

# Advancing practice-oriented education in the training of future pedagogic psychologists

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## ABSTRACT

This research aims to explore the characteristics of practice-oriented training within universities and identify the psychological and pedagogical factors that influence the development of professional competencies in future specialists. A comprehensive combination of content analysis of training conditions for future professionals in higher education and an analytical review of the formation of professional competencies among teacher-psychologists in the context of educational system modernization were applied. The conclusions highlight the challenges of implementing practice-oriented training in Kazakhstan's higher education system, detailing its forms and methods in preparing competitive and competent specialists. Additionally, the study addresses strategies for effectively organizing pedagogical conditions that foster the development of core competencies in future professionals within social and psychological fields. The findings are critical for educators educating future teacher-psychologists, as they emphasize practice-oriented methods during educational modernization.

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## 1. INTRODUCTION

The expanding societal need for educated teacher-psychologists forces educational institutions to implement innovative strategies to address these changing demands. The program emphasizes practical training, which greatly reduces the gap between academic preparation and real-world professional expectations. Given that a country's intellectual capacity is a strategic asset, Kazakhstan's entry into the Bologna system emphasizes the need for new procedures and standards for training specialists. In this context, the value of practice-oriented education is evident, as it promotes the development of fundamental professional abilities, self-motivation, and self-management, ensuring that future experts are prepared for the complexities of their field [1].

The study of Oroszi [2] points out that competency-based education is an innovative approach where academic content and teaching are based on the student's competencies, and assessment occurs according to the student's progress. Clements and Nordin-Bates [3] refer to the core component of the competency-based approach as the key competencies of an individual, which are its component qualities and help the future specialist to acquire professional experience, develop the necessary knowledge and skills, which can form social-motivational, communicative, informational and psychological-pedagogical competencies. Didur [4] highlights the role of educational contexts and interdisciplinary integration in developing pedagogical tolerance in future vocational education teachers.

At the same time, Ahanya *et al.* [5] note that involving students in the practical learning process and using techniques that allow them to immerse themselves in the conditions of professional activity helps students look for non-standard solutions of core issues and simulate the process of this activity, in which the formation of professional competencies takes place. Brauer [6] notes, that curricula must be flexible enough, which implies the ability to respond quickly to changes in society, as well as correspond to the new conditions of professional activity, including the current need for distance learning and teaching on the background of the COVID-19 pandemic. Modernization of the educational system at the stage of reform processes in the Republic of Kazakhstan requires constant education and the development of necessary skills of students in higher education for further professional activities [7]. The scientific question addressed in this study is how incorporating practice-oriented methods into the training of future teacher-psychologists might improve their professional abilities and better prepare them for the difficulties of today's educational and socioeconomic environments.

## 2. METHOD

The research methodology combined analyzing how future professionals develop competencies during higher education with studying the psychological and pedagogical conditions needed to improve practice-oriented training for future teacher-psychologists. The study explored how practical professional skills are developed in higher education by examining the components of practice-oriented education during educational system changes. The research is built upon existing theories of training educational psychologists, providing a foundation for understanding how to prepare psychology and education specialists through practice-oriented professional training that meets modern workplace demands. Based on analyses of research from Kazakhstan, Ukraine, Italy, the USA, Germany, Norway, and Australia, we examined how practice-oriented education develops in higher education and what conditions best foster professional competencies. This investigation revealed challenges related to students' traits, professional growth, and motivation in practical work, particularly considering modern educational needs, digital transformation, and broader socioeconomic shifts.

The research unfolded across three phases, beginning with an examination of practice-oriented learning theory in higher education. This analysis informed understanding of specialist training and practical skill development. Then reviewed Kazakhstan's higher education legislation and relevant psychological-pedagogical literature, which helped establish key principles of practice-oriented education and identify how students develop professional competencies during their studies. The research's second stage analyzed methods to enhance practice-oriented training for psychology teachers in Kazakh universities. This involved comparing findings with other scholars' work on practice-oriented professional development and exploring curriculum improvements aligned with modern educational reforms. The research concluded by synthesizing theoretical and experimental findings on practice-oriented training of psychology teachers in higher education, specifically regarding the development of students' professional competencies. These results can inform the design of professional education curricula.

## 3. RESULTS

Practice-oriented learning has become crucial in higher education, fostering professional motivation and skill development. This approach is particularly vital during the COVID-19 pandemic in Kazakhstan, where there's an urgent need to develop professional competencies in future educational psychologists. The successful implementation of practice-oriented methods remains essential at all educational levels to prepare professionals who can effectively apply their knowledge [8].

The modernization of modern education in the Republic of Kazakhstan prioritizes lifelong learning, where the need to develop professional competencies and personal qualities of students is the main focus of educational reforms. Draft Decree of the Republic of Kazakhstan "On Approval of the Concept for the Development of Education in the Republic of Kazakhstan until 2025" [9] establishes the provision of practice-oriented professional education to gain practical experience before the completion of higher education. Thus, the students can have dual education, which implies mastering the theoretical part of the chosen profession and the right to professional practice with employers. This project also stipulates the interaction of the educational sphere and labor market, which will allow educator-psychologists and graduates not only to use innovative technologies in learning and teaching but also to improve psychological and pedagogical conditions in the formation of professional competencies of future specialists.

The active transformation of a personality during higher education occurs as a consequence of society's influence, the need for self-realization, and personal development in professional activity. Following several studies [4], [5], [10]–[12], it can be stated that the formation of professional competencies in future specialists occurs based on their individual and social motives and needs, while the acquisition of

professional knowledge directly depends on the psychological and pedagogical conditions in the educational process, which should be aimed at the development of motivational and sense-forming of the professional orientation. In this regard, the authors agree that the prioritization of practical activities involves the formation of personal experience in practical conditions, where the feature of practice-oriented education is the accumulation of practical knowledge, skills, and professional abilities, as well as mastering the skills of the future profession. Furthermore, practice-oriented training of teacher-psychologists in higher school is implemented in four stages and assumes actualization of knowledge, reproduction of experience, adaptation to practical activity, and approbation of professional activity. These stages of the practice-oriented approach are presented in Table 1.

Table 1. Stages of practice-oriented approach to the educator-psychologist training in higher education

Stage	Aim	Goal
Actualization of knowledge and new experience gain	New information acknowledgment, knowledge, content, and structure of psychological and pedagogical theoretical training update, focus on the acquisition of practical experience.	Formation of professional role conceptual understanding for the future educator-psychologist. Development of professional goals and self-development. Formation of professional direction (skills).
Implementation of acquired social and professional relations in practice	Implement knowledge and experience into individual and collective curricula. Form the professional and role experience.	Formation of the professional mentality. Transformation of professional and social qualities and skills into professionalism.
Adapting to a future social role	Form a role-based professional competence.	Comprehension of own practical activity based on available knowledge. Acquisition of professional activity experience. Comprehension of professional technology.
Approbation of professional activity during practice	Improvement of professional education practical activity.	Concretization and implementation of formed professional concepts, mastery, and creative potential. Approbation of skills and experience in professional practical activity.

Source: compiled by the authors based on [2], [4], [6], [12].

The practice-oriented approach in the training of future teachers-psychologists implies a change in the functions of the teacher and the student, which means students will gain experience by independently mastering the material while the lecturing activity of the teacher becomes a guide on how to complete an educational objective [13]. In this context, the teacher performs the organizational function in the learning process, creating situations of practical tasks for future specialists and activating the students' motivation [14]. There is a need to form students' content knowledge (basics of the profession), pedagogical knowledge (methodology of professional activity), and pedagogical content knowledge (combining basics and methodology) [10].

Readiness for professional activity of educational psychologists should be considered in the interconnection of quality training of future specialists in higher school, where the organization of psychological and pedagogical conditions includes a set of psychological formations that allow integrating the acquired experience into practical activity and interpreting learning into a personal form of perception [15]. The occurring need to know the details of the profession of a teacher-psychologist, as well as the development of self-motivation in improving knowledge, skills, and abilities are important components in determining the readiness of the future specialist to practice and perform professional functions [16]. The modern educational psychologist must have abstract-logical thinking, good memory, be emotionally stable, have organizational and communication skills, be tactful, as well as humanism, empathy, decency, perseverance, and honesty [17].

Figure 1 shows the main focus of practice-oriented education of teacher-psychologists for a better model of the educational process in higher education comprehension. At the same time, the lack of systematic understanding of the features, principles, methods, and forms used in the educational process can lead to insufficient quality of specialist training, which requires the comprehension of the concept of the educational process itself in the context of practice-oriented approach for future teachers-psychologists. As such, Figure 2 shows the main components of the training of future specialists in practice-oriented education in higher education.

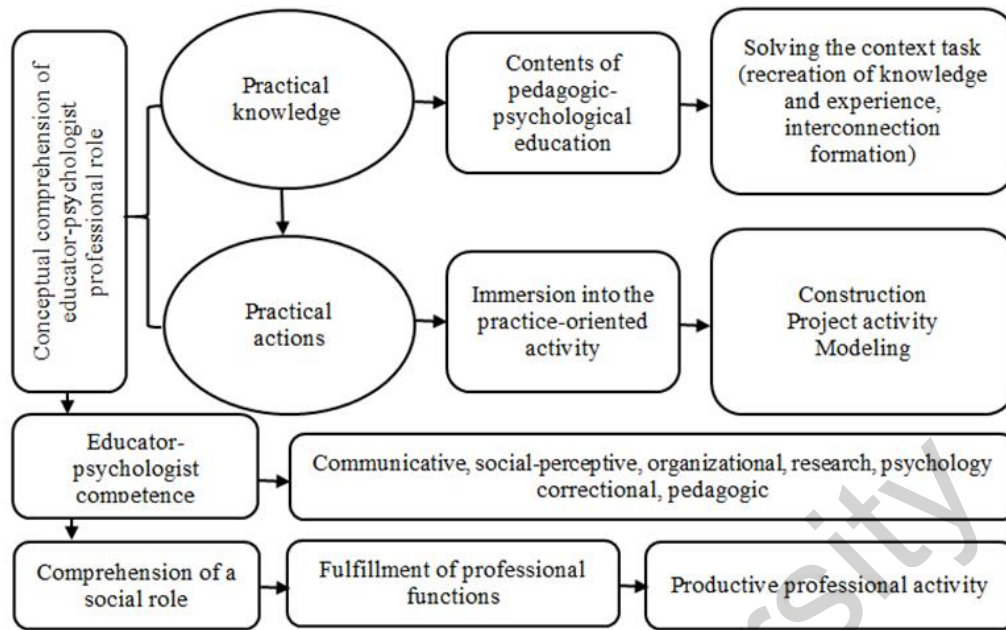


Figure 1. The model of practice-oriented approach to the educator-psychologist training process in higher education [15]–[18]

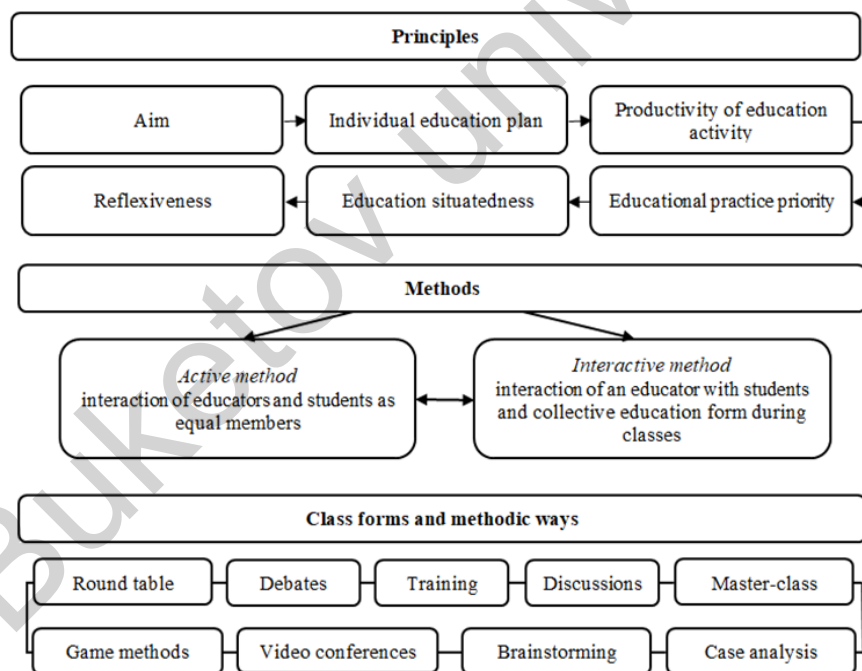


Figure 2. Practice-oriented education approach components [6], [11], [12], [15]

Research shows that practice-oriented training of future psychology teachers requires specific psychological and pedagogical conditions that integrate theoretical knowledge with practical experience. This process aims to develop professional competencies and social roles through hands-on activities in higher education. Success depends on combining practical work, educational resources, and student motivation, ultimately producing graduates who can apply theoretical knowledge in real-world situations. Effective psychology teachers must possess key personal traits including stable self-esteem, motivation, reflective ability, responsibility, independence, and emotional stability [19]. Moreover, productive practical activity assumes formed professional competencies, in particular:

- General pedagogical, such as knowledge of the current state of the educational system of the Republic of Kazakhstan, normative documents, the use of innovative pedagogical technologies and approaches during meetings, knowledge, and adherence to the main pedagogical tasks, and the ability to analyze their activities.
- General professional competencies for teacher-psychologists encompass subject expertise, organizational skills, ethical conduct, communication abilities, practical knowledge application, diagnostic capabilities, and technological proficiency.

The demand for competitive specialists determines the need for the development of practice-oriented learning in higher education, as well as the creation of effective training programs for future educator-psychologists based on the formation of applied knowledge and practical activities. The concept of a practice-oriented approach to education was quickly adopted in the global education system, where competent specialists who meet modern society's requirements imply the improvement of higher education. The implementation of practice-oriented education in the Republic of Kazakhstan enriches the educational process with innovative approaches in the training of future educator-psychologists and opens new opportunities to verify the global concepts of students' professional competence formation, which allows designing and predicting the learning outcomes in general.

The practice-oriented approach in the German educational process has been used in the professional training of specialists for more than 50 years [20]. The principle of duality in training and business creates a successful model of higher education, where the students' need for quality training and practice are met and the needs of society (business) in acquiring qualified workers are satisfied as well. It should be noted that Germany provides the possibility of dual training for 327 specialties, including the training of pedagogical and psychological professions. In contrast to the German educational system, Great Britain has been improving approaches to the possibility of enhancing the practical training of specialists since the beginning of the COVID-19 pandemic [21]. Simulation in practice-oriented learning prepares students for their future profession under mentor supervision in a controlled environment, allowing for early adjustments.

The impact of the COVID-19 pandemic proved to be a challenge for the educational system worldwide [22]. Thus, online universities in Italy were partially prepared for unfavorable conditions, but the problem was still relevant, and educational institutions were forced to switch to distance learning [23]. While technology enables practical education delivery and experiential learning through online formats like group conferences, distance learning raises concerns about academic integrity and its impact on theoretical knowledge acquisition. The involvement of students in extracurricular work through a practice-oriented approach acts as a conceptual basis in the higher educational institutions of Canada and the USA, where the practical orientation of education is a leading factor in the training of competitive specialists [24], [25].

Integration of higher education of the Republic of Kazakhstan into the Bologna system implies following the principles of this process, which allows adopting the experience of using and effectively implementing modern approaches to learning. The modernization of the educational system of Kazakhstan implies two-tier education (bachelor/master), the use of the European credit transfer and accumulation system, quality control, increasing student mobility, ensuring employment of future specialists and the implementation of the European system of education [9]. Teachers must create conditions that encourage self-education, professional identity, and competency development despite reduced class time. The research highlights the growing importance of practice-oriented training for psychology teachers in Kazakhstan's modernizing higher education system.

A detailed examination of the data reveals that, while the practice-oriented approach satisfies the urgent need for education to conform with social changes and labor market needs, its efficacy is dependent on more than simply curricular improvements. The integration of theoretical and practical training is only successful when supported by institutional structures that allow for continual feedback and change, particularly in quickly changing domains such as educational psychology. This reveals a potential gap: while the study focuses on intensive practical experiences, little attention is placed on evaluating the long-term impact of such training on career performance or professional growth beyond graduation. Furthermore, while the study includes international comparisons, it assumes that successful models from countries such as Germany can be easily transferred to Kazakhstan without taking into account cultural, economic, or educational infrastructure variations that may slow down implementation. Furthermore, the reliance on technology, particularly in light of the COVID-19 epidemic, emphasizes the importance of ongoing investment in digital tools, although the possible difficulties of uneven access to such technologies are not completely addressed. While the change to digital learning presents benefits, it could increase gaps among students, particularly in areas with insufficient technology infrastructure.

While legislative support for practice-oriented education is important, Kazakhstan's adoption of the Bologna system raises questions about the system's adaptability and responsiveness to changing educational demands. Legislative frameworks frequently lag behind social developments, resulting in delays in reacting to

new trends and gaps in training. As a result, the study might benefit from investigating how flexible, adaptive policies can be designed to assist the continual improvement of practice-based learning systems. Finally, a more in-depth examination of interdisciplinary connections, beyond psychology and pedagogy, may better prepare students for the increasingly interrelated and complicated difficulties they will confront in their professions.

#### 4. DISCUSSION

An important issue of modern professional training of specialists in psychological and pedagogical direction is the problem of the educational activities organized in conditions of modernization of the educational system and the provisions associated with changes in society. Meeting society's requirements requires higher education institutions to find effective ways of training competitive specialists. A pedagogue-psychologist is first a specialist who helps to maintain and strengthen the psychological health of students within the walls of the educational institution. The process of the activity is in the context of creating a psychological culture of students, support for personal development, and establishment of social and interpersonal relationships of all participants in the learning process, as well as in the diagnosis and psychological correction of behavioral deviations. Thus, a study by Kyzy *et al.* [26] indicates that a specialist also needs to organize preventive measures, consult students on various issues, determine effective means and methods of research, address individual and age features of students, interact with the administration of the institution and lead student research activities.

Martínez *et al.* [10] note that the formation of future specialist's professional competencies in the process of training is determined by the student's changes, where an important role is played by society's influence, motivation, growing need for self-realization and mastering the profession. At the same time professionalization implies mastering a new social role, where the stages of specialist formation, in particular learning the basics of the profession, observation, awareness, profile practice, and gaining new experience are constantly transforming during the whole period of education in higher education institution. In a study by Dwikat and Salinas [27], the formation of professionalism consists in mastering the necessary competencies, namely: activity (practice and effective application of knowledge), social (cooperation in society), personal (self-development, self-expression) and individual (self-regulation techniques, motivation). A similar opinion is expressed by Falloon [14] in his research.

Santos *et al.* [28] highlight information technology as a resource for the professional development of future specialists. The authors consider digital transformation as one of the main changes in the educational environment. In the current reality, the transition of the global educational community to distance learning involves highlighting the problem of moral behavior among students [29]. This obliges students to follow ethical principles and rules in academic and practical activities. However, Farahat [30] studying the problem of academic dishonesty, highlighted that student resort to plagiarism and cheating in their research. In this context, there is a growing need to counteract this and find effective ways to overcome academic dishonesty. A study by Djokovic *et al.* [31] describes the global problem of academic plagiarism in the educational environment of many countries. Improvement of the educational process within the framework of combating academic dishonesty involves the use of antiplagiarism by higher educational institutions to search for plagiarism in student and educator research, and the use of repositories with a database of research achievements.

As such, several researchers [11], [12] consider the purpose of the value-cognitive space as the success of the formation of students' consciousness. The activity-creative space is characterized by the authors by the sphere of assistance, and the reflexive-value space acts as a way of forming a certain sense of empathy among students in professional activity. Dall'Alba [15] interprets these three spaces by the professional role and interrelated characteristics of cognitive, behavioral, and emotional factors. The obtained results of the research also correlate with the Draft Decree of the Republic of Kazakhstan "On Approval of the Concept for the Development of Education in the Republic of Kazakhstan until 2025" [9], where the bill defines the relevance of practice-oriented education development in higher education, which allows educational institutions to improve and implement innovative approaches to the educational process, following the experience of other countries within the Bologna system.

Within the framework of professional activity, an educator-psychologist must possess skills and abilities of reflection, stress resistance, organizational abilities, and communicative and social-perceptual competence. Thus, research by Bardach *et al.* [17] point out the psychological characteristics of pedagogical professionals, which play an important role in the effectiveness of the professional role, such as motivation and personal qualities in creating positive interpersonal relationships with participants in the educational process, analytical and critical thinking, self-efficacy, emotional intelligence, stable self-esteem, mobility, attentiveness, and enthusiasm. Dall'Alba [15] notes the importance of psychological and pedagogical conditions for the creation of mental neoformations, which as a result should help the future specialist to combine his personal qualities and experience, identify and fix the content part of the profile education in an individual form and prepare the student for the future practical activity.

## 5. CONCLUSION

Constant globalization and the digitalization of the world community require highly effective professional training to be able to adapt to new transformational processes in various spheres of society, which sets requirements for higher education to prepare students in the system of practical educational activities. At the same time, the transformation of new knowledge and experience into applied activities involves immersing the future educational psychologist in situations based on practical assignments, which helps students realize their professional role and visualize future profile tasks. Analysis of modern scientific research on the problem of practice-oriented learning development revealed that the use of this technology in the educational process contributes to the accumulation of practical experience during higher education, qualitative formation of professional competencies of future specialists, as well as the development of personal qualities that contribute to the productive fulfillment of professional requirements and professionalization in general.

The current process of educational environment modernization contributes to the development of a practice-oriented approach to learning in the Republic of Kazakhstan. The Bologna system has enabled Kazakhstani universities to adopt and implement the practice-oriented learning approach, which allows young professionals to have theoretical knowledge, practical skills of professional activity, and the ability to synthesize the acquired competencies in the workplace upon graduation from high school. The findings of this study indicate that incorporating practice-oriented methods into higher education will significantly improve future teacher-psychologists' professional abilities by combining theoretical knowledge with practical experience, preparing them to meet modern societal and professional demands.

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C : Conceptualization

M : Methodology

So : Software

Va : Validation

Fo : Formal analysis

I : Investigation

R : Resources

D : Data Curation

O : Writing - Original Draft

E : Writing - Review & Editing

Vi : Visualization

Su : Supervision

P : Project administration

Fu : Funding acquisition

## CONFLICT OF INTEREST STATEMENT

Authors state no conflict of interest.

## DATA AVAILABILITY




The data that supports the findings of this study are available from the corresponding author [GM], upon reasonable request.

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