



PEDAGOGICAL AND PSYCHOLOGICAL FOUNDATIONS OF FORMING PROFESSIONAL COMPETENCE IN FUTURE TEACHERS

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Abstract: *The article examines the pedagogical and psychological foundations of forming professional competence in future teachers. The problem is considered from a theoretical and methodological perspective, because professional preparation at pedagogical universities cannot be reduced only to the transfer of subject knowledge. The educational result depends on how accurately psychological mechanisms of personality development are connected with pedagogical conditions of professional training. The purpose of the article is to define the main conditions under which the process of forming professional competence in future teachers becomes pedagogically productive and psychologically grounded. The research is based on a focused analysis of recent studies on teacher competence, professional identity, reflective practice and teacher self-efficacy. The article clarifies the distinction between the notions of qualification, professional readiness and professional competence. It also proposes criteria for evaluating the level of formation of professional competence in pedagogical universities. The main result is a structural model that connects motivational, cognitive, operational, communicative and reflective components of professional competence. The study argues that professional competence is most effectively formed when academic knowledge, practical activity and personal reflection are organized as one continuous process during the years of study at the university.*

Keywords: *professional competence, future teachers, pedagogical preparation, psychological foundations, teacher self-efficacy, reflective practice, professional identity*

ПЕДАГОГИКО-ПСИХОЛОГИЧЕСКИЕ ОСНОВЫ ФОРМИРОВАНИЯ ПРОФЕССИОНАЛЬНОЙ КОМПЕТЕНТНОСТИ У БУДУЩИХ УЧИТЕЛЕЙ

Аннотация: *В статье рассматриваются педагогико-психологические основы формирования профессиональной компетентности у будущих учителей. Проблема анализируется с теоретико-методологической точки зрения, поскольку профессиональная подготовка в педагогических вузах не может сводиться только к передаче предметных знаний. Образовательный результат зависит от того, насколько точно психологические механизмы развития личности связаны с*



педагогическими условиями профессиональной подготовки. Цель статьи заключается в определении основных условий, при которых процесс формирования профессиональной компетентности у будущих учителей становится педагогически продуктивным и психологически обоснованным. Исследование основано на целенаправленном анализе современных работ, посвящённых профессиональной компетентности учителя, профессиональной идентичности, рефлексивной практике и педагогической самоэффективности. В статье уточняется различие между понятиями квалификации, профессиональной готовности и профессиональной компетентности. Также предлагаются критерии оценки уровня сформированности профессиональной компетентности в условиях педагогического вуза. Основным результатом исследования является структурная модель, объединяющая мотивационный, когнитивный, операциональный, коммуникативный и рефлексивный компоненты профессиональной компетентности. В исследовании обосновывается, что профессиональная компетентность формируется наиболее эффективно тогда, когда академические знания, практическая деятельность и личностная рефлексия организованы как единый непрерывный процесс в течение всего периода обучения в вузе.

Ключевые слова: *профессиональная компетентность, будущее учителя, педагогическая подготовка, психологические основы, педагогическая самоэффективность, рефлексивная практика, профессиональная идентичность*

BO‘LAJAK O‘QITUVCHILARDA KASBIY KOMPETENSIYANI SHAKLLANTIRISHNING PEDAGOGIK-PSIXOLOGIK ASOSLARI

Annotatsiya: *Maqolada bo‘lajak o‘qituvchilarda kasbiy kompetensiyani shakllantirishning pedagogik-psixologik asoslari tahlil qilinadi. Muammo nazariy va metodologik nuqtai nazardan ko‘rib chiqiladi, chunki pedagogika oliy ta‘lim muassasalarida kasbiy tayyorgarlik faqat fan bo‘yicha bilim berish bilan cheklanib qola olmaydi. Ta‘limiy natija shaxsiy rivojlanishning psixologik mexanizmlari kasbiy tayyorgarlikning pedagogik shartlari bilan qanchalik aniq bog‘langaniga bog‘liq. Maqolaning maqsadi bo‘lajak o‘qituvchilarda kasbiy kompetensiyani shakllantirish jarayoni pedagogik jihatdan samarali va psixologik jihatdan asoslangan bo‘lishi uchun zarur asosiy shartlarni aniqlashdan iborat. Tadqiqot o‘qituvchining kasbiy kompetensiyasi, kasbiy identitet, refleksiv amaliyot va pedagogik o‘z-o‘ziga ishonchga bag‘ishlangan zamonaviy ilmiy ishlarning maqsadli tahliliga asoslanadi. Maqolada malaka, kasbiy tayyorgarlik va kasbiy kompetensiya tushunchalari o‘rtasidagi farq izohlanadi. Shuningdek, pedagogika oliy ta‘lim muassasalari sharoitida kasbiy kompetensiya shakllanganlik darajasini baholash mezonlari taklif etiladi. Tadqiqotning asosiy natijasi kasbiy kompetensiyaning motivatsion, kognitiv, operatsional, kommunikativ*



va refleksiv komponentlarini birlashtiruvchi tarkibiy model hisoblanadi. Tadqiqotda kasbiy kompetensiya akademik bilim, amaliy faoliyat va shaxsiy refleksiya oliy o'quv yurtidagi tahsil davomida yagona uzluksiz jarayon sifatida tashkil etilgandagina eng samarali shakllanishi asoslab beriladi.

Kalit so'zlar: *kasbiy kompetensiya, bo'lajak o'qituvchilar, pedagogik tayyorgarlik, psixologik asoslar, pedagogik o'z-o'ziga ishonch, refleksiv amaliyot, kasbiy identitet*

INTRODUCTION

Preparing a future teacher is not only a matter of giving lectures on subject methodology, pedagogy and psychology. It is also a matter of organizing a learning environment in which a student gradually becomes a professional. At the stage of university study, a young person already knows that he or she will teach in a real school, but professional behaviour is still developing. Theoretical knowledge can be solid, while practical confidence may be weak. Pedagogical reaction in a real classroom is rarely automatic. It depends on how the student has internalized professional values, how he or she controls emotions, and whether the future teacher is able to reflect on his or her own actions.

The topic is relevant because contemporary school requires more than a teacher who simply knows the subject. It requires a teacher who can plan a lesson according to learning outcomes, communicate with pupils of different abilities, work with parents, use digital tools, and continue learning throughout the career. This wide range of tasks cannot be covered only by traditional academic instruction. The university must therefore form a system of professional competencies in close connection with

the psychological development of the future teacher's personality.

Modern research on teacher education pays serious attention to the concept of professional competence. Studies show that teacher self-efficacy is one of the key psychological predictors of professional readiness and classroom effectiveness (Zee and Koomen, 2016). Other works emphasize the role of reflective practice in transforming theoretical knowledge into pedagogical action (Korthagen, 2017). Research on teacher professional identity demonstrates that competence develops together with a sense of belonging to the profession (Beauchamp and Thomas, 2009). These positions are important for higher pedagogical education, because they show that competence is not a list of separate skills but an integrated personal-professional quality.

The research problem of this article can be formulated as follows: under what pedagogical and psychological conditions does the process of forming professional competence in future teachers become effective during university study? The purpose of the article is to identify the theoretical and methodological foundations of such effectiveness. The object of the study is the process of



professional preparation of future teachers at higher educational institutions. The subject is the pedagogical and psychological conditions of forming professional competence as an integral personal-professional quality.

The hypothesis of the article is that professional competence in future teachers is formed effectively when four components act together: a clear motivational orientation toward the teaching profession, a system of theoretical and methodological knowledge, practical pedagogical activity in real or simulated conditions, and continuous reflection on professional actions. If one of these components is absent, the student may still graduate with a diploma, but his or her professional behaviour in a real school remains insecure. This idea is not new, yet many difficulties of young teachers in their first year of work begin exactly here, when one of the components has not been formed during the years of study.

METHODS

The article uses a theoretical and methodological research design. The method includes analysis of scientific literature, conceptual comparison and pedagogical-psychological modelling. The literature base includes studies on teacher education, professional competence, teacher self-efficacy, reflective practice and professional identity. Special attention is given to research that discusses pre-service teachers and the early years of professional work, because the

developmental tasks of student teachers are different from those of experienced colleagues.

The analytical procedure was organized in three stages. At the first stage, the notions of qualification, professional readiness, professional competence and professionalism were compared. At the second stage, the main psychological mechanisms relevant to the development of a future teacher were selected. These mechanisms included motivation, self-efficacy, reflection, emotional regulation, communicative orientation and professional identity. At the third stage, a structural model of forming professional competence in future teachers was developed.

The article does not present a quantitative experiment. Its task is different. It offers a theoretical framework that can later be used for designing curricula, organizing teaching practice and developing diagnostic instruments. This choice is justified because pedagogical research first needs clear criteria. Without criteria, any university course can be reported as successful, and any teaching practice can be described as productive. Such an approach is unsafe from a scientific point of view.

Results

1. Conceptual distinction between qualification, readiness and competence

The first result of the analysis is the need to distinguish three related notions: qualification, professional readiness and



professional competence. Qualification is a formal characteristic confirmed by a diploma. It shows that the graduate has passed the required examinations. Professional readiness is a psychological state. It shows that the future teacher is internally prepared to start working in a school. Professional competence is a broader integrative quality. It includes knowledge, skills, values and personal qualities that allow the teacher to act effectively in different pedagogical situations.

These three notions are connected but not identical. A graduate may have a high qualification on paper, yet remain unprepared psychologically. Another graduate may feel ready, but his or her competence may be limited to standard situations only. Professional competence is therefore the most demanding category. It assumes that the future teacher can act in non-standard conditions, take pedagogical decisions, and continue

professional development after graduation.

In modern pedagogical literature, professional competence is usually described as a multi-component construct. It includes the subject-methodological component, the psychological-pedagogical component, the communicative component, the digital component and the reflective component. In primary teacher preparation, classroom management and child psychology are added as separate but interconnected dimensions. The combination of these components forms what may be called the integral professional competence of a future teacher.

2. Criteria of pedagogical effectiveness

The analysis made it possible to define five criteria for evaluating the level of formation of professional competence in future teachers.

Criterion	Main indicator	Possible evidence in pedagogical preparation
Motivational criterion	Stable orientation toward the teaching profession	The student chooses pedagogical activity voluntarily, returns to it after difficulties, plans a teaching career
Cognitive criterion	System of professional knowledge	The student understands subject content, didactic theory, age psychology and connects them in lesson design
Operational criterion	Ability to perform pedagogical actions	The student plans a lesson, organizes pupils' activity, uses methods adequate to the aim
Communicative criterion	Productive interaction with pupils and colleagues	The student listens, formulates clear instructions, manages classroom



Criterion	Main indicator	Possible evidence in pedagogical preparation
		dialogue, cooperates with mentors
Reflective criterion	Awareness of one's own professional actions	The student analyses his or her lesson, identifies difficulties, plans personal development

These criteria help avoid a common methodological mistake. The level of professional competence cannot be measured only by examination grades or by the formal completion of teaching practice. A student may pass all examinations and still feel insecure in front of pupils. On the other hand, a student with average academic results may demonstrate strong pedagogical intuition, careful preparation and reflective thinking. A reliable evaluation requires several criteria observed together.

3. Pedagogical and psychological conditions of effective formation

The second result of the study is the definition of the conditions under which professional competence is formed effectively. The first condition is the connection between academic study and pedagogical practice. Knowledge that is acquired only in lecture halls remains formal. The university should therefore organize teaching practice not as a final event at the end of the course, but as a continuous line that runs through several years of study. Short observational practice in early courses, supervised lesson attempts in middle courses and

independent teaching in senior courses form a logical sequence.

The second condition is the development of professional motivation. Many students enter pedagogical universities under the influence of family, social environment or accidental circumstances. Their initial motivation may be unstable. The task of teacher education is to transform external motivation into internal interest in the profession. This transformation does not happen by itself. It requires meaningful contact with experienced teachers, real classroom experience, success in small pedagogical tasks and recognition of the student's first professional achievements.

The third condition is the formation of teacher self-efficacy. Self-efficacy is the student's belief that he or she can perform professional actions successfully. According to social-cognitive theory, self-efficacy is shaped by mastery experiences, observation of competent models, social persuasion and emotional state. Pedagogical universities can build all four sources into the educational process. A future teacher who first succeeds with a small group of pupils develops the basis for further professional confidence.



The fourth condition is systematic reflective practice. Reflection is the mechanism that converts experience into competence. Without reflection, practical experience may be repeated mechanically. The student may give twenty lessons and still teach in the same way, because no analysis of the action has taken place. Reflective journals, video recording of micro-lessons, supervisor feedback and peer discussion are practical tools that build reflection as a stable professional habit.

The fifth condition is psychological-pedagogical support. Future teachers face emotional difficulties: anxiety before the first lesson, fear of pupils' questions, discomfort during supervised observation. If these states are ignored, they may turn into long-term professional avoidance. Curators, methodologists and university psychologists should provide support that helps the student work through such states rather than hide them.

4. Structural model of professional competence formation

The proposed model includes five interconnected components. The motivational component covers the orientation toward the teaching profession, the system of professional values and the readiness to develop in the chosen field. The cognitive component includes subject knowledge, pedagogical theory, psychology of learners and methodology of teaching. The operational component covers the practical actions of the teacher: planning, organizing, evaluating. The communicative

component includes interaction with pupils, colleagues, parents and administration. The reflective component covers self-analysis, awareness of professional growth and planning of personal development.

For example, if the curriculum aim is to prepare a future teacher for working with mixed-ability classes, the educational process should not be limited to a single course on inclusive education. It should include a theoretical seminar, observation of real lessons with mixed-ability groups, simulated micro-teaching with feedback, supervised teaching during practice and a reflective written analysis. The same content is then experienced in several formats. This movement from theoretical understanding to reflective action is the methodological logic of competence formation.

The model also includes the principle of gradual complication. At the first stage, the student observes and analyses other teachers' work. At the second stage, the student designs lesson fragments under supervision. At the third stage, the student conducts whole lessons with methodological support. At the fourth stage, the student carries out a series of lessons independently and reflects on the results. This sequence corresponds to the actual professional readiness of students and avoids the situation in which a future teacher is asked to act professionally before he or she has had enough supported experience.

Discussion



The results of the theoretical analysis are consistent with contemporary research on teacher education. Studies emphasize that teacher competence is not formed by accumulating courses but by the integration of theoretical, practical and reflective experience. Korthagen (2017) argued that effective teacher preparation should connect theory and practice through systematic reflection. Beauchamp and Thomas (2009) showed that the formation of professional identity is inseparable from the development of professional competence. Zee and Koomen (2016) demonstrated that teacher self-efficacy is connected with classroom processes and student outcomes, which gives a psychological justification for the central role of self-efficacy in pre-service training.

At the same time, the formation of professional competence has certain risks. The first risk is academic formalism. This appears when the university focuses mainly on lectures and written examinations, while practical training remains short and superficial. In such conditions, the diploma is awarded, but professional competence is not yet built. The second risk is the underestimation of psychological preparation. If a future teacher does not understand the age psychology of pupils or his or her own emotional reactions, even good methodological knowledge may not be applied effectively. The third risk is the absence of mentoring during the first years of work. A graduate may possess all required competencies on paper, but

without professional support in the first school, the level of competence may decline rather than grow.

Another point concerns digital competence. Contemporary teachers work in an environment where digital tools, online platforms and electronic resources have become a normal part of the educational process. Digital competence cannot be added as an isolated course at the end of the curriculum. It should be present in subject methodology, in pedagogical practice and in reflective analysis. A future teacher who knows how to use a digital tool but does not know when and why to use it does not yet demonstrate full professional competence.

For master's research, this discussion has practical meaning. The pedagogical and psychological foundations of forming professional competence should be diagnosed through several indicators, not through one general impression. Motivation, knowledge, operational skills, communication and reflection should be observed separately and then connected into an integrated profile. One student may be strongly motivated but methodologically weak. Another may have good knowledge but limited reflective ability. The task of the university is to see these individual profiles and to provide differentiated pedagogical-psychological support.

The proposed model can be applied in the design of curricula, the organization of teaching practice and the



development of diagnostic instruments. It can also be adapted to the preparation of teachers in different subject areas: foreign languages, mathematics, natural sciences, primary education and others. The subject content changes, but the pedagogical-psychological logic remains close: motivation, knowledge, action, communication and reflection organized as one continuous process.

CONCLUSION

The pedagogical and psychological foundations of forming professional competence in future teachers can be defined as a system of conditions under which academic knowledge, practical activity and personal reflection are integrated during the years of university study. The article proposed five criteria of formation: motivational, cognitive, operational, communicative and reflective. These criteria can be used by

university teachers, methodologists and researchers to evaluate the level of professional competence more accurately.

The main methodological position of the article is that professional competence is not the sum of separate disciplines but an integral personal-professional quality. It is shaped not only by what the student learns, but also by how he or she experiences the profession, reflects on professional actions and develops as a personality. Higher pedagogical education becomes effective when the curriculum, teaching practice and psychological support are organized as one connected system. Further research may test the proposed model in university conditions through diagnostic surveys, observation rubrics, analysis of teaching practice portfolios and longitudinal study of graduates' first years in school.

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