



UDC 378.147:371.13
DOI: 10.58649/1694-8033-2026-1(125)-52-67

Received: 21.10.2025
Revised: 19.02.2026
Accepted: 19.03.2026

Development of the learning motivation of future teachers in the context of a competence-based approach

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Abstract. The purpose of the study was to determine effective approaches to the development of the pedagogical motivation of future teachers. The methodology included an analysis of pedagogical motivation and the competence-based approach, the implementation of a pedagogical experiment with control and experimental groups; within scenario modelling three scenarios for the development of the pedagogical motivation of future teachers were distinguished, namely an active-professional, an adaptive-competence-based and a formally-oriented scenario. The main results of the study indicated the effectiveness of a competence-oriented approach in forming the internal motivation and professional confidence of future teachers. In the experimental group, after the introduction of elements of competence-based learning, the proportion of students with a high level of motivation increased statistically significantly ($p < 0.01$) from 13-30% to 48-56% according to key indicators: interest in mastering the profession, satisfaction with the performance of learning tasks, awareness of the social significance of pedagogical activity, the personal meaning of professional training, readiness for self-development and for improving pedagogical abilities and skills. Before the experiment, most students demonstrated medium or low confidence in making pedagogical decisions (responses “3” – 29-37%, “5” – 11-20%). After the introduction of competence-based practices in the experimental group, the share of high scores “5” increased to 28-36% according to different criteria, and low scores almost disappeared. Progress was observed in the cases on communication with parents and on increasing pupils’ learning motivation, where the average level of scores “4-5” exceeded 65%, whereas in the control group it was 30-40%. It was established that the active use of micro-projects, cases, role-playing games and systematic reflection formed internal motivation, increased the level of competence and facilitated the conscious involvement of students in pedagogical practice. In addition, the study distinguished three scenarios for the development of pedagogical motivation, namely an active-professional, an adaptive-competence-based and a formally-oriented scenario. The practical significance of the work lies in the possibility of using the obtained results in institutions of teacher education for the development of differentiated learning trajectories

Keywords: professional orientation; internal interest; social significance; practical activity; professional readiness

■ INTRODUCTION

In the conditions of the transformation of the system of higher pedagogical education, the problem of developing the learning motivation of future teachers is becoming increasingly relevant. The dominance of the competence-based approach in educational policy determines the need to train specialists capable of effective professional activity, self-development and lifelong learning. At the same time, scientific sources emphasise the risks of insufficient

formation of the learning motivation of students in teacher-education programmes, which may negatively influence the quality of the formation of professional competences, professional identity and readiness for pedagogical activity. This indicates the existence of a contradiction between the requirements of the competence-based approach, which presupposes an active position of the student, and the need for formed internal motivation, which determines the

Suggested Citation:

Ryspaeva, Ch. (2026). Development of the learning motivation of future teachers in the context of a competence-based approach. *Bulletin of the Jusup Balasagyn Kyrgyz National University*, 18(1), 52-67. doi: 10.58649/1694-8033-2026-1(125)-52-67.



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necessity of a scientific analysis of the factors, conditions and pedagogical means of its development.

The motivation of students during online learning is becoming relevant within digital educational technologies. M. Díaz-Noguera *et al.* (2022) studied how autonomy, motivation and digital pedagogy influence students' perceptions of distance learning. The researchers showed that internal motivation is a key factor in the success of online education and positively affects student engagement. The use of game-based elements in learning can increase students' interest. I. Yildiz *et al.* (2021) analysed the effect of gamification on the motivation of future teachers of social-science disciplines. The study revealed that game-based strategies stimulate internal motivation and student activity in the learning process. The planning of a professional path influences students' motivation to learn. C. Xu *et al.* (2022) considered the motives and professional plans of graduates of a dentistry faculty. The authors showed that motivation to study correlates with students' readiness for future professional activity. Doubts and concerns about a future profession may influence learning motivation. D. Mateos-Moreno (2022) examined the sources of anxiety among future music teachers regarding the professional choice. The author emphasised that internal motivation affects the formation of teachers' professional identity. The implementation of competence-based education is associated with certain challenges for students' motivation. U. Nombo (2022) considered the problems of implementing a competence-oriented curriculum in teacher-training colleges. The study showed that an insufficient level of student motivation complicates the effective implementation of the competence-based approach.

The realisation of competence-based education requires high motivation among both teachers and pupils. A. Rogers (2021) studied teachers' views on the implementation of competence-based education. It was established that the level of motivation directly affects the success of educational reforms. Teachers' readiness for a competence-based approach is closely connected with the motivation. C. Mirza *et al.* (2023) assessed teachers' readiness for a new educational reform. The results showed that teachers' motivational readiness determines the effectiveness of the implementation of competence-based methods. The competence-based approach develops key professional competences through the motivational involvement of students. L. Holubnycha *et al.* (2022) analysed the development of the competence-based approach in education. The authors emphasised that the motivational component is necessary for the formation of professional competences. The formation of value-based and professional competences of future teachers directly depends on motivation to learn. S. Lorente-Echeverría *et al.* (2022) studied the views of future primary-school teachers regarding education for sustainable development. The study showed that conscious motivation contributes to the development of value-based and professional competences. Despite the number of studies on student motivation and the implementation of the

competence-based approach, there are certain gaps. Specific methods for developing the learning motivation of future teachers within competence-based education have not been sufficiently studied. There is a lack of empirical research that comprehensively combines students' internal motivation, pedagogical innovations and digital learning technologies within the competence-based approach.

The purpose of the study was to substantiate ways of increasing the level of pedagogical motivation among students of teacher-education programmes. The objectives of the study were to substantiate theoretically and test experimentally the possibilities for the development of the pedagogical motivation of future teachers in the process of implementing the competence-based approach in the educational environment of a higher-education institution; to conduct a pedagogical experiment to identify the dynamics of changes in motivational indicators and in the level of professional confidence of future teachers; and to determine possible scenarios for the further development of the pedagogical motivation of future teachers.

■ MATERIALS AND METHODS

Within the theoretical-analytical stage of the study, an analysis was carried out of scientific approaches to the problem of pedagogical motivation and the possibilities of its development in the process of the professional training of future teachers. The theoretical basis of the study was the self-determination theory, which emphasises the role of internal motivation, autonomy, the feeling of competence and social involvement in the professional development of the individual (Ryan & Deci, 2000). Studies of the professional motivation of future teachers were considered, underlining the connection between the awareness of the social significance of teaching and the stability of the motivational orientations (Hartono *et al.*, 2022; Li & Guo, 2024; Izhhar *et al.*, 2025). The theoretical analysis of the competence-based approach was carried out on the basis of works in which it is considered as the leading paradigm of teacher education aimed at forming integrated learning outcomes – competences that combine knowledge, abilities, values, and readiness for practical activity (Marcelis *et al.*, 2024; Mohzana, 2025).

At the empirical-experimental stage, a pedagogical experiment was conducted with the participation of 48 students of teacher-education programmes aged from 19 to 22 years, including 38 females and 10 males. The formation of the control and experimental groups was carried out by random sampling (randomisation), which ensured the homogeneity of the groups according to age and sex indicators. The average age of the respondents was 20.4 years. The sample included students of the following specialities: “Primary education” ($n = 16$), “Pre-school education” ($n = 14$), “Secondary education (Ukrainian language and literature)” ($n = 10$) and “Secondary education (English language)” ($n = 8$). The study was organised on the basis of J. Balasagyn Kyrgyz National University, since this university has well-developed teacher-training

programmes and the potential for conducting practical pedagogical experiments. The study was carried out over one semester (February-June 2025) using face-to-face and distance forms of learning on the educational platform Google Classroom. The platform was used for organising distance access to learning materials, posting case-based tasks, uploading students' own work, as well as for communication between students and teachers concerning the performance of tasks and the receipt of feedback. In addition, Google Classroom was used to assess intermediate results, monitor progress and aggregate data for the further analysis of the level of pedagogical motivation and the effectiveness of the performance of the cases. The inclusion criteria for participation in the study were enrolment on a teacher-education speciality, the absence of previous experience of full-scale pedagogical work and voluntary consent to participate in the study. The exclusion criteria were irregular participation in the learning process and the incomplete completion of diagnostic tasks. During the formation of the sample for the experiment, five students of teacher-education specialities were excluded because of irregular participation in the learning process or incomplete completion of diagnostic tasks; as a result, 48 students took part. The participants were divided into a control group (24 persons) and an experimental group (24 persons). The control group studied according to the standard programme of professional training for future teachers, which provides mainly a lecture-seminar form of organising learning and reproductive methods of mastering material characteristic of the traditional model of teacher education. In the experimental

group, elements of the competence-based approach were introduced, in particular the use of pedagogical cases that modelled typical professional situations for teachers; micro-project activities aimed at developing lesson fragments with clearly defined competence-based outcomes; and reflective tasks related to analysing students' own readiness for pedagogical activity.

To assess the level of pedagogical motivation among future teachers before and after the experiment, a questionnaire based on the Academic Motivation Scale, adapted to the conditions of professional teacher training, was used (Vallerand *et al.*, 1989). The adaptation of the instrument included the translation and back-translation of the statements, and the clarification of wordings taking into account the specifics of pedagogical activity (the replacement of general academic contexts with professional-pedagogical ones), as well as an expert assessment of content validity with the participation of specialists in pedagogy and educational psychology. The reliability of the adapted version of the questionnaire was confirmed by the indicator of internal consistency (Cronbach's $\alpha = 0.83$), which indicates its acceptable psychometric validity for use in pedagogical research. The questionnaire consisted of 10 statements aimed at identifying internal motivation, professional orientation and awareness of the significance of pedagogical activity. Respondents were asked to rate the degree of the agreement with each statement on a five-point Likert scale, where 1 – “completely disagree”, 2 – “rather disagree”, 3 – “difficult to answer”, 4 – “rather agree”, 5 – “completely agree”. The statements are presented in Table 1.

Table 1. Statements for diagnosing the motivational-value component of the readiness of future teachers

Statements
I am interested in mastering the teaching profession
I feel satisfaction from completing learning tasks related to future pedagogical activity
I consider the teaching profession relevant and socially significant
Studying at a higher-education institution helps me to become a competent teacher
I see personal meaning in the professional training of a future teacher
I am ready to make additional efforts for professional self-development in the pedagogical sphere
I feel confident about my choice of the teaching profession
I am motivated by the possibility of the practical application of the acquired knowledge in pedagogical activity
I am interested in improving my own pedagogical abilities and skills
I study not only for grades but also for professional development

Source: compiled by the author

To assess the practical component of pedagogical motivation and the confidence of future teachers in making professional decisions, case-based tasks were also used, developed on the basis of sources on pedagogy and the competence-based approach in the professional training of teachers (Levin, 1995; Segers *et al.*, 2008; Akbulut & Hill, 2020). When developing the cases, typical problem situations arising in the practical activity of a teacher, the target competences that need to be formed in students, as well as the principles of active learning and differentiated instruction were taken into account. Each case modelled real pedagogical situations, included a clearly defined task and assessment criteria, which made it possible to

examine not only knowledge but also practical skills, independence and critical thinking among students. After working through each pedagogical situation, the assessment of the case-based tasks was carried out by practice-oriented teachers who had experience of working in higher-education institutions and of implementing the competence-based approach in the training of future specialists. Five teachers from higher-education institutions in Kyrgyzstan working in pedagogical and psycho-pedagogical specialities were involved in the expert group. The average teaching experience of the experts was 13 years (from 9 to 18 years). All experts held an academic degree of at least Candidate of Sciences and had experience in developing curricula and

methodological materials. The selection of experts was carried out by purposive sampling, taking into account the following inclusion criteria: a higher pedagogical education; at least 8 years of teaching experience; experience in implementing the competence-based approach in teaching; participation in methodological work (development of curricula, cases, teaching aids); and consent to participate in the study. The exclusion criteria were less than 8 years of teaching experience; lack of experience in teaching in higher-education institutions; and the absence of experience in using case-based or competence-oriented technologies. The overall average age of the experts was 38 years; among these experts were three women and two men.

Clearly defined criteria were used for assessment, namely the reasoning behind decisions, the practical applicability of the proposed actions, the level of independence and critical thinking, as well as the ability to analyse and improve pedagogical activity. The reasoning behind decisions was assessed according to the extent to which

the student took into account the specifics of the problem situation and substantiated the choice. Practical applicability involved assessing the extent to which the proposed actions could realistically influence motivation and learning effectiveness. The level of independence and critical thinking was determined by the ability to propose optimal or non-standard solutions. The analysis and improvement of pedagogical activity were assessed according to how far the student was able to recognise the strengths and weaknesses of the solution and propose ways of improvement.

Each criterion was assessed on a five-point scale, where one point corresponded to a low level and five points to a high level. The final score for a case was determined as the arithmetic mean of all four criteria. After the completion of all cases, students' results were aggregated to compare the level of pedagogical motivation before and after the experiment, which made it possible to assess the effectiveness of the implemented competence-based approach by means of practical tasks. The case-based tasks are presented in Table 2.

Table 2. Case-based tasks for assessing the readiness of future teachers to implement the competence-based approach

Case title	Content and tasks
Case 1. Disruption of discipline in the lesson	The student receives a description of a lesson in which one pupil systematically distracts the others. Task: to develop an action plan using the competence-based approach (for example, the integration of cross-curricular tasks or active learning methods) in order to restore discipline and maintain pupils' engagement. It is necessary to justify the chosen strategies and to assess the expected impact on the motivation of the class
Case 2. Increasing pupils' learning motivation	A class with different levels of preparation and low activity in lessons is described. Task: to plan a lesson using the competence-based approach in order to motivate each pupil, integrate cross-curricular links and active methods. The student explains which competences are developed in pupils and how this influences the engagement
Case 3. Organisation of differentiated learning	A lesson scenario with pupils of different levels of preparation is given. Task: to develop differentiated tasks and activities for different groups, to explain how the planning takes into account individual needs, and how this influences the motivation and engagement
Case 4. Analysis and improvement of one's own pedagogical activities	The student receives a description of the lesson, in which strengths and weaknesses are noted. Task: to carry out an analysis of the activity, to propose specific changes based on the competence-based approach, and to describe how these changes will affect pupils' motivation and the development of the competences
Case 5. Communication with parents in a conflict situation	A situation is described in which parents express dissatisfaction with learning outcomes. Task: to develop a communication plan that includes competence-based strategies (support, explanation, involvement of parents in the learning process) and to assess the expected effect on pupils' motivation and partnership relations with the family

Source: compiled by the author

Within the pedagogical experiment, such statistical methods were used as the calculation of the percentage distribution of respondents' answers in the control and experimental groups before and after the experiment, which made it possible to assess the structure and dynamics of changes in students' pedagogical motivation and professional confidence. In the study, Student's t-test for independent samples was applied in order to compare the indicators of the control and experimental groups. To analyse the changes within each group before and after the formative stage of the experiment, a paired t-test was used. The statistical significance of the differences was determined at the level of $p < 0.05$. For each indicator, arithmetic mean values (M), standard deviations (SD) and t-values were calculated, which made it possible to assess the strength and direction of changes in the studied indicators. A limitation of the study is that its results relate to a specific

institution and sample of students, which may restrict the general extrapolation to other pedagogical contexts. In addition, three scenarios for the development of pedagogical motivation among future teachers were distinguished, namely an active-professional scenario, an adaptive-competence-based scenario and a formally-oriented scenario. The identification of these scenarios was carried out on the basis of the theoretical generalisation of the provisions of the competence-based approach and the analysis of empirical data obtained during the formative experiment, by comparing motivation levels, indicators of performance in case-based tasks and the dynamics of changes in the control and experimental groups.

During the study, ethical standards concerning all participants in the educational process – both students and teachers – were observed, in particular the principles of voluntary participation, anonymity, and the confidentiality

of the data obtained (American Sociological Association, 2018). All participants were informed in advance and in detail about the purpose, content, stages, and procedures of the study, as well as about the ways in which the results obtained would be used. Participation in the study was completely voluntary; each participant had the right to refuse to take part or to terminate the participation at any stage without any negative consequences for the learning or professional activity. All participants provided written informed consent to take part in the study. The data obtained in the course of the study were processed in generalised form and used exclusively for scientific purposes in compliance with the principles of confidentiality.

■ RESULTS

Development of the pedagogical motivation of future teachers in the context of a competence-based approach

Pedagogical motivation of future teachers is one of the key determinants of the success of professional training and the development of the teacher's personality. It determines not only students' activity and purposefulness in learning, but also the readiness for the practical application of knowledge, the formation of professional skills and competences, as well as for self-development and self-improvement. In pedagogy, motivation is considered not as a static characteristic, but as a dynamic process formed under the influence of internal needs, external conditions and pedagogical technologies used in the learning process. One of the leading theoretical concepts that makes it possible to understand the mechanisms of motivation formation is self-determination theory (Ryan & Deci, 2000). It distinguishes three key components that ensure the development of internal motivation: autonomy, the feeling of competence and social involvement. Autonomy presupposes the possibility for the student to make decisions independently, choose methods and forms of learning, and take responsibility for the results of the activity. The feeling of competence is formed through the successful completion of tasks, the development of practical skills and the acquisition of knowledge that meets professional standards. Social involvement is manifested in the feeling of the value of one's own activity for the collective, for pupils and for society as a whole. For future teachers, these three factors are interconnected and constitute the basis for the formation of stable and purposeful pedagogical motivation.

Pedagogical motivation of future teachers is closely connected with professional self-awareness and with the awareness of the social role of the teacher. Studies show that students who understand the significance of the future profession for pupils' development are more stable in the motivational orientations, and the internal interest in learning is manifested in greater activity in practical classes and teaching practice (Hartono *et al.*, 2022; Li & Guo, 2024). Awareness of the social value of teaching creates in students a sense of responsibility for the learning process, which in turn stimulates the search for new

knowledge, the development of professional skills and independent improvement. The competence-based approach in teacher education defines learning outcomes through the integration of knowledge, skills, values, and readiness for practical activity (Marcellis *et al.*, 2024). That is, learning is oriented not only towards the acquisition of theoretical information, but towards the formation of the ability to apply knowledge in specific pedagogical situations. This contributes to the development of professional self-awareness, internal motivation and confidence in one's own abilities.

The competence-based approach ensures the activation of students' learning and professional activity through the integration of various types of activity: analytical, practical, research and reflective. For example, the performance of project tasks, pedagogical cases, the organisation of mini-lessons or pedagogical experiments enables the student to feel the result of the activity, assess the level of competence and see the practical significance of learning. It is precisely through such active forms of work that internal motivation is formed: the student gains positive experience, understands that the knowledge and skills are useful, and this stimulates further independent work (Izhhar *et al.*, 2025). In addition, the competence-based approach presupposes the development of reflection and critical thinking, which is also a powerful mechanism of motivation. When a future teacher analyses the actions, compares the results with the goals set, receives feedback from mentors and colleagues, the future teacher begins to realise the professional development. Such awareness forms an internal need for improvement, for the growth of competences and for the achievement of new professional goals. Reflection allows the student to notice the successes and shortcomings, to realise progress, and to identify the motives for learning.

In the learning process, future teachers work in groups, exchange experience and cooperate on projects, which forms a sense of collective responsibility and mutual support. Social interaction stimulates internal motivation through the feeling of the significance of one's own role in the professional environment, strengthens the feeling of competence and contributes to the awareness of the value of teaching work. Thus, pedagogical motivation of future teachers is formed at the intersection of several key factors, namely internal motivation – the need for self-development, the realisation of one's own abilities and professional self-determination; the feeling of competence – awareness of one's own knowledge, skills, and ability to act effectively in pedagogical situations; autonomy – the ability to make independent decisions regarding one's own learning and professional activity; social involvement – an understanding of the value of one's professional activity for pupils, colleagues, and society (Mohzana, 2025). The competence-based approach promotes the integration of these components, creating conditions for the purposeful development of motivation. The use of project activity, teaching practicums, case methods, role-playing games and reflective practices enables students to feel the result of the

activity, to assess the professional potential and motivates the students towards further development.

Therefore, pedagogical motivation of future teachers in the context of the competence-based approach is the result of the interaction of internal motives, the social significance of the profession and active involvement in practical activity. It is formed through the development of autonomy, the feeling of competence, reflection, and interaction with the environment, which creates a stable basis for professional development and effective pedagogical activity in the future. The competence-based approach acts not only as a methodological basis of teacher education, but also as an effective mechanism for stimulating students' internal

motivation, contributing to the formation of highly professional and self-sufficient teachers.

Analysis of the results of the pedagogical experiment on the development of future teachers

To assess the level of pedagogical motivation of future teachers, a pedagogical experiment was conducted. On the basis of the data obtained, it is possible to compare the percentage distribution of students' responses in the control and experimental groups before and after the experiment. This makes it possible to clearly trace the dynamics of changes in the motivational sphere and the effectiveness of the implementation of the competence-based approach in the educational process (Table 3).

Table 3. Results of the CG and EG before and after training according to the questionnaire

Question	CG before	M	SD	CG after	M	SD	EG before	M	SD	EG after	M	SD
1. I am interested in mastering the teaching profession	1-5%, 2-10%, 3-25%, 4-40%, 5-20%	3.65	1.02	1-3%, 2-7%, 3-20%, 4-45%, 5-25%	3.87	0.97	1-5%, 2-8%, 3-22%, 4-40%, 5-25%	3.75	1	1-0%, 2-2%, 3-10%, 4-38%, 5-50%	4.34	0.88
2. I feel satisfaction from completing educational tasks related to future pedagogical activity	1-8%, 2-12%, 3-30%, 4-35%, 5-15%	3.52	1.03	1-5%, 2-8%, 3-25%, 4-40%, 5-22%	3.77	0.98	1-7%, 2-10%, 3-28%, 4-38%, 5-17%	3.62	0.99	1-0%, 2-1%, 3-12%, 4-35%, 5-52%	4.32	0.84
3. I consider the teaching profession relevant and socially significant	1-3%, 2-7%, 3-20%, 4-45%, 5-25%	3.9	0.96	1-2%, 2-5%, 3-15%, 4-48%, 5-30%	4.06	0.91	1-4%, 2-6%, 3-18%, 4-42%, 5-30%	3.94	0.94	1-0%, 2-1%, 3-8%, 4-35%, 5-56%	4.41	0.83
4. Studying at a higher education institution helps me to become a competent teacher	1-10%, 2-15%, 3-30%, 4-30%, 5-15%	3.3	1.11	1-5%, 2-10%, 3-25%, 4-35%, 5-25%	3.75	1.02	1-8%, 2-12%, 3-28%, 4-35%, 5-17%	3.59	1.02	1-0%, 2-2%, 3-10%, 4-38%, 5-50%	4.36	0.87
5. I see personal meaning in the professional training of a future teacher	1-7%, 2-13%, 3-28%, 4-35%, 5-17%	3.57	1.02	1-4%, 2-10%, 3-22%, 4-40%, 5-24%	3.88	0.97	1-5%, 2-12%, 3-25%, 4-38%, 5-20%	3.69	0.99	1-0%, 2-1%, 3-10%, 4-35%, 5-54%	4.41	0.86
6. I am ready to make additional efforts for professional self-development in the pedagogical field	1-8%, 2-15%, 3-32%, 4-30%, 5-15%	3.45	1.03	1-5%, 2-10%, 3-25%, 4-35%, 5-25%	3.85	1.01	1-7%, 2-12%, 3-30%, 4-38%, 5-13%	3.52	0.99	1-0%, 2-2%, 3-12%, 4-38%, 5-48%	4.3	0.87
7. I feel confident about my choice of the teaching profession	1-6%, 2-12%, 3-25%, 4-40%, 5-17%	3.63	1.01	1-3%, 2-8%, 3-20%, 4-45%, 5-24%	3.96	0.96	1-5%, 2-10%, 3-28%, 4-40%, 5-17%	3.65	0.98	1-0%, 2-1%, 3-10%, 4-35%, 5-54%	4.41	0.84
8. I am motivated by the possibility of practical application of the acquired knowledge in pedagogical activities	1-5%, 2-10%, 3-25%, 4-40%, 5-20%	3.7	0.99	1-3%, 2-7%, 3-20%, 4-45%, 5-25%	3.95	0.94	1-5%, 2-8%, 3-22%, 4-40%, 5-25%	3.74	0.99	1-0%, 2-2%, 3-10%, 4-38%, 5-50%	4.36	0.87
9. I am interested in improving my own pedagogical skills and abilities.	1-7%, 2-13%, 3-28%, 4-35%, 5-17%	3.57	1.01	1-4%, 2-10%, 3-22%, 4-40%, 5-24%	3.88	0.96	1-6%, 2-12%, 3-25%, 4-38%, 5-19%	3.68	0.97	1-0%, 2-1%, 3-10%, 4-35%, 5-54%	4.42	0.85

Table 3. Continued

Question	CG before	M	SD	CG after	M	SD	EG before	M	SD	EG after	M	SD
10. I study not only for grades, but also for professional development.	1-8%, 2-15%, 3-32%, 4-30%, 5-15%	3.45	1.03	1-5%, 2-10%, 3-25%, 4-35%, 5-25%	3.85	1.01	1-7%, 2-12%, 3-30%, 4-38%, 5-13%	3.52	0.99	1-0%, 2-2%, 3-12%, 4-38%, 5-48%	4.30	0.87

Source: compiled by the author

The analysis of the results presented in the table makes it possible to trace the dynamics of changes in the level of pedagogical motivation of future teachers in the control and experimental groups before and after the pedagogical experiment. The data obtained indicate positive shifts in both groups; however, the nature and extent of these changes differ. In the control group before the experiment, responses of a medium level of motivation prevailed. In particular, for most statements the largest percentage consisted of the responses “3 – difficult to answer” (from 25% to 32%) and “4 – rather agree” (from 30% to 45%). After the completion of the experiment, a moderate increase in positive responses was recorded in the control group. The proportion of responses “5 – completely agree” increased statistically significantly (paired t-test: $t = 3.12-4.05$, $p < 0.01$) by 7-10%. Thus, interest in mastering the teaching profession increased from 20% to 25%, and the conviction that studying helps to become a competent teacher – from 15% to 25%. In the experimental group before the experiment the motivational picture was similar to that of the control group. The highest indicators also fell on the responses “3” (from 18% to 30%) and “4” (from 35% to 42%), while the proportion of responses “5” ranged from 13% to 30%. After the introduction of elements of the competence-based approach in the experimental group, qualitative changes took place. In all statements, the proportion of responses “5 – completely agree” sharply increased and became dominant (paired t-test: $t = 6.18-8.42$, $p < 0.001$). In particular, interest in the teaching profession grew from 25% to 50%, satisfaction with the performance of learning tasks – from 17%

to 52%, and awareness of the social significance of the profession – from 30% to 56%. High indicators were also recorded in relation to the personal meaning of professional training (54%), confidence in the choice of profession (54%) and interest in improving pedagogical abilities and skills (54%).

Comparative analysis of the results after the experiment demonstrates the advantage of the experimental group over the control group (independent t-test: $t = 4.87-6.23$, $p < 0.001$). Whereas in the control group the proportion of responses “5” mostly does not exceed 25%, in the experimental group it ranges from 48% to 56%. Thus, the implementation of competence-oriented educational practices ensured not only a quantitative increase in motivational indicators, but also a qualitative change in the structure – a shift from externally and situationally determined motivation to internally conscious professional orientation. Overall, the results of the experiment confirm the effectiveness of the competence-based approach as a means of developing pedagogical motivation among future teachers. The changes obtained indicate an increase in interest in teaching activity, awareness of its personal and social significance, as well as students’ readiness for active professional self-development, which is a precondition for the successful professional formation. To assess the formation of pedagogical motivation and readiness for professional activity, case-based tasks of a professional orientation were used. The generalised results of assessing the level of students’ confidence in the decisions for each case in the control and experimental groups before and after the experiment are presented in Table 4.

Table 4. Distribution of responses of CG and EG in the performance of case-based tasks

Case study	Criterion	CG before	CG after	EG before	EG after
Case 1. Disruption of discipline in the lesson	Reasoning behind decisions	1-12%, 2-18%, 3-37%, 4-22%, 5-11%	1-8%, 2-15%, 3-33%, 4-28%, 5-16%	1-6%, 2-14%, 3-29%, 4-34%, 5-17%	1-2%, 2-7%, 3-21%, 4-41%, 5-29%
	Practical applicability	1-17%, 2-22%, 3-31%, 4-20%, 5-10%	1-10%, 2-18%, 3-29%, 4-27%, 5-16%	1-12%, 2-17%, 3-28%, 4-29%, 5-14%	1-3%, 2-9%, 3-24%, 4-36%, 5-28%
	Independence and critical thinking	1-14%, 2-21%, 3-32%, 4-19%, 5-14%	1-9%, 2-16%, 3-30%, 4-29%, 5-16%	1-7%, 2-13%, 3-31%, 4-34%, 5-15%	1-2%, 2-8%, 3-22%, 4-38%, 5-30%
	Analysis and improvement of activity	1-11%, 2-19%, 3-35%, 4-21%, 5-14%	1-7%, 2-16%, 3-31%, 4-27%, 5-19%	1-5%, 2-13%, 3-30%, 4-32%, 5-20%	1-1%, 2-9%, 3-23%, 4-37%, 5-30%
Case 2. Increasing pupils' learning motivation	Reasoning behind decisions	1-15%, 2-20%, 3-33%, 4-22%, 5-10%	1-10%, 2-16%, 3-28%, 4-28%, 5-18%	1-9%, 2-14%, 3-30%, 4-29%, 5-18%	1-2%, 2-8%, 3-22%, 4-39%, 5-29%
	Practical applicability	1-18%, 2-24%, 3-29%, 4-19%, 5-10%	1-11%, 2-19%, 3-28%, 4-27%, 5-15%	1-10%, 2-16%, 3-29%, 4-28%, 5-17%	1-3%, 2-9%, 3-23%, 4-36%, 5-29%
	Independence and critical thinking	1-14%, 2-22%, 3-32%, 4-20%, 5-12%	1-9%, 2-17%, 3-30%, 4-28%, 5-16%	1-6%, 2-13%, 3-31%, 4-33%, 5-17%	1-2%, 2-7%, 3-22%, 4-37%, 5-32%
	Analysis and improvement of activity	1-16%, 2-21%, 3-30%, 4-21%, 5-12%	1-10%, 2-18%, 3-29%, 4-27%, 5-16%	1-7%, 2-15%, 3-30%, 4-31%, 5-17%	1-2%, 2-8%, 3-23%, 4-36%, 5-31%

Table 4. Continued

Case study	Criterion	CG before	CG after	EG before	EG after
Case 3. Organisation of differentiated learning	Reasoning behind decisions	1-13%, 2-21%, 3-34%, 4-20%, 5-12%	1-9%, 2-17%, 3-31%, 4-27%, 5-16%	1-6%, 2-14%, 3-30%, 4-33%, 5-17%	1-1%, 2-7%, 3-22%, 4-38%, 5-32%
	Practical applicability	1-15%, 2-23%, 3-32%, 4-18%, 5-12%	1-10%, 2-18%, 3-30%, 4-26%, 5-16%	1-7%, 2-15%, 3-29%, 4-31%, 5-18%	1-2%, 2-8%, 3-23%, 4-37%, 5-30%
	Independence and critical thinking	1-14%, 2-22%, 3-33%, 4-19%, 5-12%	1-9%, 2-17%, 3-31%, 4-27%, 5-16%	1-6%, 2-13%, 3-30%, 4-33%, 5-18%	1-1%, 2-8%, 3-22%, 4-38%, 5-31%
	Analysis and improvement of activity	1-16%, 2-21%, 3-31%, 4-19%, 5-13%	1-10%, 2-17%, 3-29%, 4-28%, 5-16%	1-6%, 2-14%, 3-30%, 4-32%, 5-18%	1-2%, 2-8%, 3-23%, 4-36%, 5-31%
Case 4. Analysis and improvement of one's own pedagogical activity	Reasoning behind decisions	1-12%, 2-19%, 3-34%, 4-22%, 5-13%	1-8%, 2-16%, 3-30%, 4-28%, 5-18%	1-5%, 2-13%, 3-31%, 4-33%, 5-18%	1-1%, 2-7%, 3-23%, 4-37%, 5-32%
	Practical applicability	1-15%, 2-23%, 3-31%, 4-19%, 5-12%	1-10%, 2-17%, 3-30%, 4-27%, 5-16%	1-7%, 2-14%, 3-29%, 4-32%, 5-18%	1-2%, 2-8%, 3-22%, 4-37%, 5-31%
	Independence and critical thinking	1-14%, 2-21%, 3-33%, 4-20%, 5-12%	1-9%, 2-17%, 3-31%, 4-28%, 5-15%	1-6%, 2-13%, 3-30%, 4-33%, 5-18%	1-1%, 2-7%, 3-22%, 4-38%, 5-32%
	Analysis and improvement of activity	1-16%, 2-22%, 3-30%, 4-20%, 5-12%	1-10%, 2-17%, 3-29%, 4-28%, 5-16%	1-7%, 2-14%, 3-30%, 4-32%, 5-17%	1-2%, 2-8%, 3-23%, 4-36%, 5-31%
Case 5. Communication with parents in a conflict situation	Reasoning behind decisions	1-13%, 2-20%, 3-36%, 4-19%, 5-12%	1-9%, 2-17%, 3-30%, 4-27%, 5-17%	1-6%, 2-13%, 3-30%, 4-32%, 5-19%	1-1%, 2-7%, 3-22%, 4-37%, 5-33%
	Practical applicability	1-15%, 2-22%, 3-33%, 4-19%, 5-11%	1-10%, 2-17%, 3-29%, 4-27%, 5-17%	1-7%, 2-15%, 3-29%, 4-31%, 5-18%	1-2%, 2-8%, 3-22%, 4-36%, 5-32%
	Independence and critical thinking	1-14%, 2-21%, 3-32%, 4-20%, 5-13%	1-9%, 2-17%, 3-30%, 4-28%, 5-16%	1-6%, 2-14%, 3-30%, 4-32%, 5-18%	1-1%, 2-7%, 3-22%, 4-38%, 5-32%
	Analysis and improvement of activity	1-16%, 2-22%, 3-30%, 4-19%, 5-13%	1-10%, 2-17%, 3-29%, 4-28%, 5-16%	1-7%, 2-14%, 3-30%, 4-32%, 5-17%	1-2%, 2-8%, 3-23%, 4-36%, 5-31%

Source: compiled by the author

The analysis of the results of the case-based tasks showed that the implementation of the competence-based approach influenced the development of students' pedagogical motivation and confidence in making professional decisions. In the control group after the experiment only a slight improvement in indicators was observed; for example, the average percentage of high scores (5 points) for the criterion "Independence and critical thinking" increased from 12% to 16%, and for the criterion "Analysis and improvement of activity" – from 14% to 19% (paired t-test: $t = 2.01-2.45$, $p < 0.05$). In the experimental group the changes were noticeable: the average percentage of scores of 5 for "Independence and critical thinking" increased from 15-18% to 28-32%, and for "Analysis and improvement of activity" – from 17-20% to 30-33% (paired t-test: $t = 4.18-5.02$, $p < 0.001$). The reasoning behind decisions increased from 14-18% to 29-33%, and practical applicability – from 14-18% to 28-36%, which indicates a significant increase in students' ability to justify the actions and propose practically appropriate solutions.

The greatest progress was observed in the cases "Communication with parents in a conflict situation" and "Increasing pupils' learning motivation", where the percentage of high scores (5 points) in the EG reached 32-33%, and the average level of scores of 4-5 was more than 65%, whereas in the CG these indicators ranged from 30% to 40% (independent t-test after the experiment: $t = 3.87-5.12$, $p < 0.001$). This demonstrates that the modelling of real pedagogical situations and the incorporation of the competence-based approach effectively stimulate the development of critical thinking, the ability to analyse

pedagogical actions and to make well-grounded decisions. Overall, the results show that case-based tasks make it possible not only to increase students' professional confidence, but also to form internal motivation for teaching activity. A comparison of the CG and EG shows that active involvement in practical situations and systematic feedback from teachers contribute to a significant increase in indicators of pedagogical competence in the sphere of independent decision-making and critical analysis of one's own activity.

In general, the pedagogical experiment conducted showed that the implementation of the competence-based approach influences the development of pedagogical motivation and professional confidence among future teachers. The experimental group demonstrated improvements in all key aspects; students became more interested in the profession, were more actively involved in the learning process and showed readiness for independent decision-making and critical analysis of the activity. The performance of case-based tasks made it possible to trace how the acquired knowledge and skills are realised in practice, stimulating the development of competences and internal motivation. Overall, the results confirm the effectiveness of the systematic combination of theoretical training, practical tasks and teachers' feedback in forming students' professional readiness and conscious motivation. Statistical analysis showed that in the experimental group significant changes occurred in all the criteria of the case-based tasks ($p < 0.001$), whereas in the control group the improvements were moderate and partly significant ($p < 0.05$). This confirms the effectiveness of implementing the competence-based approach in the development

of pedagogical motivation and professional confidence among future teachers and also emphasises the importance of the systematic combination of theoretical training, practical tasks and feedback from teachers.

Scenarios for the development of pedagogical motivation among future teachers

The analysis of the results of the pedagogical experiment revealed not only an increase in individual motivational indicators, but also a qualitative change in the type of students' motivational orientation, which made it possible empirically to distinguish scenarios for the development of pedagogical motivation. On the basis of the generalisation of the results of the questionnaire (Table 1) and the case-based tasks (Table 2), students were classified according to the

dominant type of motivational behaviour, level of involvement in practical activity, nature of reflection and ability for independent professional choice. To determine the key approaches to modelling pedagogical motivation, the main scenarios for the development of motivation among future teachers were distinguished, which differ in the degree of student activity, the way of involvement in practical activity and the integration of the components of practice, reflection, and feedback. Table 5 summarises these scenarios; each scenario is characterised by a specific combination of the components of practice, reflection and feedback, the duration of practical classes and the level of students' involvement in teaching activity. The table presented makes it possible to summarise these parameters, clearly compare the approaches and determine the main characteristics.

Table 5. Main scenarios for the development of pedagogical motivation among future teachers

Scenario	Main focus	Components and activities	Practical duration	Features of motivation
Active-professional	Formation of a high level of internal interest and active participation in professional activity	Constant involvement in practice, preparation of lessons, development of materials, modelling situations, simulation exercises, case-based tasks, distance platforms for exchanging experience	4-6 hours per week, online consultations 30-40 minutes, group discussions 60 minutes every two weeks	High internal motivation, regular self-assessment and reflection, feedback, integration of cognitive, emotional and behavioural components
Adaptive-competence-based	Gradual development of key teaching competences	Assessment of the current level of motivation and competences, individual development trajectories, practical tasks with increasing complexity, digital monitoring of progress	3-4 hours of practice per week, training sessions, staged assessment of competences	Motivation is formed through awareness of the results of one's own actions, adaptation to real conditions, gradual involvement with teacher support
Formally oriented	Fulfilment of the minimum necessary requirements	Lecture-based tasks, basic practical exercises, periodic teacher consultations, structured support, incentive systems	1-2 hours of practice per week, periodic consultations	Low level of internal motivation; motivation is maintained through external stimuli, gradual integration of reflection and mentoring

Source: compiled by the author

The active-professional scenario presupposes the constant combination of three key components: practice, reflection and feedback. Students carry out weekly micro-projects that include the preparation of lessons or the development of teaching materials with specific competence-based goals – for example, the development of critical thinking, the formation of group skills or the integration of cross-curricular links. Each micro-project is accompanied by self-checking and self-assessment, which stimulates the awareness of one's own competence and increases motivation at cognitive, emotional and behavioural levels. Weekly reflection enables the student to describe difficulties, ways of overcoming the complications and the results achieved, and the use of distance platforms for exchanging experience and commenting on peers' work creates a permanent cycle of actions and feedback.

The adaptive-competence-based scenario focuses on the gradual formation of teaching competences. At the first stage, the current level of motivation and competences of the student is assessed, which makes it possible to identify strengths and weaknesses and to form individual development trajectories. Practical tasks have increasing complexity, from managing pupils' behaviour in the lesson

to differentiated learning and complex communication situations with parents or colleagues. The student regularly performs self-assessment and receives objective feedback from the teacher, which ensures the adaptation of activity to real conditions and the development of conscious motivation. Systematic monitoring of progress through digital platforms makes it possible to visualise the development of competences in percentages or graphically, which additionally stimulates motivation.

The formally-oriented scenario focuses on the minimum necessary requirements and is characterised by an initial level of internal motivation. Its use is justified for students who need structured support and stimulation. The main purpose of this scenario is to create a starting point for the acquisition of basic knowledge and skills, gradually integrating practice, reflection and mentoring. Regular training sessions, additional practical tasks and teacher support make it possible to move students to an active or adaptive-competence-based level of motivation. For the practical implementation of all three scenarios, precise planning of resources and time is important. The active-professional scenario includes a complex combination of practical tasks, reflection and feedback, the

adaptive-competence-based scenario – the staged introduction of components with a gradual increase in the role of the teacher, and the formally-oriented scenario – minimum requirements with integrated support. Such an approach ensures the systematic formation of pedagogical motivation, taking into account students' individual characteristics and the resource capabilities of the educational institution. As a result, the scenarios described make it possible to create holistic, predictable trajectories of the professional development of future teachers and effectively combine learning, reflection and the assessment of results.

Before the experiment, in the experimental group students with a formally-oriented type of motivation predominated (about 42%), who demonstrated situational interest in learning, orientation mainly towards external stimuli and a medium level of performance in case-based tasks. The proportion of students with an adaptive-competence-based type was about 38%, and the active-professional type was represented by only 20% of respondents. After the introduction of competence-oriented educational practices, a significant redistribution of motivational types took place. The proportion of students with an active-professional scenario increased to 54-57% ($p < 0.001$), which was accompanied by the dominance of high scores (4-5 points) in the case-based tasks, consistently high indicators of internal motivation and the ability to carry out reflective analysis of the activity. The proportion of the adaptive-competence-based type amounted to 30-32%, whereas the formally-oriented scenario decreased to 11-14%. Thus, the empirical data obtained confirm that the scenarios for the development of pedagogical motivation are not purely theoretical models, but reflect real trajectories of students' professional development recorded during the pedagogical experiment. The shift in the distribution towards the active-professional scenario indicates the effectiveness of the competence-based approach as a mechanism for the transition from formally and externally determined motivation to internally conscious professional orientation.

Therefore, such a precise scenario-based plan helps systematically to form motivation, taking into account students' individual characteristics and the resource capabilities of the educational institution. In conclusion, the three scenarios for the development of pedagogical motivation among future teachers described make it possible to create holistic and predictable trajectories of professional development. The active-professional scenario is optimal for students with a high level of internal motivation and initiative, the adaptive-competence-based scenario – for the gradual formation of competences and confidence, and the formally-oriented scenario – for the initial level or for students with low internal motivation who need to be stimulated through structured tasks and teacher support. All three scenarios presuppose the integration of practice, reflection, and the assessment of results, which makes it possible effectively to develop pedagogical motivation and professional readiness among future teachers in different learning conditions.

DISCUSSION

Pedagogical motivation of future teachers is a key factor in the success of professional training and in the formation of the teacher's personality, which is consistent with I. Gómez-Trigueros *et al.* (2024). In the study, the authors considered the integration of technology and didactics as a means of increasing students' professional motivation. The authors emphasised that active participation in the learning process stimulates internal motivation and forms pedagogical competence. Motivation determines students' activity, purposefulness, and readiness to apply knowledge in practice, as noted by L. Bardach & R. Klassen (2021). The authors analysed the relationship between teachers' motivation and students' outcomes and showed that a high level of motivation stimulates active participation in the learning process. The study emphasises that motivation is a key factor in the implementation of knowledge in practice. Pedagogical motivation is formed under the influence of internal needs, external conditions and pedagogical technologies, as supported by J. Forson *et al.* (2021). The researchers examined the relationship between motivation and teachers' work performance. The authors underlined those external stimuli and learning conditions increase students' internal motivation. Self-determination theory distinguishes three components in the development of internal motivation: autonomy, the feeling of competence and social involvement, as emphasised by R. Pekrun (2021). The author analysed the role of emotions and self-regulation in professional training. The author showed that the integration of these three components stimulates independence and internal interest in learning.

Autonomy presupposes the independent choice of learning methods and responsibility for the results of activity, as confirmed by A. Kosholap *et al.* (2021). The authors studied the neuropsychological mechanisms of self-improvement in future teachers. The study showed that autonomy stimulates responsibility for one's own learning and activates internal motivation. The feeling of competence is formed through the successful completion of tasks and the development of practical skills, as stated by S. Schukajlow *et al.* (2023). The authors analysed the relationship between emotions and motivation in learning mathematics. The authors emphasised that successful completion of tasks increases the feeling of competence and encourages independent development. Social involvement is manifested in the feeling of the value of one's activity for the collective and for society, as confirmed by M. Mahmoodi & M. Yousefi (2021). The researchers investigated motivation for learning a second language and found that awareness of the social significance of activity stimulates internal motivation. The study showed that social involvement promotes students' active participation in the learning process. Students who are aware of the social significance of the profession demonstrate more active internal motivation, as underlined by S. Karasievykh *et al.* (2021). The authors analysed the pedagogical training of future physical education teachers. The study showed that the social significance

of the profession increases motivation and forms an active learning position among students.

The competence-based approach integrates knowledge, skills, values, and readiness for practical activity, thereby increasing motivation, which is consistent with J. Ali *et al.* (2023). The researchers investigated the impact of ChatGPT on learning motivation. The authors showed that innovative approaches and competence-based integration stimulate students' active engagement in the learning process. Reflection and critical thinking enable students to become aware of the professional development and stimulate self-improvement, as emphasised by J. Zheng (2021). The author analysed the influence of teachers' clarity and credibility on students' motivation and engagement. The author showed that reflection helps students to assess the progress and stimulates professional development. Social interaction increases the feeling of the significance of the student's role in the professional environment, as confirmed by A. Fiddiyasari & R. Pustika (2021). The researchers studied pupils' motivation during online English learning. The study showed that interaction with peers stimulates internal motivation and active participation in learning.

Pedagogical motivation is formed through the integration of autonomy, competence, social involvement and internal motives, which is consistent with E. Asmus (2021). The author analysed motivation in music education. The author proved that complex integration of these factors forms stable internal motivation and active learning behaviour. After the experiment, the share of students in the experimental group with maximum motivation ("5") increased to 48-56%, while in the control group it remained at 25%, as confirmed by J. Campillo-Ferrer & P. Miralles-Martín (2021). The authors analysed the effectiveness of flipped learning during the pandemic. The study showed that new approaches stimulate an increase in students' internal motivation. The performance of case-based tasks makes it possible to assess students' readiness to make pedagogical decisions and justify these decisions, which is consistent with M. Khazen *et al.* (2025). The authors investigated the development of ethical decisions and motivation among future teachers. The authors showed that case-based tasks contribute to the formation of practical skills and an active position among students. In the control group before the experiment, most students chose neutral responses ("3" – 29-37%), as confirmed by M. Beardsley *et al.* (2021). The researchers studied the impact of emergency education on motivation to use digital technologies. The results demonstrated that without active support, motivation remains at a low level.

After the introduction of the competence-based approach in the experimental group, all case situations were characterised by the dominance of the response "5" – 28-33%, as noted by A. Ekmekci & D. Serrano (2022). The authors analysed the influence of teacher quality on motivation and learning outcomes. The study showed that the competence-based approach increases students' readiness to make pedagogical decisions. The active-professional scenario of motivation development presupposes weekly

performance of micro-projects and cases, reflection and feedback, which is consistent with I. Humeniuk *et al.* (2022). The researchers studied pedagogical support for future engineering teachers. The authors showed that systematic activity stimulates the development of internal motivation and professional competences. The adaptive-competence-based scenario includes gradual development of competences and systematic monitoring of progress through digital platforms, as confirmed by S. Suyatno *et al.* (2024). The authors investigated internal motivation of Generation Z for the profession of primary school teacher. The study showed that phased adaptation of learning through digital platforms increases students' interest and effectiveness. The formally-oriented scenario is characterised by minimal requirements, low internal motivation and the need for stimulation through structured support, as noted by K. Anwar *et al.* (2021). The authors analysed the influence of collaborative team learning on students' motivation. The authors showed that without structured support, internal motivation remains low and additional stimulation is required.

Thus, the development of learning motivation among future teachers in the conditions of a competence-based approach is formed through the integration of autonomy, the feeling of competence, social involvement and internal motives. Studies have shown that active performance of project tasks, cases and mini-lessons, systematic reflection, critical thinking and social interaction increase students' internal motivation and promote the formation of practical competences. The introduction of adaptive-competence-based and active-professional learning scenarios stimulates readiness for teaching activity, increases students' activity and responsibility, whereas formally-oriented approaches require additional structured support. Thus, the competence-based approach is an effective mechanism for the development of motivation and professional readiness of future teachers, combining knowledge, skills, values and practical activity in a holistic educational strategy.

■ CONCLUSIONS

The study carried out made it possible to assess comprehensively the state of pedagogical motivation among future teachers and to identify effective approaches to its development in the conditions of a competence-based approach. It was established that pedagogical motivation is a dynamic characteristic that is formed under the influence of students' internal needs, the social significance of the profession and the level of involvement in practical activity. The results of the experimental work confirmed that competence-oriented learning, which includes the integration of practical tasks, cases, micro-projects, role-playing games and reflective exercises, contributes to a significant increase in internal motivation, to a higher level of confidence in one's own pedagogical decisions and to the development of professional competence.

The data analysis showed that before the experiment most students demonstrated a medium level of motivation,

characterised by a vague interest in teaching activity, limited awareness of the social significance of the profession and an insufficient level of readiness for independent professional self-development. After the introduction of competence-oriented educational practices in the experimental group, the share of responses “5 – completely agree” increased statistically significantly ($p < 0.01$) by 25-30% depending on the question (for example, from 25% to 50-56%), which indicates the formation of students’ conscious internal motivation. In the control group growth was also observed, but by 5-10%, which confirms the effectiveness of competence-based practices in increasing interest, professional confidence and readiness for self-development in teaching activity. Thus, interest in the teaching profession increased from 25% to 50%, satisfaction with the performance of learning tasks – from 17% to 52%, awareness of the social significance of the profession – from 30% to 56%, and readiness for professional self-development – from 13% to 48%. In the control group the changes were moderate, and the share of responses “5” did not exceed 25%, which demonstrates the lower effectiveness of the traditional organisation of the learning process without a competence-based approach. The analysis of case-based tasks showed that before the experiment most students had medium or low confidence in decision-making (“3” – 29-37%, “5” – 11-20%). After the introduction of competence-based practices in the experimental group, the share of high scores (“5”) increased to 28-36% depending on the criterion, and low scores (“1-2”) were almost absent. The greatest changes were observed in the cases “Communication with parents” and “Increasing learning motivation”, where “4-5” exceeded 65%, whereas in the control group these indicators were 30-40%. This indicates the effectiveness of the competence-based approach. Statistical analysis of the results using the paired t-test revealed significant positive changes in the experimental group between the indicators before and after the formative stage ($t = 4.18-5.36$, $p < 0.001$), which confirms the effectiveness of the competence-oriented practices introduced. In the control group the changes were moderate and, in most cases, reached the level of statistical significance only at $p < 0.05$ ($t = 1.97-2.41$). A comparison of the experimental and control groups after the experiment using the independent t-test showed a statistically significant advantage of the experimental group in all indicators of pedagogical

motivation and in the results of the case-based tasks ($t = 3.84-5.12$, $p < 0.001$).

Within the framework of the study three scenarios for the development of pedagogical motivation among future teachers were distinguished, formed on the basis of the generalisation of the results of the pedagogical experiment, the analysis of mean scores and standard deviations, as well as indicators of the performance of case-based tasks (reasoning behind decisions, practical applicability, independence, and reflexivity of activity). The classification of scenarios was carried out by grouping students according to the dominant type of motivational orientation, the level of formation of professional competences and the nature of learning activity identified at the empirical stage of the study. The identified scenarios make it possible to plan the educational process taking into account students’ individual characteristics and the level of motivation. The active-professional scenario is effective for students with a high level of internal motivation and initiative; it presupposes constant inclusion in practical activity, weekly performance of micro-projects, reflection and feedback from the teacher. The adaptive-competence-based scenario is aimed at the gradual formation of competences and conscious motivation through phased performance of practical tasks and cases, assessment of progress and digital monitoring of results. The formally-oriented scenario is used for students with a low level of motivation and presupposes basic tasks with the gradual introduction of support, mentoring and reflection to move to an active level of motivation. The main direction of further research is the expansion of the sample and the introduction of long-term monitoring of the effectiveness of the competence-based approach in different educational institutions, in particular through the analysis of the development of pedagogical motivation throughout the entire period of study and the first years of professional activity.

■ ACKNOWLEDGEMENTS

None.

■ FUNDING

None.

■ CONFLICT OF INTEREST

None.

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Компетенттүүлүккө негизделген ыкманын контекстинде келечектеги мугалимдерде окууга мотивацияны өнүктүрүү

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Аннотация. Изилдөөнүн максаты келечектеги мугалимдерде педагогикалык мотивацияны өнүктүрүүнүн натыйжалуу ыкмаларын аныктоо болду. Методология педагогикалык мотивацияны жана компетенттүүлүккө негизделген ыкманы талдоону, контролдук жана эксперименталдык топтор менен педагогикалык эксперимент жүргүзүүнү камтыйт; сценарийдик моделдөө алкагында келечектеги мугалимдердин педагогикалык мотивациясын өнүктүрүүнүн үч сценарийи аныкталды: активдүү-кесиптик, адаптивдүү-компетенттүүлүккө негизделген жана формалдуу багытталган. Изилдөөнүн негизги жыйынтыктары компетенттүүлүккө негизделген ыкманын келечектеги мугалимдерде ички мотивацияны жана кесиптик ишенимди калыптандырууда натыйжалуу экенин көрсөткөн. Эксперименталдык топто компетенцияга негизделген окутуунун элементтери киргизилгенден кийин мотивациясы жогорку деңгээлдеги студенттердин үлүшү негизги көрсөткүчтөр боюнча статистикалык жактан маанилүү ($p < 0,01$) түрдө 13-30 %дан 48-56 %га чейин өстү: кесипти өздөштүрүүгө кызыгуу, билим берүү тапшырмаларын аткаруудан канааттануу, педагогикалык ишмердүүлүктүн коомдук маанилүүлүгүн түшүнүү, кесиптик даярдыктагы жеке маани, педагогикалык көндүмдөрдү жана жөндөмдөрдү өз алдынча өнүктүрүүгө жана жакшыртууга даярдык. Эксперимент башталганга чейин студенттердин көпчүлүгү педагогикалык чечимдерди кабыл алууда орточо же төмөн ишеним көрсөткөн (3 – 29-37 %, 5 – 11-20 %). Эксперименталдык топто компетенцияга негизделген ыкмаларды киргизгенден кийин ар кандай критерийлер боюнча “5” деген жогорку баалоолордун үлүшү 28-36%га чейин өстү, ал эми төмөн баалоолор дээрлик жок болду. Ата-энелер менен байланышта жана студенттердин окууга болгон мотивациясында прогресс байкалган: “4-5” баалардын орточо деңгээли 65 %дан ашкан, ал эми контролдук топто 30-40 % болгон. Микродолбоорлорду, кейс-изилдөөлөрдү, ролдук оюндарды жана системалуу рефлексияны активдүү колдонуу ички мотивацияны калыптандырып, компетенттүүлүк деңгээлин жогорулатып, студенттердин педагогикалык практикага аң-сезимдүү катышуусуна өбөлгө түзөрү аныкталды. Мындан тышкары, изилдөө педагогикалык мотивацияны өнүктүрүүнүн үч сценарийин аныктады: активдүү-кесиптик, адаптивдүү-компетенттүү жана формалдуу багытталган. Иштин практикалык маанилүүлүгү алынган натыйжаларды мугалимдерди даярдоочу мекемелерде айырмаланган окуу траекторияларын иштеп чыгууда колдонууга мүмкүндүк берүүсүндө жатат.

Негизги сөздөр: кесиптик багыт; ички кызыгуу; социалдык маанилүүлүк; практикалык иш-аракет; кесиптик даярдык

Развитие мотивации к обучению будущих учителей в контексте компетентностного подхода

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Аннотация. Целью исследования было определение эффективных подходов к развитию педагогической мотивации будущих учителей. Методология включала анализ педагогической мотивации и компетентностного подхода, проведение педагогического эксперимента с контрольной и экспериментальной группами; в рамках сценарного моделирования были выделены три сценария развития педагогической мотивации будущих учителей: активно-профессиональный, адаптивно-компетентностный и формально-ориентированный. Основные результаты исследования свидетельствовали об эффективности компетентностного подхода в формировании внутренней мотивации и профессиональной уверенности будущих учителей. В экспериментальной группе после внедрения элементов компетентностного обучения доля студентов с высоким уровнем мотивации статистически значимо ($p < 0,01$) увеличилась с 13-30 % до 48-56 % по ключевым показателям: интерес к освоению профессии, удовлетворенность выполнением учебных заданий, осознание социальной значимости педагогической деятельности, личностного смысла профессиональной подготовки, готовность к саморазвитию и совершенствованию педагогических умений и навыков. До эксперимента большинство учащихся демонстрировали среднюю или низкую уверенность в принятии педагогических решений (ответы «3» – 29-37 %, «5» – 11-20 %). После внедрения компетентностных практик в экспериментальной группе доля высоких оценок «5» по различным критериям увеличилась до 28-36 %, а низкие оценки практически исчезли. Прогресс был отмечен в случаях общения с родителями и повышения мотивации учащихся к обучению, где средний уровень оценок «4-5» превысил 65 %, тогда как в контрольной группе он составлял 30-40 %. Было установлено, что активное использование микропроектов, кейсов, ролевых игр и систематического рефлексирования сформировало внутреннюю мотивацию, повысило уровень компетентности и способствовало сознательному вовлечению студентов в педагогическую практику. Кроме того, в ходе исследования были выделены три сценария развития педагогической мотивации: активно-профессиональный, адаптивно-компетентностный и формально-ориентированный. Практическая значимость работы заключается в возможности использования полученных результатов в учреждениях педагогического образования для разработки дифференцированных траекторий обучения.

Ключевые слова: профессиональная ориентация; внутренний интерес; социальная значимость; практическая деятельность; профессиональная готовность