THEORY AND PRACTICE OF PROFESSIONAL TRAINING OF FUTURE PRIMARY SCHOOL TEACHERS IN THE CONTEXT OF THE MODERNIZATION OF EDUCATION

GULSUM AYAPBERGENOVA, ARNA APLASHOVA, BAKZHAN DLMIBETOVA, ZHULDYZ SAGYNTAEVA, NAGIMA AKHTAYEVA

E.A. Buketov State University of Karaganda, 100028, 28 Universitetskaya Str., Karaganda, Kazakhstan
b) Pavlodar State Pedagogical University, 140000, 10 Tkachev Str., Pavlodar, Kazakhstan
c) SILKWAY International University, 160011, 27A Tokuev Str., Shymkent, Kazakhstan
email: gulsumas@mail.ru, aplashova.aru@mail.ru, gulsumas@mail.ru, zhuldyz.sagytarva@mail.ru, nagbek7878@mail.ru

Abstract: Transformational shifts occurring in society require the development of adaptive mechanisms of the system of higher professional education in order to train specialists with the skills of socio-philosophical and psychological-pedagogical analysis, allowing to create technologies that form the basis of the competence of the future specialist. Professional training of specialists in the context of the modernization of the education system consists in educating a new cultural person, harmoniously developed, combining spiritual wealth, moral purity, ready to work in a market economy, while maintaining the traditions of the ancestors. In this regard, in the conditions of the reorientation of modern universities to the training of specialists, many problematic issues of an organizational, methodological, psychological, pedagogical and methodological nature arise.

Keywords: schoolteachers, modernization of education, future specialist, modern pedagogical and methodological nature arise.

1 Introduction

A performing educational system relies on many conditions such as efficient training of teaching staff. Competent teachers are a prerequisite of an efficient educational process. It is very important to develop a constant and real relationship between theoretical knowledge and the educational practice of future teachers. Students, future teachers should be aware of the role they play in educating future generations and of the fact that what they teach is what learners acquire. The quality of the learners' studies is linked to the manner teachers know to present the theoretical material as possible. This update is based on expected results, which are determined by educational areas and reflect the activity aspect, i.e. students “know, understand, apply, analyze, synthesize, and evaluate.”

As part of the update of the content of education, the approbation of regulatory documents (standard program, educational and methodical complexes, textbooks, etc.), assessment systems (criterial, summative, and formative ones), advanced training courses, etc. will be carried out.

Along with the experimental work, the issue of training and retraining teachers capable of working on new methods is also important.

According to standard plans, the following subjects are introduced in primary school: natural science, knowledge of the world, information and communication technologies, level-based learning of languages.

The analysis of the scientific and pedagogical literature on the development of primary education in Kazakhstan showed that the issue of the history of national education was adequately explored (by A.I. Sembayeva, T.T. Tazhibayeva, K.K. Kunantayeva, G.M. Khrapchenkova, V.G. Khrapchenkova, G.K. Akhmetova, and others). The development of the primary school in Kazakhstan and aspects of the training and education of children of primary school age are presented in the works of A.K. Tiebaldiyeva, S. Maygaranova, A.K. Arenova, V.P. Karibzhanova, and others.

Traditional education was carried out according to the “teacher-student-teacher” scheme but modern education should be based on the principle “teacher-student-students.”

Education affects not only the economy, but also the formation of personality and is aimed at democratization, humanization, humanitarization, computerization, informatization, and integration of society. Democratization is a way to manage the process of education, which creates a comfortable social environment for people to interact. Humanization of education is considered in the context of the ability of an individual to self-realize, to receive free and comprehensive development. The general cultural and socio-cultural component of the concept of education means the humanitarization of society and individuals.

The “Information Kazakhstan 2020” and “Digital Kazakhstan” programs have become a real breakthrough for the education system. Computerization, informatization, and digitalization contribute to the introduction of innovative changes in education and is a process of using the latest information technologies in all areas of human activity. (3, 4)

The integration of education is considered from the point of view of the interaction of various forms and systems of education that contribute to the implementation of educational tasks at the 2015-2016 academic year, in the 1st grade, 30 pilot schools were identified. In these schools, the approval of the State Compulsory Primary Education Standard will be held. These are 17 urban and 13 rural schools including 4 small-size schools. 10 schools are with Kazakh as the language of instruction, 9 schools are with Russian as the language of instruction, 1 school is with Uyghur as the language of instruction, and 10 schools are mixed.

The main objective of the modern program is to integrate the educational space, the orientation of the national education system to the standards of world educational practice with the preservation of the best traditions and standards of national education.

The update of the content of education implies a shift from the traditional organization of the educational process, when, primarily, the content of education reflected in the curricula was prescribed (each of the developers tried to cover as much theoretical material as possible). This update is based on expected results, which are determined by educational areas and reflect the activity aspect, i.e. students “know, understand, apply, analyze, synthesize, and evaluate.”
regional, national and international levels. At all levels of the implementation of educational tasks, there is a need for continuous improvement of education. It is known that the increase in efficiency is carried out in two main ways: extensive and intensive ones. The extensive method, which depends on the growth of the number of educational institutions, nevertheless did not become an indicator of the quality of education and in many countries has outlived. The intensive way (method) influences the increase in the labor productivity of the participants of the educational process on the basis of the use of the latest technologies and teaching methods.

Research scientist A.I. Rakov (5) argued that as human activities become more complex, the amount of knowledge required for its implementation increases dramatically. With the transition to the modern stage of development, characterized by the increasing pace of technical and technological innovations, the amount of knowledge necessary for their substantiation, development, implementation, and dissemination should grow exponentially. (5)

Qualitatively new requirements for the education system, due to social and scientific-technical progress, become the measure of social welfare.

2 Materials and Methods

Modernization of the teacher training system, from the initial narrow-profile to continuous professional development based on studies of psychological and pedagogical science and the continuous use of innovative methods and tools in the education system is impossible without relying on the already existing experience in the world educational practice.

The Human Development for All and Everyone report of 2017 introduces new human skills in the 21st century and notes that by 2020, more than 1/3 of the knowledge and skills important for work will change. The mastering of skills should be part of a lifelong education process aimed at four criteria: critical thinking, collaboration, creativity and communication. (6)

Critical thinking applies logic and also relies on metaknowledge and broad criteria of intellectuality, such as clarity, credibility, accuracy, significance, depth, outlook, and justice. Creative emotionality are also integral parts of critical thinking. (7)

Collaboration - the process of joint activity in any area of two or more people or organizations to achieve common goals, during which there is an exchange of knowledge, training and the achievement of agreement (consensus). (8) Communication is a process of interaction between people, during which interpersonal relationships arise, manifest and are formed. (8) Creativity is the ability of a person to think outside the box, make decisions, create something new and generate lots of ideas. (8)

Along with the outlined characteristics of future specialists related to the formation of meta-competences, the distinctive features of the new teaching culture are the ability for professional self-development, tolerance, the ability to put oneself in the place of another, to understand and accept another, and to be near him/her. (9) Therefore, the following necessary components of the system-functional model of the new teaching culture can be singled out:

- personality-oriented one (implies professional self-development in teaching);
- content-based one (includes the selection of the content of the interacting participants’ activities implemented in the process of additional education of younger schoolchildren);
- organizational and methodical one (implies taking into account the essential characteristics of additional education of younger schoolchildren in the social local system);
- procedural one (it assumes that primary school teachers should master the essential mechanisms of the pedagogical activity, be ready for transforming sociocultural experience, searching their own pedagogical styles, and be aware of education as a transformative interaction).

The structure of the model of training higher basic education graduates (bachelors) in accordance with the Kazakh state obligatory standard of postgraduate education can be constructed on the basis of basic components (blocks), each of which can include specific cycles of hierarchically interrelated disciplines: social and humanitarian, natural science, and general professional ones; specialization disciplines and practical specifically oriented disciplines.

In view of the study of the qualities required for the new teaching culture considered in the scientific literature (9) and in view of the comparison with other presented models, the constituent elements of future teachers’ readiness model can be as follows:

| Table 1. Constituent elements of future teachers’ professional readiness model |
|-------------------------------------------------|-------------------------------------------------|-------------------------------------------------|-------------------------------------------------|-------------------------------------------------|
| Epistemological ones  | Search ones  | Analytic ones  | Communication ones  | Activity-based ones  | Adaptive ones  |
| 1. Ability to apply inductive and deductive methods  | 1. Information management and media management skills  | 1. Ability to design educational programs  | 1. Team management skills  | 1. Ability to join the process started  | 1. Ability to use new information and communication technologies  |
| 2. Ability to apply synthetic method  | 2. Competences in other areas  | 2. Ability to select the content, forms and methods of work  | 2. Ability to work in a team  | 2. Ability to reach the goal  | 2. Ability to be responsible for decisions made  |
| 3. Ability to organize their own research  | 3. Ability to analyze and classify various documents  | 3. Ability to professionally analyze pedagogical situations  | 3. Critical decision ability  | 3. Ability to creative activity  | 3. Ability to find new solutions in inadequate situations  |
modern educational concepts, programs, and methodological approaches

| consultants | organizing professional discourse in the form of debates and discussions on any topics of social development

| 6. Deep reflective culture of thinking | 6. Ability to process planning; diagnostic abilities; professional mobility and self-control | 6. Modern ecological culture including civilizational-ecological approaches of P. Teilhard de Chardin, V. Vernadsky, I. Prigodin, etc. | 6. Legal literacy for drawing up contracts | 6. To be a facilitator creating conditions for the development of students, for their self-improvement | 6. To have a motivation for self-actualization

| 7. Ability to apply the system of learning technology, means and methods of student learning management | 7. Research skills manifested in the ability to know and objectively evaluate pedagogical situations and processes | 7. Ability to intercultural communications, to understand the differences between people, have the ability to live with representatives of other cultures, languages, religions, prevent the emergence of racism and xenophobia | 7. Skills to build subject-subject relations, establish equality and partnership | 7. Ability to create a learning environment for students learning activities to acquire new knowledge, to support solutions to the learning problem | 7. To know the real processes taking place in the modern school

The implementation of the described qualities of a teacher, as noted by Kazakh researchers, depends on the level of formation of the three groups of competencies that a teacher of the new culture should possess:

- methodological (psychological and pedagogical) competencies;
- general cultural (ideological) competencies;
- subject-oriented competencies.

The most important task of training teachers in the system of continuous education is the formation of the foundations of professional competence necessary for the implementation of pedagogical activity. (10)

The competence-based approach in determining the quality of education will make it possible to present to potential customers and consumers of education clearly delineated educational needs for their implementation. Competence is a productive activity characteristic of education. The lower threshold of competence is the level of activity necessary and sufficient for minimal success in obtaining a result.

Competence is the organization of one’s own and other resources for setting and achieving goals to transform the situation. Among an individual's own resources one can call his/her knowledge, skills and abilities, which are also the result of education, and in addition, psychological characteristics, values, etc., which are not.

3 Results and Discussion

The described constituent elements of future teachers’ professional readiness model enable highlighting the criteria, indicators, and level of a teacher’s readiness to develop younger schoolchildren.

The list of components, in one way or another, reproduces the list of activities for which the future teacher should be ready:

1. Mastering self-designing activities, designing one’s own and attracting external resources for self-realization and reflection.
2. Mastering communicative activities, constructing their own and attracting external resources of self-help and mutual assistance in public life.
3. Designing their own and attracting external resources for minimal mastering of pedagogical and creative activities.
4. Designing their own and attracting external resources for minimal mastery of various professional activities.
5. Designing their own and attracting external resources for minimal mastering the basics of scientific research.

If we imagine readiness as a hierarchy of attained competencies, then we can see the resource potential of the education system in accordance with the three global goals of education (classical, real and social ones) and at all basic levels (elevated, basic, supporting and compensatory ones).

Table 2. Levels of readiness of future teachers to the development of younger schoolchildren

<table>
<thead>
<tr>
<th>Leading Educational Subsystems</th>
<th>Classic Educational Subsystem</th>
<th>Real Educational Subsystem</th>
<th>Social Educational Subsystem</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced Education Subsystem</td>
<td>1. Self-construction competence: minimal mastering of self-realization and self</td>
<td>1. Search and research competence: minimal mastery of the basics of research activities</td>
<td>1. Social competence, or competence of solidarity: minimal mastery of communitarian activities through self-help and mutual aid in</td>
</tr>
</tbody>
</table>

- 110 -
reflection activities | public life
---|---
2. Individual reproductive competence: minimal mastering of parental, pedagogical, and creative activities | 2. Social reproductive competence: minimal mastering of other professional activities | 2. Self-construction competence: minimal mastering of self-designing, self-realization and reflection activities
3. Search and research competence: mastering the basics of research and development | 3. Independent competence: minimal mastering of self-designing, self-realization and reflection activities | 3. Search and research competence: minimal mastery of the basics of research activities
5. Social reproductive competence: minimal mastery of one or other professional activities | 5. Individual reproductive competence: minimal mastering of parental, pedagogical, and creative activities | 5. Social reproductive competence: minimal mastery of one or other professional activities

<table>
<thead>
<tr>
<th>Basic Education Subsystem</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Self-construction competence</td>
<td>2. Social competence or solidarity competence</td>
<td>2. Social competence and solidarity competence</td>
</tr>
<tr>
<td>4. Social competence or solidarity competence</td>
<td>4. Self-construction competence</td>
<td>4. Individual reproductive competence</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Subsystem of supporting and compensatory education</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Social reproductive competence</td>
<td>1. Social competence or solidarity competence</td>
<td>1. Individual reproductive competence</td>
</tr>
<tr>
<td>2. Individual reproductive competence</td>
<td>2. Social reproductive competence</td>
<td>2. Social competence or solidarity competence</td>
</tr>
<tr>
<td>3. Social competence or solidarity competence</td>
<td>3. Individual reproductive competence</td>
<td>3. Social reproductive competence</td>
</tr>
</tbody>
</table>

Competencies, therefore, in some combination that has already taken place, contain global goals of education - classical, real, and social ones, as well as types of educational content - elementary, pragmatic, and universal ones.

Table 3. Indicators of readiness of future teachers to the development of younger schoolchildren

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social</td>
<td>The ability to take responsibility, make decisions, implement them; tolerance, love of children.</td>
</tr>
<tr>
<td>Communicative</td>
<td>Knowledge of foreign languages, computer literacy, knowledge of ethnic pedagogy and psychology, the basics of world religions.</td>
</tr>
<tr>
<td>Informational</td>
<td>Ability to apply information technology, resources, the ability to independently comprehend the information received.</td>
</tr>
<tr>
<td>Special</td>
<td>High level of general culture, broad outlook, pedagogical tact, organizational skills, respect for the child’s personality. Energism and stress resistance.</td>
</tr>
<tr>
<td>Cognitive</td>
<td>Focus on professional growth, continuous improvement of the educational level, the ability to acquire new knowledge and skills, the desire for self-development.</td>
</tr>
</tbody>
</table>

In the process of development, the personality of the child changes itself. This process is, to a certain extent, controlled by the teacher, whose efforts should be aimed at improving the physical and psycho-physiological qualities of the child, personal qualities, knowledge, skills, values and attitudes; behavioral scenarios, fundamentals of lifestyle, attitudes towards oneself (self-acceptance), towards the world (world perception, worldview, pictures of the world), relationship with the world (ways of self-realization and self-affirmation). These tasks give rise to the following requirements for the preparation of future teachers for the development of primary schoolchildren:

1. Sociability, tolerance, social mobility, information technology culture, and flexibility of thinking.
2. Global, systemic, planetary, information technology, projective outlook and thinking.
3. Professional competence and mobility, the constant need for professional development and retraining, competitiveness.
4. Enterprise, ability to entrepreneurship, competitiveness, ability to professional self-preservation, individual style of professional activity.
5. Professional independence, responsibility, creativity, reflection, and adequate self-esteem. (11)

In the process of mastering pedagogical and psychological disciplines, the future teacher should be oriented towards the following requirements:

1. Reorientation from personality problems to child problems;
2. Attraction of child’s whole environment to solving the problems of a child;
3. Taking into account all life realities and specific life situations of a child;
4. Diagnostics of potential and real possibilities of oneself, a child and participants of the environment.

The solution of these problems is possible in the discourse of the developed model of pedagogical support aimed at assisting children in solving their problems. (12-15)

The preparation of an integral model of the future teacher's personality implies the use of special programs and courses that solve the problem of creating professionalism in solving educational tasks in accordance with the needs of modern society and a creative, independent, responsible person. (16-20)

The analysis of the scientific literature, the difficulties of practicing educators, teachers, class tutors, as well as the study of the experience of pedagogical universities training future teachers, curricula in social and pedagogical disciplines, and interviewing students enable drawing up the following conclusions:

- there is an objective need to train students of pedagogical universities for the development of primary school children;
- there is a low level of readiness of both students and practicing teachers to implement social education in general;
- the analysis of the scientific literature suggests that the system of training future teachers will be most effective if new teaching technologies will be used as its technological support.

4 Conclusion

Innovative changes in higher professional education connected with modernization have predetermined the need for working out adequate socio-pedagogic conditions of shaping a student's personality that require the development and introduction of a new model of pedagogical practice based on a competency model of a tertiary school graduate. (21-25) This is in regard to the tendency of implementing projects for the creation of a balanced and high-tech innovative model of development of a contemporary social educator's professional competence. (26-31)

The study of theoretical aspects of the problem permitted us to carry out a comparative analysis and to interpret concepts as follows: competence - as a personal quality of a subject manifested in specialized activity in the system of the social and technological division of labor that can be viewed in an aggregate of competences as a structural component of competence; professional competence - as a totality of integrated characteristics of a person (specifically professional competence, social professional competence, individual/personal, professional competence, extreme professional competence) determine a professional's ability to realize in his or her activity a range of socio-professional and interdisciplinary knowledge, technologies of productive rendering of social aid and support to those in need of it for the purposes of improving the quality of social services; preparedness for shaping constructive social relationships of interaction, interception and understanding another person; initiating a specialist's striving for personal advancement, professional self-realization and self-assertion in diverse spheres of activity.

The analysis of pedagogical approaches (functional and activity, axiological, universal, personality oriented) permits to conclude that professional competence of a social educator acts as his or her integrative professional and personal characteristic determining the quality of his or her activity expressed in the ability to act adequately, independently and responsibly in permanently changing social and professional spheres, reflecting his or her readiness for self-assessment, self-development and self-realization. The result of education is a specialist's preparedness for personal activities. The social educators' preparedness for professional activity leads to an integrative education of an individual characterized by a high level of his or her mastering of psychological, pedagogical and special knowledge, expertise and skills, as well as professionally significant qualities needed for the efficient performance of the primary professional functions at a high creative level.

In a study performed (Psychological and pedagogical education, the scope of education: Psychology and social pedagogics, qualification: bachelor) a social educator's professional activities were viewed from the perspective of purposeful, conscious, personally meaningful activity aimed at a productive and creative solution of professional tasks. Pedagogical practice, being a link of the comprehensive educational process, permits integrating and generalizing perceptions and initial experience of a student's professional activity, and to form professional competencies. It should be noted that, in fact, practice integrates professional training of students in the sphere of theory, methodology and research work. Such an integration permitted us to create a comprehensive model of professional training through levels of the integration processes: the “external” integration ensuring interconnection with the future specialist's professional activity as per the Federal State Educational Standard of Higher Professional Education (5) and qualification profile in view of regional peculiarities and social partners' needs; the "structural" one, manifesting itself in the rapprochement of practice with other elements of professional training (character building, educational, independent, research work); the "internal" presuming interconnection and complementarity of some types and elements of practice as a system.

The results of the study confirm the validity of the developed conceptual theses of projecting the social educators' practice on the ground of the following approaches: (a) the competency-based approach (the goal of learning is not the process itself but the students' achieving a certain result - forming professional competencies); (b) the context-based approach (right from the start a student is put into an activity-oriented position because learning subjects are presented as educational and educational-professional activity objects; (c) the reflexive approach (the emphasis is not put on understanding reflection as the student's understanding of thinking and communication patterns) (d) the modular and activity approach, which permits the students to perform a meaning-making transition from one type of activity (obtaining theoretical knowledge) to another (obtaining professional skills) and to establish a link between the expected result of education.

The development of the "Practice" modules was based on the principles whose implementation ensured the necessary efficiency in attaining goals, and determined the content and logic of pedagogical practice organization:

1) Continuity: one of the key principles of professional education development;
2) The principle of consistency: stage-by-stage mastering of the whole complex of professional expertise and skills, successive mastering all the professional functions of a specialist;
3) The principle of successiveness: stage-by-stage mastering of various types of activity (organizational and managerial, socio-technological, socio-projective, research activity);
4) The principle of integration: linking students' theoretical and practical skill in their independent social activity, the realization of integrative methods in training and implementation of practical activity;
5) The polyfunctionality principle: simultaneous performance of different professional functions in the process of practice (organizing, socio-rearing, socio-educational, rights advocacy, rehabilitation, research, etc.), mastering various professional roles within the framework of various kinds of practice (activity organizer, educator, protector, assistant, advisor);
6) The principle of social partnership: reflects relationships between all the practice subjects built on the priority of trust, partnership, and cooperation;
7) The principle of personality: presupposes affording giving students the opportunity of choosing an institution for practice on their own depending on their interests.

The contemporary educational paradigm, "education for sustainable development", requires training of efficient specialists who can make decisions quickly and attain success. The task of higher educational institutions is to prepare future specialists who are not only competent in theoretical professional activity, but are highly cultured, and civic and socially responsible, sharing humanistic ideals and moral values.

**Literature:**


21. European Science Foundation [Internet]. The professionalisation of academics as teachers in higher education: Science position paper; France: Ireg Strasbourg. Available from: www.esf.org/social


24. Grossman, Hammerness, McDonald [Internet]; 2009. Available from: https://www.google.ro/?gs_id=skl%7cGrossman%2C%7cHammerness%2c%7CMcDonald%2c%7CMcDonald%2c%7c2009


31. Welch T. Teacher development: What works and how can we learn from this and maximise thebenefits? Presentation at Teachers’ UproRnt meeting. Wits School of Education; 2012.

**Primary Paper Section:** A

**Secondary Paper Section:** AM, AN, AO