Introduction of practice-oriented learning in the training of future teachers

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Abstract

Relevance. The relevance of the study is conditioned by the modernisation of the modern higher education system, specifically, by the need to apply effective teaching methods for training polyfunctional pedagogical specialists.

Purpose. The purpose of this study was to find best methods and techniques of training future teachers in the context of forming their interest in learning and mastering practical skills in the context of modern requirements to a pedagogical specialist.

Methodology. The conceptual framework of the theoretical and methodological approach to the research problem was a qualitative combination of the methods of content analysis, synthesis, and deduction, as well as the methods of experimental learning, observation, and comparative analysis.

Results. The analysis of theoretical foundations on the research topic showed that practice-oriented learning is based on the principles that emphasise the practical application of knowledge, development of skills and competences necessary for successful professional activity of a specialist. The analysed modern scientific works allowed highlighting the relevant problems of the introducing practice-oriented learning in higher education, which contributed to the development and implementation of the concept of increasing the interest of future teachers in mastering professional skills in the educational process. The conducted pedagogical experiment revealed substantial differences in the use of conventional teaching methods and the selected strategy in the context of development of students’ professional competences.

Conclusions. It was empirically established that practice-oriented forms of class organisation allow creating conditions for active learning activities of students, which also affects their adaptation to the performance of professional tasks and motivation to the implementation of pedagogical activity in general. The value of the obtained research results lies in the

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Introduction
The digitalisation of society and transformation processes at the political and economic levels necessitates the improvement of the country’s educational system. An important strategy for the modernisation of educational services is to provide students with practical experience during professional training. In this regard, the key issue is to change conventional teaching methods to best teaching models that will be closer to real professional activities. This determines the search for effective ways to build the educational process in higher education and predetermines the relevance of the problem of introducing practice-oriented learning in the professional training of future teachers.

The implementation of the practice-oriented approach in higher education makes provision for the adaptation of conventional methods, techniques, and ways of teaching to the modern requirements of society. Thus, investigating the problems of learning in the era of digitalisation, S. Bakhishcheva et al. [1] point out that the introduction of digital technologies in the practical component of education provides effective learning, contributing to the development of students’ skills necessary for successful professional activity in the future. Furthermore, the researchers emphasise that the use of digital technologies offers unique opportunities to integrate practical activities into the learning process, specifically using multimedia resources, virtual environments, online projects, and networking. Therewith, students’ preparation for future profile activity should be carried out considering a range of key factors reflecting modern requirements and challenges of the professional sphere.

Studying the features of psychological and pedagogical training in higher education, W. Zunmin et al. [2] note that such aspects include knowledge of trends and innovations in education, technical skills, creativity, polyfunctionality, professional culture, self-regulation, professional motivation, and practical experience. Therewith, the authors emphasise that the purposeful development of these competences helps to ensure sustainable components of successful professional activity of a teacher in the modern world.

A.B. Kuzdeubayeva et al. [3] share similar conclusions, noting that the development of professional competences should be carried out through the lens of students’ practical experience. Investigating the problem of professional training of future teachers, the researchers highlight the necessary conditions that affect the quality of professional activity of graduates. Specifically, quality training of a specialist is facilitated by pedagogical practice, optimised teaching methods and approaches, introduction of specialised courses in the educational process, which are aimed at developing students’ adaptability, communication skills, motivation, the need for self-development, as well as the ability to handle the challenges of professional activity and to interact effectively with students. However, this also leads to the need to develop polyfunctional competencies in students that will enable the educator to fulfil not only conventional pedagogical responsibilities but also to play a wider role in supporting students and shaping the entire learning process.

Thus, S.R. Sakibaev [4] points out that a teacher should be ready to become a mentor for students and support them in their academic and personal development. Furthermore, investigating the specific features of the development of professional competences of future teachers, the researcher notes that a modern teacher also needs skills in working with information technologies, to be able to interact with multicultural students, and to apply their knowledge to develop students’ critical thinking and social responsibility.

Practice-oriented learning helps prepare students for real-life professional scenarios, develops their professional identity, and helps them gain professional confidence. However, according to G.A. Abayeva et al. [5], the process of integrating this approach entails challenges. Studying the specifics of the dual model of education, particularly the practical component of training, the authors highlight several problems universities face. These include issues related to technical resources and the availability of non-adaptive curricula and a lack of a knowledge assessment system within the framework of the practice-oriented approach. Additionally, teaching staff often adhere to conventional teaching methods, and students face difficulties in adapting to this approach, and there is a lack of partnerships with educational organizations. The totality of the above determines the significance of modernising the existing teaching strategies, based not only on the formation of students’ profile competences, but also on the development of their personal potential, motivation, and the need for self-improvement in professional activity.

The purpose of this study was to cover the specific features of integration of practice-oriented approach in higher education, namely for student teachers. The study of theoretical foundations on the research problem allowed putting forward a hypothesis: \( H_0 \) – The use of the case study method in the training of first-year students of pedagogical specialties promotes their interest in mastering professional competences.

Materials and Methods
The theoretical and methodological framework of this study included the definition of the specific features of practice-oriented learning in higher education, as well as the coverage of the specifics of its integration into the educational process in the training of pedagogical specialists. The implementation of this conceptual approach was based on the use of the method of cause-and-effect relationships in establishing the specific features of development of professional competences of future teachers within the framework of their practical tasks, as well as content analysis of the impact of the practice-oriented approach on professional training.

The study also employed the methods of generalisation, synthesis, and deduction, which helped to identify the features of dual training and highlight the key aspects of
the practice-oriented form of organising classes in higher education. This approach also made it possible to identify and systematise the principal determinants in the development of students’ professional knowledge and skills, and to provide a scientific and theoretical framework for the study. Furthermore, the use of comparative and praximetric methods contributed to the argumentation of the significance of the introduction of practice-oriented learning in the educational environment of the university. This includes the need to create special psychological and pedagogical conditions for students to master practical skills and their successful adaptation to future professional activities.

The empirical study was implemented at the University of Astana, Republic of Kazakhstan. First-year students of the speciality “Foreign language: two foreign languages” in the number of 37 people were invited to take part in the pedagogical experiment. The preparatory stage involved organisational work with the university administration and teaching staff. Furthermore, the content of the curriculum was transformed. Specifically, the pedagogical study involved one lecture session and two practical sessions per week. The study was conducted in the first semester of the 2020–2021 academic year over 15 weeks. The pedagogical experiment was based on the introduction of practice-oriented teaching methods into the curriculum of the discipline “Pedagogy”, namely, the case study method. The purpose of this course was to strengthen the practical-applied orientation of the process of teaching students the pedagogical disciplines and to contribute to the development of their psychological and pedagogical competence. The developed concept implied the introduction of the study of 9 cases based on real practice-oriented situations into the educational programme, which a pedagogical specialist faces in their professional activity.

The effectiveness of using the proposed concept was determined by assessing the students’ professional skills development through the use of the pre-test and post-test. The developed pre-test included 18 questions based on determining students’ attitudes towards their chosen speciality, namely, indifference, interest, developing curiosity, and functional interest in the teaching profession in general. After the testing, the respondents were divided into subgroups, where the experimental group included 18 students (EG-18) and the control group consisted of 19 students (CG-19). For EG-18 respondents, the sessions were conducted using the case study method, while for CG-19 subjects, the training was continued using conventional methods. Furthermore, a mid-term test at the end of each week of study was provided for students. The final test was administered using the post-test, which was designed along the lines of the pre-test. In addition, during the experiment, an on-going interview survey was provided for both groups to determine students’ satisfaction and interest in the programme of study.

Technical devices and multimedia programmes (tablet, computer) were used in the implementation of the experiment. Forms were developed for accompanying interviewing and pedagogical observation. The student’s t-test was used for independent samples to analyse the results of the experiment.

Results

The introduction of the practice-oriented approach in higher education is substantiated by a multitude of pedagogical, educational, and professional advantages. Specifically, this approach provides students with the opportunity to learn not only theoretical knowledge, but also to gain practical experience, which contributes to the effective development of their professional skills and competences. The determinants of implementing a practice-oriented approach in higher education are the professional development of students [6], their active involvement in the learning process [7], the development of critical thinking [8], increasing competitiveness among teaching specialists according to the labour market demands [9]. Additionally, it supports the development of specific skills (e.g., teamwork, problem solving) [10], the development of independence, responsibility, and initiative in professional matters [11], as well as the transformation of the learning process through effective perception and assimilation of large amounts of information [12]. Generally, the application of a practice-oriented approach promotes integrated learning for students and prepares them for successful and productive professional activities after graduation.

For the Republic of Kazakhstan, the integration of practice-oriented learning is a major step in improving the educational system and training future specialists. Therewith, the positive impact of the practice-oriented learning approach is reflected in the possibility to adapt the educational environment to the needs of modernity, namely, to establish partnerships with the business sector, where students will be able to gain real work experience while studying at the university. Furthermore, the integration of a practice-oriented approach into the learning process will allow future specialists to develop communication and teamwork skills.

In addition, this approach is designed to stimulate research activities of students and teachers, which contributes to the creation of innovations and development of scientific areas in the educational sphere. At the same time, it is important to solve problems concerning the development of innovative infrastructure to support practical training in the educational institution, the development of a system of evaluation and quality control to regulate the learning process, as well as the introduction of professional training of teachers for the quality adaptation of practice-oriented learning in higher education. All the above stipulates the need for a systematic and comprehensive approach to the integration of practice-oriented form of learning into the educational process of higher education.

The conducted theoretical research points to the necessity of creating an integrated approach to the development of a positive attitude towards practice-oriented learning on the part of both pedagogical specialists and students. Specifically, there is a need to develop an adaptive approach to curriculum transformation that can clearly demonstrate the relevance of introducing a practical-applied learning orientation. Furthermore, finding the best diagnostic tools for assessing students’ knowledge is also important.

The conducted pedagogical research with the modernised curriculum gave students an opportunity to
explore proposed cases and suggest possible solutions, as well as actively involved students into the educational process. The topics of the realised cases are presented in Table 1.

**Table 1. Plan of practical-applied orientation of training of future teachers**

<table>
<thead>
<tr>
<th>No.</th>
<th>Case descriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Case 1. General foundations of pedagogy as a science. Topic: “Exploring the educational environment”. Description: Students analyse an educational institution in terms of general principles of pedagogy. They should identify the features of the educational environment, its relevance to pedagogical theories, and suggest improvements.</td>
</tr>
<tr>
<td>2</td>
<td>Case 2. Didactics – the theory and practice of learning. Topic: “Designing a training course”. Description: Students design a course of study for a specific age group, considering the principles of didactics. They should offer teaching methods, assessment and adaptation to different learning styles.</td>
</tr>
<tr>
<td>3</td>
<td>Case 3. Education as a socio-cultural phenomenon and universal value. Topic: “Multiculturalism in education”. Description: Students explore diversity of cultures and their effect on educational processes. The objective is to propose strategies for integrating cultural aspects into curricula and educational activities.</td>
</tr>
<tr>
<td>4</td>
<td>Case 4. Education as a pedagogical process. Topic: “Individualisation of the educational process”. Description: Students develop a plan to individualise the educational process for a student with special needs, considering the principles of differentiation and inclusion.</td>
</tr>
<tr>
<td>5</td>
<td>Case 5. Forms, means of training, their application in practice. Topic: “Effective use of technology in learning”. Description: Students are given the task of designing a lesson using modern educational technologies, explaining their purpose and evaluating the effectiveness of their use.</td>
</tr>
<tr>
<td>6</td>
<td>Case 6. Theoretical and methodological foundations of education. Topic: “Models of educational programmes”. Description: Students research different models of educational programmes and argue why the choice of a particular model is appropriate for a particular group of learners.</td>
</tr>
<tr>
<td>7</td>
<td>Case 7. Family education and family pedagogy. Topic: “Family and school cooperation”. Description: Students consider the importance of family and educational institution interaction in the educational process. The objective is to offer practical ways to improve engagement.</td>
</tr>
<tr>
<td>8</td>
<td>Case 8. A general characterisation of the teaching profession. Topic: “Professional reflection”. Description: Students analyse their expectations for the future teaching profession, reflect on their strengths and areas for development, and develop a professional growth plan.</td>
</tr>
<tr>
<td>9</td>
<td>Case 9. Fundamentals of management of educational systems. Topic: “Managing change in an educational institution”. Description: Students consider a scenario of change in the structure of an educational institution and develop a strategy for managing change, considering the interests of all participants in the process.</td>
</tr>
</tbody>
</table>

**Source:** compiled by the authors of this study.

The implemented cases were based on students watching video clips. These cases focused on how to engage learners in the learning process and develop the ability to identify pedagogical challenges and find their solutions within the proposed case study. The cases also aimed to highlight the advantages and disadvantages of these methods in increasing learners’ engagement in language learning. In doing so, students were also required to propose their ideas for improving efficiency in solving the problem as a whole. Thus, each of the proposed cases had a concrete objective, situation, theoretical material, and evaluation criterion. Moreover, individual, paired, and group forms of work, as well as innovative teaching technologies such as discussions, problem-based learning, project technologies, and research-based learning were used in the learning process. This approach created a favourable atmosphere, increased students’ activity in the learning process and increased interest in their future profession.

Changing and improving the curriculum to strengthen the practice-oriented focus of education aims to solve a range of didactic tasks. These tasks include forming students’ understanding of the significance of using modern tools that contribute to successful professional activity. It also aims to actualize existing knowledge and skills, and seeks to define the role of a foreign language
teacher in modern society and develop students’ ability to plan, organize, and practically implement pedagogical activities. Furthermore, the use of the case method as a tool of practice-oriented learning approach promotes the development of analytical skills, critical thinking, the formation of productive interpersonal relationships, management skills, and technological literacy.

At the same time, with the contextualised nature of learning, case studies allow students to immerse themselves in real-life scenarios and problems that an educator may encounter in their professional life. The importance of the case method in the practice-oriented approach is also conditioned by the use of best teaching methods, where the student is given the opportunity to take an active part in the educational process, to take initiative, to develop skills of collective learning. The use of case studies in the training of future teachers supports the development of students’ professional orientation, contributes to their better understanding of their future professional role and responsibility. Besides, this approach is also a tool for monitoring and measuring the development of professional competences, which allows promptly respond to problems in the study of specific topics and adjust learning strategies.

The study of the effectiveness of the implementation of the case study method in the education of future teachers was based on the assessment of students’ knowledge before and after the modernisation of the curriculum. Thus, 37 students took part in the study. The formulated hypothesis suggested that the practice-oriented approach in the educational process has an impact on the effectiveness of students’ development of professional competences. The beginning of the pedagogical experiment was accompanied by preliminary testing (pre-test), which allowed determining the level of students’ interest in mastering professional skills. Specifically, it helped to identify the respondents’ tendency to show indifference in their chosen profession, their ostensible interest, occasional curiosity, developing inquisitiveness, as well as functional interest and professional need to master the basics of pedagogical activity.

Therewith, the obtained results of the pre-test indicated insignificant differences in students’ attitudes towards the future profession, and therefore, will not have a significant impact on the final result of the pedagogical experiment. The respondents were further divided into two subgroups where appropriate arrangements were organised for EG-18, particularly the use of case study, multimedia resources and digital tools in the learning process. CG-19 continued their training using conventional methods. The questionnaire for the final test (post-test) was constructed following the logic of the pre-test. The final testing of respondents helped to identify key categories of interest in students’ mastery of professional skills. After the post-test, it was found that the indicators of the formed attitude of students towards the future profession in EG significantly differ before and after training with practice-oriented focus/tasks. The obtained data of EG-18 respondents are clearly presented in Table 2.

### Table 2. Summary t-test for paired sample before and after implementation of case studies in the teaching process EG

<table>
<thead>
<tr>
<th>Category</th>
<th>Pre-test (n=18)</th>
<th>Post-test (n=18)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>Professional needs</td>
<td>8.83</td>
<td>1.29</td>
</tr>
<tr>
<td>Functional interest</td>
<td>8.83</td>
<td>1.82</td>
</tr>
<tr>
<td>Inquisitiveness</td>
<td>9</td>
<td>1.71</td>
</tr>
<tr>
<td>Interest</td>
<td>7.67</td>
<td>1.41</td>
</tr>
<tr>
<td>Curiosity</td>
<td>7.5</td>
<td>1.34</td>
</tr>
<tr>
<td>Indifferent attitude</td>
<td>5.94</td>
<td>1.11</td>
</tr>
</tbody>
</table>

**Note:** n – number of respondents in the group; M – mean value; SD – standard deviation.

**Source:** compiled by the authors of this study.

The findings of the study suggest that the mean score of EG-18 respondents increased in all categories after the pedagogical experiment. The exception was the scale of indifferent attitude towards mastering professional skills and the teaching profession in general. This indicator in EG respondents decreased almost twice. This shows that the advanced concept, particularly the introduction of the case study method in the programme of study of first-year students, contributes to the growth of interest in the students’ mastery of professional skills.

The conducted empirical study also indicates that the CG participants showed less interest in learning the discipline. The indicators of interest in mastering professional skills in EG and CG after the experiment are presented in Table 3.

### Table 3. Summary values in determining the interest of EG-18 and CG-19 students in mastering professional skills at post-testing

<table>
<thead>
<tr>
<th>Categories</th>
<th>EG-18</th>
<th>CG-19</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>Professional needs</td>
<td>11.44</td>
<td>1.92</td>
</tr>
<tr>
<td>Functional interest</td>
<td>12.11</td>
<td>1.99</td>
</tr>
<tr>
<td>Inquisitiveness</td>
<td>10.67</td>
<td>1.81</td>
</tr>
<tr>
<td>Interest</td>
<td>9.83</td>
<td>1.15</td>
</tr>
<tr>
<td>Curiosity</td>
<td>9.61</td>
<td>1.82</td>
</tr>
<tr>
<td>Indifferent attitude</td>
<td>3.17</td>
<td>0.38</td>
</tr>
</tbody>
</table>

**Source:** compiled by the authors of this study.

Thus, the conducted pedagogical experiment indicates that the case study method is effective in the training of future teachers. In addition, the testing data obtained before and after the introduction of practice-oriented teaching methods in the educational program of first-year students suggest significant findings. The use of this approach, where the student is an active participant in the educational process, contributes to increasing their level of interest in mastering their future profession. Furthermore, the use of the case method facilitates the acquisition of practical skills by the trainees. This approach stimulates students’ creative thinking when performing practical tasks.
The accompanying interviews with EG respondents indicate an increase in motivation to study psychological and pedagogical disciplines. Specifically, students noted that the cases presented in the course encouraged them to seek additional information to solve problems related to inclusive education and professional development of teacher educators. Furthermore, EG students noted that the learning format in the context of case study application was interesting to learn and much easier than the conventional approach. EG participants specified that they mastered quite a large amount of information quickly, as most of the sessions were structured in a group work format, where students could freely hold discussions, do joint research, solve modelled situations collectively, and use technological tools in team interaction. Notably, the implemented practical exercises in the educational institution allowed students to familiarise and smoothly adapt to the challenges and problems of professional activity. Specifically, students learnt to discuss possible options for resolving various pedagogical problems, to find a creative approach to solving them, and to take responsibility for the final result. Furthermore, teamwork showed the students the importance of communication skills in teaching.

Thus, the organised psychological and pedagogical conditions for the EG students during the period of passing the modernised training programme contributed to the formation of greater interest in mastering professional competences than the CG respondents. The results of EG final testing also indicate an increase in students’ profile knowledge and skills. Furthermore, the analysis of EG students’ learning activity results suggests the development of several key skills.

These include pedagogical skills, such as the ability to plan lesson activities, an awareness of the role of methodological training, and the application of methods for monitoring and assessing knowledge. Communication skills also improve, with students demonstrating the ability to interact in a team, perceive the needs of others, and find optimal tools for interpersonal communication. Organizational skills are enhanced, evidenced by the ability to manage a subgroup, effectively allocate roles, and plan students’ learning activities. Technological skills also develop, as students learn to use technology in the educational process to enhance learning. Additionally, students show increased motivation for self-education, habitually searching for information independently outside of class time. There is a greater understanding of the individuality of each participant in the educational process. Critical thinking skills are strengthened through the application of critical analysis in solving simulated problems, and students adhere to ethical aspects, following the ethics and rules of professional practice.

At the same time, interviewing with CG respondents indicated that students found it difficult to adapt to the large amount of information received in lectures. Furthermore, CG students also noted that some of the terminology that was used in the training was difficult to understand and learn. Therewith, as respondents noted, they were not motivated to seek additional information on their own.

The results of the conducted pedagogical experiment indicate the importance of using modern teaching approaches, namely, the application of practice-oriented methods in training future teachers. The key in this approach is the selection of the best learning strategy for solving educational tasks, such as a motivated and interested in professional development specialist who can meet modern challenges and requirements of society. Furthermore, the use of practice-oriented classes in higher education allows students to master professional skills when learning, facilitates the mastering of information on profile disciplines, and has a positive impact on the adaptation of students to practical activities and the development of their professional identity.

Thus, case study as a method of practice-oriented learning is an innovative educational approach, which is aimed at the development of students’ practical skills, application of knowledge in real situations and preparation of future specialists for successful professional activity. In addition, the practice-oriented focus of higher education is designed to promote students’ research activities in the process of their studies, as well as to motivate them to professional self-development and interest in mastering professional skills in general. Therewith, observing the principles of practice-oriented learning, combining methods and forms of classes, it is possible to provide quality and effective training of a modern specialist who can be flexible to innovations and adapt to the improving educational space. In addition, based on the conducted study, the purposeful formation of a strong connection between theoretical knowledge and practical skills of students contributes to the strengthening of their socio-psychological readiness to realise themselves in future professional activity.

**Discussion**

The practice-oriented approach to learning in the educational system is not merely a new technology for training modern specialists, but a holistic philosophy that aims to develop practical skills and apply knowledge in real-life situations. Based on the principles of interrelation of theory and practice, this approach contributes to the preparation of students for successful professional activity. In today’s society, the modernisation of the educational system is becoming relevant. Specifically, there is a growing need to train specialists who can adapt to the challenges of modernity. In this context, the development of effective curricula, the modernisation of teaching methodology in higher education, as well as access to real professional environments and interaction with organisations and enterprises are of strategic importance. This makes it necessary not only to consider the problems associated with the introduction of practice-oriented learning, but also to find ways to solve them, considering the increasing requirements to a pedagogical specialist.

From the analysed scientific papers by L.J. Trechsel et al. [13], H. Jensen and L.L. Rørbæk [14], M. Fernández-Raga et al. [15], A. Jakoet-Salie and K. Ramalobe [16], R.A. Ellis [17], it follows that the practice-oriented approach is a multidimensional process that involves the creation of certain educational conditions that promote the integration of theoretical knowledge and skills in the professional development of a specialist. Therewith, the development of personal qualities and professional competences create unity in the practical activity of a

1951
future specialist. Thus, the mutual influence of theoretical knowledge and practical skills in training students determines the development of fundamental knowledge, contributing to the formation of professional competence. Also, the organisation of practice-oriented learning allows creating conscious motivation for professional activity, as well as to increase the involvement of students in the learning activity.

The application of the practice-oriented approach in the educational process involves revision of the traditional functions of the teacher and the student. Thus, investigating the problem of training future teachers, D.N. Harris and T.R. Sass [18] point out that in the educational process with practice-oriented focus, the lecture activity of a teacher is transformed into step-by-step instruction. In this approach, the teacher performs the function of a class organiser, and students are given the opportunity to collectively find a solution to a problem situation. It ensures the development of students’ conscious understanding and attitude towards the future professional activity of a teacher.

Investigating the features of practice-oriented learning, P. João et al. [19], D. Schina et al. [20], L. Darling-Hammond [21] identify key stages that cover the process of students’ professional training. Thus, according to the researchers, the actualisation of existing knowledge and the acquisition of new experience in the classroom is designed to develop students’ conceptual understanding of their future professional role, promote professional self-determination, and develop professional orientation (skills, abilities). Therewith, the reproduction of learnt socio-professional relations helps students to develop a professional mentality, transforming the acquired knowledge and personal qualities into a tool for improving pedagogical skills and increasing creative potential. Analogous conclusions can be traced in the studies of G.A. Abayeva et al. [5], T. Pozo-Rico et al. [22], M. Takala et al. [23], S.E.A. Groothuijsen et al. [24], L. Zhao and W. Fan [25], where the researchers also point out that a clear algorithm should be followed when preparing for the implementation of practice-oriented learning in higher education. Investigating the implementation of this approach in the educational system, the researchers distinguish the following stages:

- determination of goals and objectives that students should achieve as a result of training (development of key competences of a future specialist);
- development of a training programme, including theoretical and practical orientation, as well as methods of control and evaluation of knowledge;
- the choice of practical forms of learning that promote the development of practical experience (active learning methods, laboratory work, projects);
- integration of theory into practice using evidence form solving real-life scenarios and problem tasks that are related to future professional activities;
- independent work and project activities that contribute to the development of initiative, responsibility, and creativity of students;
- feedback from the teacher and the organisation of mentoring to support, guide, and assess students’ emerging skills;
- knowledge control and reflection, which involves the use of formal methods of assessment (exams, testing) and informal methods (reflective reports, portfolios) to track progress in professional development and analyse acquired experience;
- integration with the professional community (active engagement) to enrich the training with real cases and industry expectations;
- optimisation of the educational programme and its adaptation to changes in the professional environment, considering feedback from the student community and pedagogical specialists.

The above stages of implementation of practice-oriented learning form a cyclical process that ensures constant modernisation of this approach and preparation of students for real challenges in their future professional life. The results of the empirical study conducted also correlate with these findings. Thus, strengthening the practice-oriented focus of training through the use of case studies implied the modernisation of the training programme for first-year students, which contributed to the development of their interest in mastering professional skills. Furthermore, a diagnostic toolkit was created based on students’ previously acquired attitudes towards the teaching profession.

However, preliminary testing showed low indicators of motivation and interest in mastering professional skills. Notably, the EG respondents had a considerably higher level of interest in mastering professional skills according to the results of the final testing, which indicates a successful choice of learning strategy, namely, the use of case studies as a key method of practice-oriented approach. This also specifies that solving real-life scenarios and pedagogical problems in training specialists is significant in the development of their professional competences and indicates the need for practical orientation in the educational process.

L. Zhang and Y. Ma [26] point out that the concept of project-based learning lies not only in the development of practical skills of students, but also in promoting the successful entry of a young specialist into labour activity. In this case, the authors highlight the main principles and provisions of the practical aspect of training, such as projects and case studies. These include the creation of conditions for the active involvement of students in the learning process through interactive methods. There is a focus on the development of profile skills and competencies, the use of real projects and scenarios for training, and an individualized approach that adapts the program to the level of training and learning objectives. Additionally, the aim is to provide a holistic educational experience, encompassing all aspects of the learning process, assessment, methodology, and content, while also developing professional skills and competencies.

These findings are also comparable with the conducted pedagogical study, where the modernised training programme for first-year students promoted the mastery of professional skills by EG students in the context of their practical and project activities, as well as increased their
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interest in learning the theoretical and practical foundations of the profession. When implementing the training programme, interactive teaching methods were used, namely, the use of case studies was a key approach. Furthermore, discussions, group work, role-playing games, and project activities of students were included in the learning process. Specifically, the students developed, presented, and conducted a lesson using a set of innovative teaching methods, and were able to analyse shortcomings and evaluate pedagogical approaches in the implementation of professional tasks of their colleagues.

Practice-oriented learning is of particular importance in the training of future teachers, as a pedagogical specialist should possess not only theoretical and practical skills, but also be ready for effective interaction with all participants of the educational process. U. Bergmark [27] notes that the effectiveness of professional training lies in the creation of the best psychological and pedagogical conditions for training. While researching the issues of professional teacher training, the researcher highlights the significance of organisational, communicative, informational, and developmental functions of training, where methods for the development of motivation and active cognitive activity will also be involved.

A. Kuzle [28] reached analogous conclusions. Investigating the problematic issues of practice-oriented learning, the researcher points out that the conceptual role of a specialist is based on their practical knowledge (content of pedagogical education and solving professional problems) and practical actions (immersion in practice-oriented activities), which contribute to mastering the social role and successful performance of professional functions in labour activity. This also correlates with the pedagogical experiment conducted. Thus, the EG respondents noted that the created psychological and pedagogical atmosphere and practical orientation of training contributed to the development of their communication skills, creativity, critical, and analytical thinking. Furthermore, students also highlighted the importance of highlighting issues of concern regarding inclusive education.

The endeavour to create competitive specialists who meet the requirements of modern society is becoming the principal task of higher education. Therewith, approaches to the implementation of practice-oriented learning in the Republic of Kazakhstan are based on the world concepts of development of students’ professional competences. Kazakhstan’s entry into the space of the Bologna system allows the country to adopt the practices of implementing modern approaches to learning, where the reduction of classroom load and increase of practical training also makes provision for the development of new learning strategies [29]. Furthermore, it becomes important to escalate the content of basic and profile disciplines, where interdisciplinary connections/interaction become the main components in the development of students’ practical skills.

The conducted pedagogical experiment also indicates that the use of case studies helps to increase the degree of students’ interest in mastering professional skills and competences; this method also promotes problem solving skills based on objective judgement. Thus, by solving various cases, students can gain psychological confidence and emotional resistance to various problem situations in future professional activity. Therewith, one of the main problems of increasing the practice-oriented focus of education in higher education is the insufficiency of academic hours allocated for the study of practice-oriented courses that develop professional and personal competences of students. The content of professional disciplines does not always meet the requirements of the modern labour market, and the lack of teaching materials and literature with real practice-oriented learning technologies hinders the integration of this approach into higher education [30].

The obtained results of the theoretical and empirical research testify the need to modernise the system of higher education of the country, namely, the creation of specialised pedagogical conditions for the development of the practical component of professional activity in students of pedagogical specialties during their professional training. The conducted pedagogical experiment also indicates the significance of using practice-oriented methods in the teaching process, as it makes it easier to master a large amount of information. The highlighted pedagogical approach contributed not only to increasing students’ interest in mastering profile skills, but also to students’ gaining practical experience in solving various pedagogical scenarios. It allowed them to develop their motivation for learning and to form awareness, responsibility, and positive attitude towards the chosen profession of a teacher.

Conclusions
Modern demands on the teaching profession create the need to transform conventional teaching strategies. The introduction of the practice-oriented approach in higher education implies modernisation of current training programmes, their adaptation to dynamic changes in the labour market, creation of an environment for active interaction with students, development of adaptive tools for quality control and assessment of learning outcomes. The formulated hypothesis at the beginning of the study was fully confirmed empirically. The conducted study determined that the implementation of case study method promotes students’ interest in learning as well as students’ deep learning.

Therewith, the findings of the empirical study suggest that the construction of students’ learning activities in the practice-oriented context (project activities, case studies, discussions) contributes to the development of their professional competences. These competences allow them to adapt to changing circumstances, effectively solve problems, establish communication, and interact optimally with the participants of the educational process. The analysed scientific approaches to the study of practice-oriented learning strategies indicate that the introduction of case studies in training future specialists stimulates the development of their professional skills and abilities. This is also confirmed by the obtained results of the pedagogical experiment, which suggest that a properly selected set of practice-oriented methods and forms of training affects the students’ interest in learning and the development of their professional skills.

Specifically, the analysis of the results of the final testing showed that the indicators of the categories that are
related to students’ interest in mastering profile knowledge and skills in the EG respondents are considerably higher than in the CG students, whose training was conducted within the framework of conventional methods of training specialists. Therewith, pre-testing did not reveal significant differences in the performance of the two groups, which suggests the significance of using the case study method in the learning process of first-year students. Furthermore, interviews with the EG respondents allowed determining that the modernised curriculum based on the case method helped to increase students’ interest in learning, their motivation for self-development, and creative approach in solving pedagogical problems.

A promising area for further research is to analyse the readiness of teachers to implement the practice-oriented approach of teaching in higher education institutions. In doing so, expanding the sample and identifying the difficulties faced by educators in implementing the case study method may help to establish similarities in future teacher training and textbook development based on the case study. The practical value of the research findings lies in the possibility to use the proposed concept to develop the interest of first-year students in mastering profile competences.

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Conflict of Interest
The authors have no conflict of interests to declare.

References
Introduction of practice-oriented learning in the training of future teachers


Впровадження практико-орієнтованого навчання у підготовку майбутніх учителів

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Анотація

Актуальність. Актуальність дослідження зумовлена модернізацією сучасної системи вищої освіти, зокрема, необхідністю застосування ефективних методів навчання для підготовки поліфункціональних педагогічних фахівців.

Мета. Метою даного дослідження був пошук оптимальних методів і прийомів підготовки майбутніх учителів у контексті формування у них інтересу до навчання та оволодіння практичними навичками в контексті сучасних вимог до педагога.

Методологія. Концептуальною основою теоретико-методологічного підходу до проблеми дослідження стало якісне поєднання методів контент-аналізу, синтезу та дедукції, а також методів експериментального навчання, спостереження та порівняльного аналізу.

Результати. Аналіз теоретичних засад теми дослідження показав, що практико-орієнтоване навчання ґрунтується на засадах, які акцентують увагу на практичному застосуванні знань, розвитку умінь і компетенцій, необхідних для успішної професійної діяльності фахівців. Проаналізовані сучасні наукові праці дозволили висвітлити актуальні проблеми впровадження практико-орієнтованого навчання у вищій освіті, що сприяло розробці та реалізації концепції підвищення інтересу майбутніх учителів до оволодіння професійними навичками у навчальному процесі. Проведений педагогічний експеримент виявив суттєві відмінності у використанні традиційних методів навчання та обраної стратегії в контексті розвитку професійних компетентностей студентів.

Висновки. Емпірично встановлено, що практико-орієнтовані форми організації заняття дозволяють створити умови для активної навчальної діяльності студентів, що також впливає на їх адаптацію до виконання професійних завдань та мотивацію до здійснення педагогічної діяльності в цілому. Цінність отриманих результатів дослідження полягає в розробленому підході до інтеграції методу кейс-стаді в навчальну програму, що дозволяє оптимізувати реалізацію практико-орієнтованого навчання студентів педагогічних спеціальностей.

Ключові слова: вища освіта; тематичне дослідження; педагогічна майстерність; професійні компетенції; мотивація; навчальна діяльність.