiate *readiness for professional activities from the structural aspect*, emphasizing several structural components: 1) cognitive component, 2) emotional component, 3) component of motivation. Cognitive component in the works of other scientists is defined also like the competency based component in the structure of readiness (Гилёва, 2000; Рахматуллина, 2006).

T. Tolkacheva (Толкачева, 2009) identifies two components in the structure of professional activities: 1) the component of motivation and values as the psychological aspect of readiness; 2) the content procedural component, based on the acquired competences.

I. Gorohovskaya (Гороховская, 2008) substantiates the prospective teacher's readiness for professional activities as: 1) personality's progress towards one's general and professional perfection, where particularly important are values based motives (the component of psychological readiness – authors' comment), and 2) the totality of integrative personality's qualities, characterized as an entirety of knowledge and skills, that becomes the basis for the development of competences. According to the scientist's point of view, competences manifest as the ability to operate during the process of professional activities with one's personal resources, including knowledge and skills, taking professional, responsible decisions (competency based readiness – authors' comment).

Scientist J. Tyagunova (Тягунова, 2008) has developed the structural model of a teacher's readiness for professional activities, identifying interrelated components: target-oriented, the motives of activities synthesizing component (psychological readiness – authors' comment), the component of the search for content and the component of the inner resources of innovative activities. Thereby he scientist emphasizes the competency based readiness for professional activities in her readiness structural model as well.

L. Subbotina (Субботина, 2011), on the basis of her theoretical research, also identifies two basic components in the structure of the readiness for professional activities of students as prospective specialists: 1) psychological readiness; 2) readiness for competent activities. In these components the scientist identifies even more detailed substructures, the description of which will be presented, when analyzing separately and substantiating psychological readiness and competency based readiness.

• **The Ecological Approach.** The experience and its adequate self-evaluation, developed in the interaction with the surrounding environment, are of the same importance. We applied ecological approach during the development of the structural model of the teacher's readiness for professional activities. There are several scientists at the Institute of Education and Home Economics (the Latvia University of Agriculture) who substantiated **ecological approach** on education in their publications (Briede, Pēks, 1998; Briede, Pēks, 2011; Katane, 2005; Katane, 2007a; Katane, 2009; Katane, Baltušite, 2007; Katane, Kalniņa, 2010; Katane, Krugļija, 2009; Katane, Laizane, 2012; Katane, Pēks, 2006 etc.).

We agree to the thought that has been emphasized in the works of V. H. Ittelson (Ittelson, 1969), S. Rubinstein (Рубинштейн, 2004), H. Steinbah and V. Yelensky (Штейнбах, Еленский, 2004) and in the works of other scientists, namely, that the question: *how does the environment influence a human being* should be modified a bit: *how does a human being perceive the surrounding environment?*

Paraphrasing the above mentioned idea about the school, the university lecturer and the schoolteacher, supervising the students' practical training, shall answer the following questions:

- *How does the student perceive the school environment?*
- *What does he know about the educational environment as multilevel, multicontextual and multifunctional?*
- *What are his attitudes towards the educational environment, including school?*
- *In what way does the pedagogy student's readiness for professional activities develop in the environmental system of education?*

The aim of the research: to work out and develop the structural model of a teacher's readiness for professional activities in the context of educational environment.

Research methods: the analysis and evaluation of scientific literature; the analysis and evaluation of different (European, Latvian) documents; reflection on experience.

Results and Discussion

As a result of theoretical research and reflection of personal experience, there was developed the structural model of prospective teacher's readiness for professional activities in the context of educational environment (Figure 1).

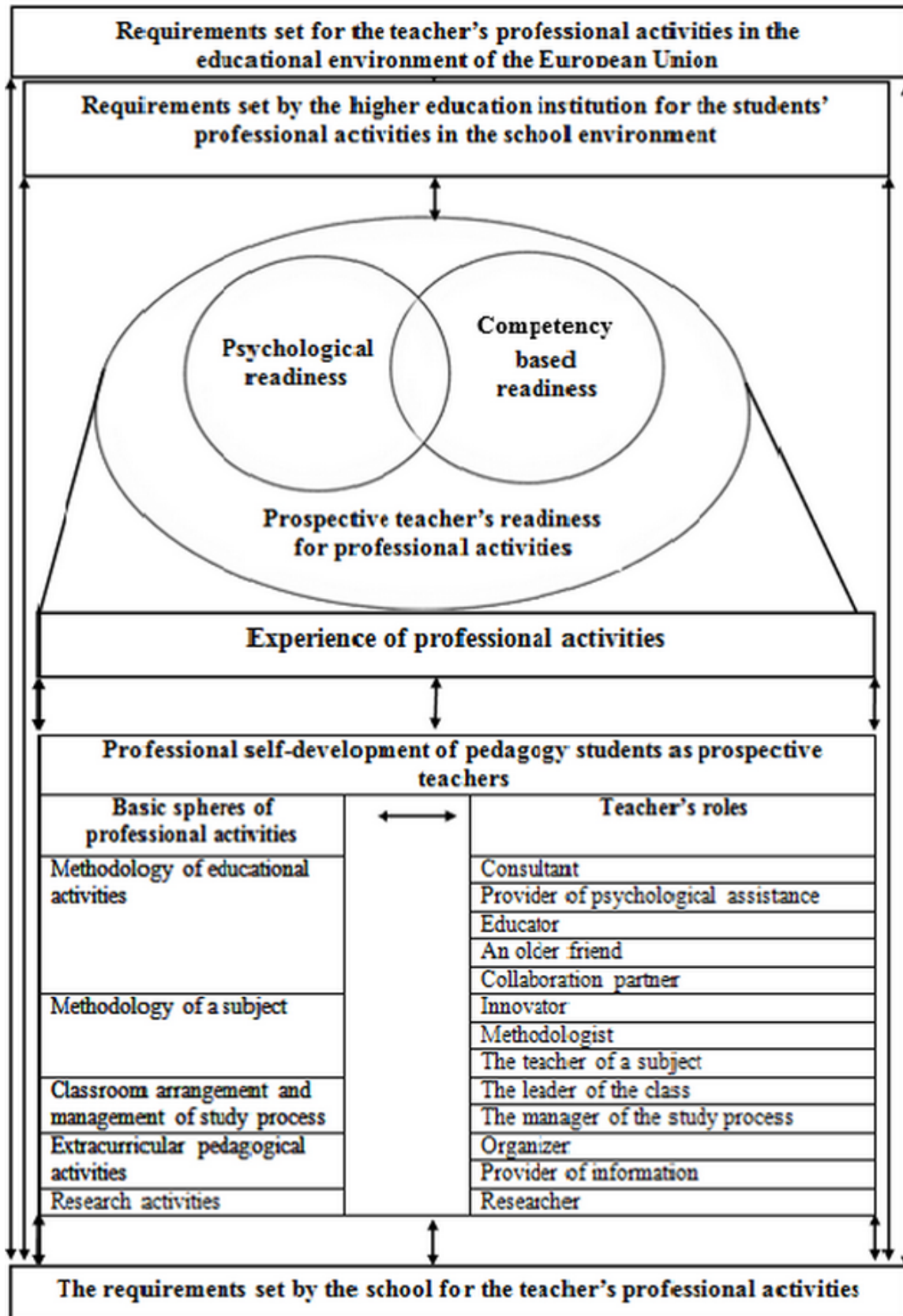


Figure 1. The Structural Model of the Prospective Teacher's Readiness for Professional Activities in the Context of Educational Environment (Authors' design)

There have been conclusions evaluated drawn by the eastern and western scientists, when substantiating the concepts of readiness for activities and readiness for professional activities (Baltušīte, 2012; Baltušīte, 2013; Katane, Baltušīte, 2007).

In our model the readiness of a prospective teacher for professional activities consists of two basic components (Figure 1): 1) *psychological readiness* that has been formulated in the model for the evaluation of pedagogy students' readiness for professional activities, developed by the authors, as ***I want*** (the core of the personality's progress – the motives); 2) *competency based readiness – I can*. This component of readiness comprises *different competences forming the core of the structure of this readiness and* that are necessary for the responsible professional activities of the pedagogy student as a prospective teacher. The diverse competences existing in the structure of readiness develop and improve in close connection with many spheres of professional activities and teacher's roles.

Results of our theoretical research prove that in the scientific substantiations of readiness for professional activities given by different authors, it is possible to establish the tendency to identify two basic components: *psychological readiness* and *competency based readiness*.

Our substantiation of *psychological readiness for professional activities* we based on the conclusions of authors, who consider motives as a core for the personality's progress (Reeve, 2001; Божович, 1997; Ильин, 2000; Леонтьев, 1982; Немов, 1995; Рубинштейн, 2004; Санжаева, 1997; Хачатрян, 2011; Цветкова, 2006 etc.).

For example, the emotional component and the component of motivation in the works of other authors represent the component of psychological readiness (Деркач, 2004; Крылов, 2005). Scientist E. Hachatryan (Хачатрян, 2011) identifies in the prospective teacher's readiness for professional activities the psychological readiness, based on the progress of personality and professional progress, including also professional development and improvement, as well as competency based readiness.

Irrespective of scientists' different approaches, it is possible to draw a conclusion that psychological readiness for professional activities is a complex formation, comprising several components. Psychological readiness for professional activities develops during the professional studies and determines the productivity of the prospective specialists' activities.

Performed research shows that *psychological readiness for professional activities is characterized as an integral formation, ensuring successful performance of professional activities in the particular context, where the leading role is attributed to motives, forming positive attitude towards the chosen profession*.

Psychological component is closely related to the competency based component. If there are competences, necessary for performing professional activities, and the prospective teacher has a desire to perform these activities, it is possible to speak about the readiness for professional activities.

The competency based readiness for professional activities has been substantiated by many authors, for example, I.Gorbatkina (Горбаткина, 2003), E. Hachatryan (Хачатрян, 2011), O. Isachenko (Исаченко, 2008), M. Yemec (Емец, 2011), I. Sitka (Ситка, 2011), L. Subbotina (Субботина, 2011), T. Tolkacheva (Толкачева, 2009) etc.

For example, several scientists emphasize the connection and complementarity in the readiness for professional activities and competency based readiness (Андриенко, 2000; Конохова, 2002; etc.).

Having evaluated the substantiations of the structure of readiness for professional activities, given by many scientists, it is possible to draw a conclusion that all these models of readiness are united by the basic conclusion that ***the basis and/or core for the prospective teacher's readiness for professional activities are competences***.

There have been analyzed the conclusions of the following scientists, and the regulatory documents of Europe and Latvia (Andersone, 2009; Bankauskienė, 2007; Bauer, 2005; Briede, 2009; Common European Principles .., 2005; Drexel, 2003; Grabovska, 2006; Huntly, 2008; *Latvijas ilgtspējīgas attīstības ..*, 2010; *Latvijas Nacionālās attīstības ..*, 2006; *Latvijas Nacionālās attīstības ..*, 2012)

Therefore *the competency based readiness* is defined as follows: competency based readiness is one of the basic components of readiness for professional activities that, according to its essence, is an integral formation of a personality's qualities, where the core of this entirety is formed by competences.

In the structure of competency based readiness, alongside with the central competences, it is important to identify also: the prospective teachers' developed self-regulation and self-control mechanism, where of particular significance is the following: volition, the ability to make a decision and undertake responsibility, the ability to evaluate adequately oneself and one's professional activities; **creativity** in the performance of the innovative professional activities. The prospective teachers' competency based readiness is not only an integral formation of a personality's qualities, but also the situation of resources and the start, before the beginning of professional activities. Competency based readiness for professional activities is also the result of the professional development of pedagogy students as prospective teachers during the study period.

The prospective teacher's competences form the main structural part (core) of the *competency based readiness for professional activities*.

Irrespective of different interpretations of the structural components of competence and the diversity of competences, necessary for the educator's professional activities that are described in the scientific literature, as a result of theoretical research there has been identified the tendency to relate the competence to the readiness for professional activities.

The structure of competency based readiness, alongside with the competences, comprises the mechanism of self-regulation and self-control, as well as creativity that is necessary for the teacher's creative, innovative professional activities. The prospective teachers' readiness for professional activities, including competences, develops and improves in the process of professional activities.

The prospective teacher's experience of professional activities develops through testing and improving one's ability regarding different spheres of a teacher's professional activities by performing different functions and acquiring different teacher's roles related to these functions (Figure 1).

Many spheres of a teacher's activities and also many roles and functions that pedagogy students shall acquire during the study period at the higher education institution determine the specificity of a teacher's professional activities (Figure 1, Figure 2).

On the basis of the results of theoretical research, as well as the standards of studies and a teacher's profession (2004) there were identified several *spheres of a teacher's professional activities*: methodology of a subject, methodology of educational activities, extracurricular pedagogical activities, research activities, professional development, arrangement and management.

Professional activities in all these spheres facilitate the professional development, and vice versa, because the professional development is like a basis for the diverse professional activities; at the same time the professional development takes place thanks to the diverse professional activities (Figure 2).

Having evaluated authors' theoretical conclusions and personal experience, we can say that in order to perform professional activities, the prospective teacher needs several competences that determine the development of his professional expertise on the whole. The diversity of the types of competences is closely related to the diversity of the spheres of professional activities.

Irrespective of the fact that the basic spheres of professional activities do not change, their content changes. The novelty is the fact that a teacher in any situation at school shall be able to combine competences representing different spheres according to the situation. Therefore pedagogy students, during their practical training, shall develop their competences for the activities in all basic spheres of a teacher's professional activities by acquiring several teacher's roles.

The concept of competence that has been introduced into the sphere of education shall be now attributed to the teacher and pupil's readiness to act under the modern conditions. This readiness, first of all, is ensured by general competences.

Within the framework of research, while substantiating *the structure of pedagogy students' readiness for professional activities*, the authors of this article defined the **concept of competence** as follows: *the competence is an integral entirety of knowledge, skills and experience, manifesting through the responsible independent activities, while respecting the specificity of particular environment and situation.*

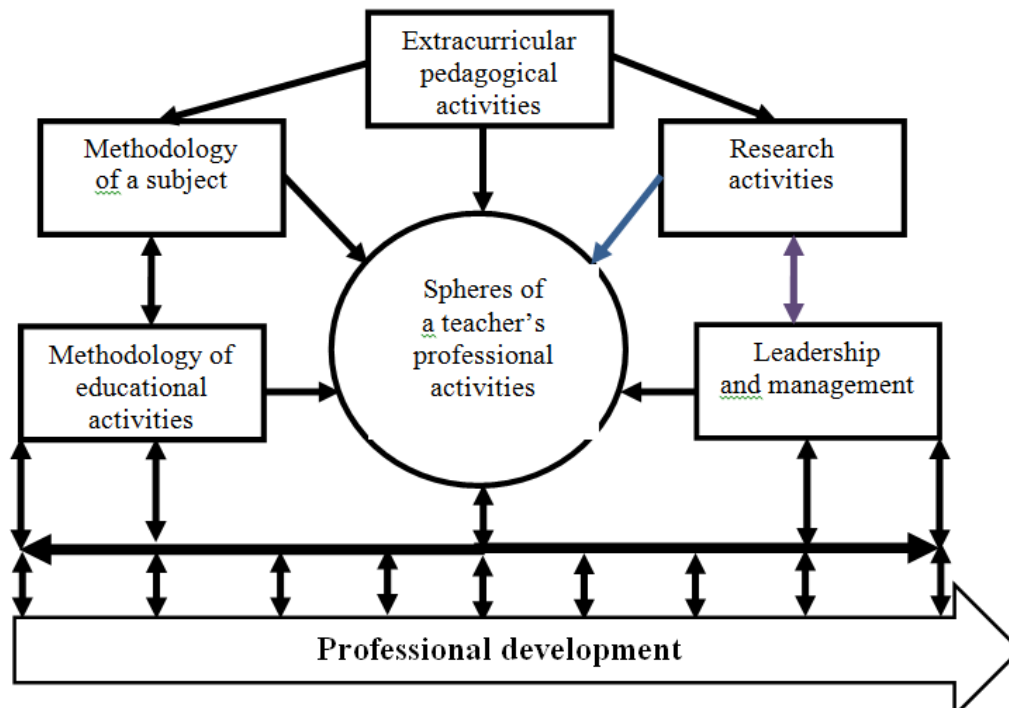


Figure 2. Spheres of a Teacher's Professional Activities (Authors' design)

Since there is no unanimity regarding the definitions and classification of the types of a teacher's competences, then within the framework of our research, on the basis of the developed substantiation of the spheres of a teacher's professional activities (Figure 2), the types of prospective teachers' competences and their definitions had been related to *the spheres of a teacher's professional activities*: 1) *methodological competence of educational activities*; 2) *methodological competence of a subject*; 3) *competence of extracurricular pedagogical activities*; 4) *research competence*; 5) *leadership and management competence*; 6) *competence of professional development*.

Having evaluated authors' theoretical conclusions and personal experience, we can say that *in order to perform professional activities, the prospective teacher needs several competences that determine the development of his professional expertise on the whole*. The diversity of the types of competences is closely related to the diversity of the spheres of professional activities.

All these competences are necessary for the pedagogy students as prospective teachers in order they could start their independent professional activities, including: 1) adapting to the school environment under the changing conditions; 2) accepting every pupil, while being aware of his/her developmental resources; 3) collaborating with the participants of educational process in the school environment and beyond it; 4) aligning the requirements of regulatory documents with the independent target-oriented creative activities; 5) performing activities in the real and virtual educational environment; 6) drawing the conclusion that the teacher performs the particular mission of his/her life and that the teacher's wisdom at present is relative in comparison to the pupil's wisdom, because, when the pupil would reach the teacher's age and would have amassed his/her own experience, the pupil could achieve better results than his/her teacher; 7) knowing of at least two foreign languages; 8) working in the multicultural environment; 9) working at all the levels of ecosystem; 10) continuing self-development and self-perfection.

Readiness for professional activities is based on the teacher's personal *experience of professional activities* (Figure 1) that has been amassed during the process of professional development within

several years. *The amassing of the experience of professional activities starts with the students' practical training in the school environment.*

The results of theoretical research show that readiness (both psychological and competency based readiness) for professional activities depends on different personality's qualities, forming the structures of the basic components (motives, attitudes, values, competences, self-organizational and self-control mechanism etc.) of readiness for professional activities and on the factors of educational environment that like the totality of internal factors or factors resulting from the personality and external or environmental factors influence an individual's professional activities.

As a result of theoretical research and reflection of personal experience, there was developed the structural model of a prospective teacher's readiness for professional activities in the context of educational environment (Figure 1).

Pedagogy students' readiness for professional development is influenced by both internal (resulting from the personality) factors and external or environmental factors, including requirements set for the school and the teacher by: 1) the European Union and national level educational environment and society; 2) the environment of a higher education institution; 3) the environment of a practical base – a school that has its specific pedagogical and cultural environment.

There are many and different factors of educational environment. Some of the environmental factors are the requirements set for the professional activities of teachers, including prospective teachers. Pedagogy students face the scientifically substantiated, experience based requirements set by the academic staff of higher education institution, and school mentors. But the teachers' professional activities in a modern school are influenced by the requirements set for the teacher's professional activities that exist in the national and European Union educational environment (Figure 1). Therefore academic staff of higher education institution shall be competent specialists themselves in their sphere and methodologically competent mentors.

Therefore in the structural model of a teacher's readiness for professional activities there are identified several contexts of educational environment, comprising the above mentioned requirements set for the teachers' professional activities in a form of directives (imperatives) – ***I need.***

- The educational environment of the European Union with its requirements for the teacher's professional activities.
- The educational environment of the higher education institution with the requirements set for the students' practical training in order they could perform professional activities in the school environment.
- The educational environment of the school and its local requirements set for the teacher's professional activities that mostly result from the specificity of the school environment, namely, from the strategy and aims of the sustainable development of school, the peculiarities of its cultural environment, the type and status of school, the formal and non-formal educational programs implemented at the school, the model of collaboration with the social partners, and many functions of the school, including participation in different projects.

It is essential that the requirements of external educational environment, as a result of interiorization, are accepted and transformed as internal motives of professional activities, thus there are harmonized and aligned personality's needs and motives with the aims of professional activities. At the same time the aims of professional self-development and the purposes of career development are also the motives of the teacher's professional activities.

Pedagogy student's readiness for professional activities is the precondition and also the result of professional self-development, therefore readiness for professional activities interacts with the professional self-development on an ongoing basis through the acquisition of different spheres of professional activities, educator's roles and functions resulting from them.

The structural model of a teacher's readiness for professional activities in the context of educational environment, developed by the authors of this article, became the basis for the

development experimental approbation in practice of the methodology for the self-evaluation of pedagogy students' readiness for professional activities.

Conclusions

In the teachers' education the concept *readiness for professional activities* has complex and diverse significance, comprising the diversity of an educator's roles and functions in the school. The facilitation of prospective specialists' readiness for professional activities during the study process at a higher education institution is one of the main directions of its activities. The content of concept *readiness for activities* changes according to the requirements set by the time and could be understood as self-realization in the creative activities, transfer of knowledge from one sphere to another, fast integration into the environment of a new place of work.

The prospective teacher's readiness for professional development consists of two basic components: 1) psychological readiness, and 2) competency based readiness. The emotional component and the component of motivation represent the component of psychological readiness. The motives are a core for the personality's progress. The competence as a structural part of the competency based readiness is an integral entirety of knowledge, skills and experience, manifesting through the responsible independent activities, while respecting the specificity of particular environment and situation. In order to perform professional activities, the prospective teacher needs several competences that determine the development of his professional expertise on the whole. The diversity of the types of competences is closely related to the diversity of the spheres of professional activities.

The readiness for professional activities is based on the teacher's personal *experience of professional activities* that has been amassed during the process of professional development within several years. *The amassing of the experience of professional activities starts with the students' practical training in the school environment.*

Pedagogy students' (prospective teachers') readiness for professional development is influenced by both internal (resulting from the personality) factors and external or environmental factors, including requirements set for the school and the teacher by: 1) the European Union and national level educational environment and society; 2) the environment of a higher education institution; 3) the environment of a practical base – a school that has its specific pedagogical and cultural environment.

Bibliography

1. Adey P., Hewitt G. (2004). *The Professional Development of Teachers: Practice and Theory*. Kluwer Academic Publishers.
2. Andersone R. (2009). Skolotāju profesionālā kompetence sabiedrības ilgtspējīgai attīstībai (Teachers' Professional Competence for the Sustainable Development of Society). *LU raksti, 747.sējums*, Rīga, Latvijas Universitāte, Pedagoģija un skolotāju izglītība: 8. – 19. lpp. ISSN 1407 - 2157 (In Latvian)
3. Argyris C. (1957). *Personality and Organization: the Conflict between System and the Individual*. New York: Harper.
4. Argyris, C., Schön, D. (1978). *Organizational learning: a theory of action perspective*, Reading, Mass: Addison-Wesley.
5. Baltušīte R. (2013). *Pedagoģijas studentu gatavība profesionālai darbībai skolas vidē* (The Pedagogy Students' Readiness for Professional Activities in the School Environment). Promocijas darbs. Jelgava: LLU, 184 lpp. (In Latvian)
6. Baltušīte R. (2012). Readiness for Pedagogical Activity Indicators and Methodology. In Proceedings of the International Scientific Conference, *ATEE Spring University, 20 Years for Sustainable Development: Learning from Each Other*, Lithuania, Vilnius, pp. 205 – 210. ISSN 1822 - 2196
7. Bankauskienė N. (2007). *Asmeninis profesinis tobulėjimas Šiuolaikinio mokytojo kompetencija*. (Personal professional development of modern teaching) KTU Socialinių mokslų fakultetas, Edukologijos institutas, Edukacinės kompetencijos centras. [online] [06.05.2012]. Available at www.pprc.lt/.../naujienos/Mokytojai_butinos_kompetencijos.pdf (in Lithuanian)

8. Bauer K.O. (2005). *Pädagogische Basiskompetenzen. Theorie und Training*. (Educational basic Competence. Theory and practice) Juventa Verlag Weinheim und München. (in German)
9. Beck E., Brühwiller C., Müller P. (2007). *Adaptive Lehrkompetenz als Voraussetzung für individualisiertes lernen in der Schule*. (Adaptive teaching competence as a prerequisite for individualized learning in school) In Lemmermöhle, Doris et al. (Hrsg): *professionell lehren, erfolgreich lernen*. Münster, Waxmann. (in German)
10. Briede B. (2009). Concepts, Research Aspects and Kinds of Competence, Professional Competence and Professionalism. In Proceedings of the 4th International Scientific Conference *Rural Environment. Education. Personality (REEP)*. Jelgava: LLU TF IMI, pp. 503 – 512.
11. Briede B., Pēks L. (2011). *Ekoloģiskā pieeja izglītībā* (Ecological Approach in Education) [elektroniskais resurss]. Jelgava, LLU, IMI, Monogrāfisko pētījumu sērija *Izglītības ekoloģija*, CD – ROM, 160 lpp. (In Latvian)
12. Briede B., Pēks L. (1998). Pedagoģiskā vide (Pedagogical Environment). Starptautiskās konferences materiāli *Mājturības pedagoģiskās aktualitātes*. Jelgava: LLU, 87 – 92 lpp. (In Latvian)
13. *Common European Principles for Teacher Competences and Qualifications* (2005). [online] [03.12.2011]. Available at www.minocw.nl/documents/principles_en.pdf
14. Čehlova Z. (2002). *Izziņas aktivitāte mācībās* (Cognitive Activity during the Study Process). Rīga: RaKa, 136 lpp. (In Latvian)
15. Dauge A. (1928). *Audzinašanas ideāls un īstenība* (*The Ideal of Education and the Reality*). Cēsis un Rīga: O.Jēpes apgāds, 125 lpp. (In Latvian)
16. Davidson D. (1980). *Essays on Actions and Events*. Oxford University Press.
17. Drexel I. (2003). The Concept of Competence – an Instrument of Social and Political Change. *Lecture. Stein Rokkan centre for social studies UNIFOB AS*, 15 p.
18. Giesecke H. (1997). *Die pädagogische Beziehung: Pädagogische Professionalität und die Emanzipation des Kindes*. (The pedagogical relationship: Pedagogical professionalism and the emancipation of the child). 2.Aufl., Weinheim, München: Juventa Verlag. 223S. (in German)
19. Grabovska R. (2006). *Ilgspējības principa īstenošana skolotāju izglītībā* (The Implementation of the Principle of Sustainability in the Teacher Education). Promocijas darbs pedagoģijas nozares augstskolas pedagoģijas apakšnozarē. Daugavpils: DU, 138 lpp. (In Latvian)
20. Huntly H. (2008). *Teachers' Work: Beginning Teachers' Conceptions of Competence*, pp. 126 – 145. [online] [03.06.2010]. Available at <http://link.springer.com/article/10.1007/BF03216878#page-1>
21. Johnson M. (2000). *New Roles for Educators*. [online] [06.05.2012]. Available at http://www.mff.org/edtech/article.taf?function=detail&Content_uid1=290
22. Ittelson W.H. (1969). *Visual Space Perception*. New York.
23. Katane I. (2005). *The Evaluation Model of the Rural School as Educational Environment*. Summary of Doctoral Dissertation. Scientific sub-sector: School Pedagogy. Daugavpils: Daugavpils University, pp. 37-73.
24. Katane I. (2007a). *No ekoloģiskās paradigmas līdz vides modelim izglītības pētniecībā* (From Ecological Paradigm to Environmental Model in Research of Education). Sērija „*Izglītības ekoloģija*”. Jelgava: LLU, 239 lpp. (in Latvian)
25. Katane I. (2007b). Systemic Ecological Approach in the Teacher Education: Ecological Didactic Model of Students' Pedagogical Practice. *Journal of Teacher Education for Sustainable Development, Vol. 2 (7), pp. 40- 54*.
26. Katane I. (2009). Ecology of Education as a New Interdisciplinary Research Trend. In Proceedings of the International Scientific Conference *Latvia University of Agriculture – 70*. Jelgava: LLU, pp. 183 – 184.
27. Katane I., Baltušīte R. (2007). Ecological Approach for the Formation and Development of Prospective Teachers' Readiness for the Professional activities at Latvian Schools. *Transformations in Business & Economics, Vol. 6, No 2 (12), pp.114 – 132*.
28. Katane I., Kalniņa I. (2010). *Skolēnu personības konkurētspējas attīstība neformālās komercizglītības vide* (Competitiveness Development of Students' Personality in Environment of Non-Formal Commercial Education). Jelgava: LLU, 331 lpp. (In Latvian)

29. Katane I., Kruglija S. (2009). Pedagoģijas studentu gatavība profesionālai darbībai ekoloģiskajā skatījumā (Readiness of Pedagogical Students for Professional Work in the Ecological Perspective). Starptautiskās zinātniskās konferences rakstu krājumā: *Sabiedrība, integrācija, izglītība*. Rēzekne: Rēzeknes Augstskola, 80. – 89. lpp. (In Latvian)
30. Katane I., Laizāne A. (2012). *Divdesmit pirmā gadsimta lauku skolas izglītības vide Latvijā un ārzemēs (The Educational Environment of the Twenty-First Century Rural School in Latvia and Abroad)*. Sērija „Izglītības ekoloģija”. Jelgava: LLU TF IMI, 284 lpp. (In Latvian)
31. Katane I., Pēks L. (2006). *Izglītības ekoloģija: starpdisciplinārs virziens mūsdienu izglītības pētniecībā (Educational Ecology: Interdisciplinary Trend of Modern Educational Research)*. Sērija „Izglītības ekoloģija”. Jelgava: LLU IMI, 56 lpp. (In Latvian)
32. Kepaitē A. (2008). Peculiarities of Prospective Teachers’ Reflection. ATEE, Spring University, *Teacher of the 21st Century: Quality Education for Quality Teaching*, Rīga, pp. 83 –88
33. Latvijas ilgtspējīgas attīstības stratēģija līdz 2030.gadam (2010). (*Sustainable Development Strategy of Latvia until 2030*). [online] [14.03.2011]. Available at http://baltadaba.lv/wp-content/uploads/2013/04/latvija2030_lv.pdf (In Latvian)
34. Latvijas Nacionālais attīstības plāns 2007.-2013.gadam. (2006). (*National Development Plan of Latvia for 2007-2013*). [online] [14.03.2011]. Available at www.likumi.lv/doc.php?id=139505 (In Latvian)
35. *Latvijas Nacionālās attīstības plāns 2014 – 2020 gadam* (2012). M.Krieviņa prezentācija Prioritātes, indikatori, darbības virzieni. (*National Development Plan of Latvia for 2014-2020*). [online] [14.03.2011]. Available at http://www.esfondi.lv/upload/Prezentacijas/15022012_NAP_Prioritates_final.pdf (in Latvian)
36. Nieke W. (2002). Kompetenz. (Competence). In H.-U. Otto, T. Rauschenbach & P. Vogel (Hrsg.), *Erziehungswissenschaft: Professionalität und Kompetenz*. Opladen: Leske + Budrich. (in German)
37. Petere A. (2011). Tolerance pret citādo. Attieksme vai kompetence skolotāja profesionalitātes skatījumā (Tolerance towards the Different One. The Attitude or the Competence from the Aspect of Teacher’s Professionalism.). In Proceedings of the International Scientific Conference *Society, Integration, Education*. Rēzekne: Rezekne Higher Education Institution, 2.daļa, 327 – 334 lpp. (in Latvian) ISSN 1691 - 5887
38. Reeve J. (2001). *Understanding Motivation and Emotions*. New York: John Wiley & Sons, USA, p. 585.
39. Roga V. (2008). *Sociālā pedagoga ekoloģiskās kompetences veidošanās lauku kopienā (The Formation of the Social Educator’s Ecological Competence in the Rural Community)*. Promocijas darbs sociālajā pedagoģijā. Rīga: LU, 232 lpp. (in Latvian)
40. Rutka L. (2008). Psychological Factors of Pedagogical Process. ATEE, Spring University, *Teacher of the 21st Century: Quality Education for Quality Teaching*, Rīga: LU, pp. 104 – 116.
41. Strode A. (2010). *Studentu patstāvīga profesionālā darbība pedagoģiskajā praksē (Students’ Independent Professional Activities during the Pedagogical Practice)*. Rēzekne: RA izdevniecība. (in Latvian)
42. Students J. A. (1998). *Vispārīgā paidagōģija (General Pedagogy)*, II daļa. Rīga: RaKa, 224 lpp. (in Latvian)
43. Vygotsky L.S. (1981). The Genesis of Higher Mental Functions. In J.V. Wertsch (Ed. & translation) *The concept of activity in Soviet psychology*. Armonk, NY: M.E. Sharpe, pp. 144-188.
44. Андриенко Е. (2000). *Социальная психология (Social Psychology)*. Москва: Академия, 264 с. (In Russian)
45. Божович Л. (1997). *Проблемы формирования личности (Problems of the Identity Formation)*. 2-е изд. Москва, Воронеж. Издательство «Институт практической психологии» (Institute of Applied Psychology), Воронеж: НПО «МОДЭК », 362 с. (In Russian)
46. Гальперин П. (1985). *Методы обучения и умственное развитие ребенка (Teaching Methods and a Child’s Mental Development)*. Москва: МГУ, 45с. (in Russian)

47. Гилёва И. (2000). *Системно – структурный анализ мотивационной готовности к творческой деятельности* (Systems Structural Analusis of the Motivating Readiness for the Creative Activities). Автореф. дис. ... канд. психол. наук. Барнаул, 20 с. (in Russian)
48. Горбаткина И. (2003). *Формирование готовности студентов педагогических вузов к профессиональной деятельности в условиях вариативного образования* (The Formation of Readiness of the Students of Pedagogical Higher Education Institutions for Their Professional Activities under the Conditions of Variational Education). Москва: Московский городской педагогический университет, 167 с. (In Russian)
49. Гороховская И. (2008). *Формирование готовности будущего социального педагога к реализации воспитательных возможностей игры* (The Formation of the Readiness of a Prospective Social Educator for the Application of Educational Possibilities of a Game). Диссертация. Курск: Курский государственный университет, 253 с. (In Russian)
50. Деркач А. (2004). *Акмеологические основы развития профессионала* (Acmeological Basis for the Development of a Professional). Москва, Воронеж: НПО МОДЭК, 752 с. (In Russian)
51. Емец М. (2011). *Формирование готовности к педагогической деятельности будущего бакалавра технологического образования* (The Formation of the Readiness for the Pedagogical Activities prospective Bachelor technological Education). Оренбург: Оренбургский государственный университет, 253 с. (in Russian)
52. Зимняя И. (2004). *Ключевые компетентности как результативно-целевая основа компетентностного подхода в образовании* (Key Competences as a Result-Target Basis of the Competency Approach in Education). Труды методологического семинара *Россия в Болонском процессе: проблемы, задачи, перспективы*. Москва: Исследовательский центр проблем качества подготовки специалистов, 35 с. (in Russian)
53. Ильин Е (2000). *Мотивация и мотивы* (Motivation and Motives). Санкт-Петербург: Питер, 508с. (In Russian)
54. Исаченко О. (2008). *Формирование профессиональной готовности студентов педагогического вуза к работе в сельском социуме :на примере педагогических дисциплин* (The Formation of the Professional Readiness of the Students of a Pedagogical Higher Education Institution for the Professional Activities in the Rural Socium: A Case of Pedagogical Disciplines). Благовещенск: Благовещенский государственный педагогический университет, 239 с. (In Russian)
55. Конюхова Е. (2002). *Фактор готовности в формировании установки на успешность профессиональной деятельности* (The Factor of the Readiness within the Process of the Formation of Approach to the Success in the Professional Activities). *Материалы научно – практической конференции*. Новосибирск: с. 15 – 22. (In Russian)
56. Крылов А. (2005). *Психология* (Psychology). 2-е издание. Москва: проспект, 578 – 598 с. (In Russian)
57. Кузьмина Н. (1990). *Профессионализм личности преподавателя и мастера производственного обучения* (Professional Identity of Teachers and Trainers). Москва: Высшая школа, 358с. (In Russian)
58. Леонтьев А. (1982). *Деятельность. Сознание. Личность* (Activity. Consciousness. Personality). Москва: МГУ. (In Russian)
59. Немов Р. (1995). *Психология* (Psychology). Москва: Просвещение, Тюмень: Тюменский государственный университет, с. 3-26. (In Russian)
60. Никитина Н. (2006). *Введение в педагогическую деятельность* (Introduction to the Pedagogical Activities). Москва: Академия, 224с. (In Russian)
61. Никитина Н., Железнякова О., Петухов Л. (2002). *Основы профессионально – педагогической деятельности* (The Basis of the Professional Pedagogical Activities). Москва: Мастерство, 288с. (In Russian)
62. Рахматуллина Л. (2006). *Формирование практической готовности будущих учителей к профессиональной деятельности* (The Formation of the Practical Readiness of Prospective Teachers for the Professional Activities). *Вестник БашГУ*, 2, с. 136 -138. (In Russian)
63. Рейнолдс М. (2003). *Коучинг: эмоциональная компетентность. Используйте свои эмоции для успеха в работе* (Coaching: Emotional Competence. Study Your Emotions for the Success

- in Your Work) (пер. с англ.). Москва: Центр поддержки корпоративного управления и бизнеса, 112 с. (In Russian)
64. Рубинштейн С.Л. (2004). *Основы общей психологии* (The Basis of General Psychology). Из серии: Мастера психологии. СПб: Питер, 720 с. (In Russian)
 65. Санжаева Р. (1997). *Психологические механизмы формирования человека к деятельности* (Psychological Mechanisms of the Development of Human Activity). Диссертация на соискание степени доктора псих. Наук (Doctoral Thesis in Psychology). Новосибирск: Новосибирский Государственный педагогический университет. (In Russian)
 66. Ситка И. (2011). *Формирование у будущих учителей готовности к действиям в чрезвычайных ситуациях на основе ситуационного моделирования*. (The Formation of Readiness of a Prospective Teacher for the Activities in Extraordinary Situation) Чебоксары: Чувашский государственный педагогический университет им. И.Я.Яковлева, 184 с. (In Russian)
 67. Субботина Л. (2011). *Формирование профессиональной готовности студентов к самостоятельной деятельности* (The Formation of the Professional Readiness of Students for Their Independent Activities). *Ярославский педагогический вестник*, 4, с. 295-298. (In Russian)
 68. Толкачева Т. (2009). *Формирование профессиональной готовности будущего учителя к гражданскому воспитанию младших школьников* (The Formation of Professional Readiness of a Prospective Teacher for the Civic Education of Junior Pupils). Оренбург: Оренбургский государственный университет, 219 с. (In Russian)
 69. Тягунова Ю. (2008). *Развитие готовности учителя к воспитанию у подростков ценностного отношения к семье* (The Development of a Teacher's Readiness for the Education of Adolescents regarding the Approving Attitude towards the Family). Челябинск: Южно-Уральский государственный университет, 180 с. (In Russian)
 70. Хачатрян Э. (2011). *Формирование готовности педагогов к применению инновационных технологий в процессе повышения квалификации* (The Formation of the Educators' Readiness for the Application of Innovative Technologies during the Process of the Improvement of Professional Skills). Москва: Московский институт открытого образования, 214 с. (In Russian)
 71. Штейнбах Х., Еленский В. (2004). *Психология жизненного пространства* (The Psychology of Living Space). Санкт-Петербург: Речь, 239 с. (In Russian)
 72. Цветкова Р. (2006). *Мотивационная сфера личности студента как субъективно - развивающая система* (Motivational Sphere of a Student's Personality as a Subjective Developmental System). Хабаровск: ДВАГС, 200 с. (In Russian)
 73. Эрдынеева К., Кадашникова Э. (2009). *Экологическая компетентность как феномен педагогической реальности* (Ecological Competence as a Phenomenon of Pedagogical Reality). *Успехи современного естествознания*, 1, с. 59. (In Russian)