

# Development Of Component Parts Of The Professional Competence Of The Future Specialist

Senior Lecturer R.A.Mavlonov,  
Trainee Teacher A.R.Mirzamakhmudov,  
Namangan Engineering Construction Institute

**Abstract.** The article covers the issues of development of the components of professional competence of the future specialist based on the researches of theorists involved in the implementation of the competent approach in higher education practice.

**Keywords.** intellectual competence, decision-making, knowledge, flexibility, efficiency, intellectual initiative, situational analysis, planning, prediction, self-control

Competence in the performance of professional tasks does not include only the knowledge acquired by the student during the study of various subjects of the educational program of the higher education institution. Setting the formation (development) of professional competence of the future specialist as the ultimate goal of education, it is necessary to take into account professional training and personal qualities such as physical, mental and spiritual health, education, general cultural literacy.

In recent years, many scientists, including V.G.Gorb, S.A.Tatyanenko, O.Melnichuk, A.Yakovleva and others, have developed various options of the expert model. The analysis of the literature showed that professional and personal qualities of the specialist are mandatory components in all developed models.

According to K.G.Batotsyrenova, the components of the specialist model should include the following features, in addition to the qualification requirements developed in the state educational standard:

- intellectual competence, that is, regular organization of knowledge, flexibility and efficiency in the analysis of situations that ensures the possibility of making effective decisions in professional activity;
- intellectual initiative is an inalienable property of a person, it is an organic unity of cognition and motivational aspirations, readiness to go beyond the established boundaries and develop externally stimulated intellectual activity;
- self-organization, which includes analyzing the situation, setting a task, planning and predicting the possible results and consequences of one's actions, self-monitoring and evaluating the effectiveness of decisions based on self-reflection;
- self-management, which means the ability to freely control one's intellectual activity, the ability to correct changes in oneself, to understand and use cultural self-correction mechanisms<sup>1</sup>.

The personal side of the expert's model includes revealing human potential, forming his motives and interests, nurturing needs in the process of purposeful interaction between the teacher and the student. This defines the following requirements for the expert model:

- understanding the nature and social importance of the specialty;
- compliance with moral and legal norms of society;
- the existence of axiological aspirations, that is, ideals, values, priorities, motives, etc.;
- to know the laws of interpersonal communication and be able to use them in practice;
- the ability to make decisions and be responsible for them;
- the presence of purely human, humanitarian motives - justice, sympathy, etc.;
- patriotism, healthy lifestyle, participation in community social life, productivity, etc.

Taking into account the professional competence of the future specialist, it is necessary to take into account the increasing impact of his activities on all areas of human life. This is facilitated by the general development of modern techniques and technologies, in particular, the computerization of the entire society

---

<sup>1</sup> Batotsyrenova K.G. Novye informatsionnye tehnologii kak uslovie intellektualnogo razvitiya lichnosti // Quality of education: concept, problemy otsenki, upravlenie. 4.1. Tezisy Vserossiyskoy nauchno methodicheskoy conference. - Novosibirsk, 1998. - S. 20 - 28.

and the threat of environmental man-made disasters.

Dividing these qualities into two blocks, he lists the following characteristics in the first block, "subject of modern culture":

- getting to know the achievements of world and national culture;
- high morality and social activity;
- striving for truth as an ideal and recognizing its priority;
- personal values and tolerance;
- legal knowledge and obedience to the law;
- active humanitarianism, striving for social justice;
- national and religious tolerance;
- patriotism;
- persistence;
- obligation.

In the second "specialist" block, he identifies general professional qualities:

- calculation of ecological imperative;
- evidence-based problem solving on a scientific basis;
- focus on high-tech, non-traditional solutions;
- effective use of information tools;
- development potential of the chosen field of activity;
- professional knowledge and activity in new development;
- readiness for research, design, production, organizational, management, educational and methodological activities.

The above qualities are universal. They should be typical of a graduate of any higher education institution. When developing the teaching technology of any subject specified in the specialty program, it is necessary to take into account the requirements imposed by the modern society on the graduate of the higher education institution.

In modern conditions, a competitive specialist must not only have the sum of knowledge, skills and abilities included in the curriculum of academic subjects, but even more - he must have the qualities necessary for professional activity that allow him to apply this knowledge in a timely manner in certain conditions. Therefore, it is logical that the entire technology of teaching the subjects in question should be developed taking into account the main goal - the development of the professional skills of the specialist, that is, the important professional qualities of the specialist.

One of the main goals of life - the realization of one's abilities in professional activity - is achieved by a person with the help of the education he receives. The process of becoming a highly qualified, competitive specialist begins from the first days and continues to study in higher education institutions and adapt the graduate to the first years of work after receiving a diploma of higher education.

According to B.A.Benediktov, S.B.Benediktov, who developed the theory of higher education in the 70s and 80s of the last century, the student's adaptation to the social environment in higher education institutions is completed by the second year, profession and specialization. By professional adaptation, they understand the student's adaptation to the intensive process of studying in higher education institutions, as well as the development of professional abilities (profession determination) in the process of acquiring knowledge, skills and abilities. According to these authors, early specialization is detrimental to learning <sup>2</sup>.

However, if two aspects are taken as criteria for the quality of specialist training: the time required for the graduate to adapt to the workplace corresponding to the chosen specialty and the number of relevant specialties that the graduate can master with very little effort and time, then in the period of "recognition" of the graduate as a specialist (both by himself and by the employees of the organization where he started his professional activity) can be achieved by moving the beginning of the formation of his professional competences to an earlier date, that is, with the beginning of his educational activity. Therefore, it is

---

<sup>2</sup>Benediktov B.A., Benediktov S.B. Psychology training and higher education . - Mn.: Vyssh , Shk ., 1983. - 224 p.

important to form the professional competence of a future specialist starting from the first semester of study at a higher education institution. For this, it is necessary to develop the content and methodology of teaching first and second year subjects in the logic of the competent approach.

The problem of the graduate's adaptation to the future workplace is related to the difference in requirements for the subject during training and in the work environment. There are conflicts between organizational forms and the content of educational, knowledge and professional activities. Thus, the result of educational activity is knowledge, skills, abilities and personal qualities of a person, and the result of professional activity is goods, new knowledge and education of people. The system of using knowledge in solving production problems contradicts the division of their acquisition by subjects and departments while studying at the university. The abstract subjects of educational activity expressed in texts, action programs and gesture systems are opposed to the real subject of professional activity, where knowledge is used by the system as a means of production in general. The individual nature of learning contradicts the collective nature of work.

Some of these contradictions in the educational process are solved by observing the interrelationship between subjects, finding professional content in the studied topics, introducing active forms of education, as well as by determining the educational goals, not in acquiring the knowledge, skills and competencies necessary for the professional activity of the future specialist.

Based on the research of theorists involved in the implementation of the competent approach in higher education practice, it is possible to identify three main classes of components of professional competence that are formed and improved in the process of training a future specialist in higher education institutions: basic, meta-technical and special competencies. Basic competence can be called a general, important competence for a specialist: analysis, systematization, finding professionally relevant information, solving educational problems of self-education, planning, modeling, using professional communication, etc. Meta-science (main) competence - for a specialist, it is necessary to determine the competence that is common to the subjects included in the curriculum of students of this specialty: social, legal, ecological, etc. The class of special (subject) competencies is a group of components of professional competence that forms a student as a multi-specialist in the course of teaching subjects.

allows creating conditions for the professional development of a specialist from the first days of training in higher education institutions :

- the student understands more clearly why the topic is being studied, therefore, the professional and cognitive motivation of teaching increases; the specialist's conceptual apparatus (vocabulary) is accumulated, which facilitates the study of other subjects;

- the student's ability to form his own educational system increases, in which each subject has its own task and place;

Using a competent approach to teaching, the teacher can involve the student in the learning and activity process of each topic in such a way that the authorship of the student's activity belongs to him. This is manifested in the responsible attitude towards the assigned person, initiative in educational situations, critical perception of educational tasks and the desire to creatively perform them.

In the process of teaching general professional subjects, the system of developing the professional competence of the future specialist, like any pedagogical system, ensures the interaction of students, teachers, educational goals, the content of general professional subjects, organizational forms of teaching and didactic processes.

The element that makes up the system in this pedagogical system is the educational goals determined by the social order of the society, more precisely, the characteristics and requirements of the modern professional activity of the specialist. Each element of the pedagogical system is a complex subsystem with its own structure of interrelated elements. A change in an element of a system causes a change in all other elements of the system. Thus, the replacement of traditional educational goals, subject areas with the components of the specialist's professional competence requires consideration of all other elements of the pedagogical system. When starting to design the technology of teaching general professional subjects to students, we should note that teaching technology as a process means interrelated pedagogical actions aimed at solving the following tasks:

- initial design of the educational process with subsequent implementation of this project;

- determination of educational goals and objective control of their achievement;
- integrity of the structure and content of the project;
- optimization of teaching methods, forms and tools;
- the presence of operational considerations that allow the implementation of the educational process.

The design of science teaching technology can be expressed as a procedure for describing the system of interrelated pedagogical processes and the methods of developing the components of the professional competence of the future specialist through the studied topic. The construction of this educational technology is related to the selection of educational material and the creation of the methodological base necessary for the implementation of the developed project.

**References:**

1. Мавлонов Р. А., Нуманова С. Э. ЭФФЕКТИВНОСТЬ СЕЙСМИЧЕСКОЙ ИЗОЛЯЦИИ В ЖЕЛЕЗОБЕТОННЫХ МНОГОЭТАЖНЫХ КАРКАСНЫХ ЗДАНИЯХ //НАУЧНЫЙ ЭЛЕКТРОННЫЙ ЖУРНАЛ «МАТРИЦА НАУЧНОГО ПОЗНАНИЯ». – С. 37.
2. Mavlonov R. A. EVALUATION OF THE INFLUENCE OF DIFFERENT TYPES OF FOUNDATIONS ON BUILDING STRUCTURES UNDER SEISMIC LOADING //НАУЧНЫЙ ЭЛЕКТРОННЫЙ ЖУРНАЛ «МАТРИЦА НАУЧНОГО ПОЗНАНИЯ». – С. 61.
3. Mavlonov R. A., Numanova S. E. Effectiveness of seismic base isolation in reinforced concrete multi-storey buildings //Journal of Tashkent Institute of Railway Engineers. – 2020. – Т. 16. – №. 4. – С. 100-105.
4. Холбоев З. Х., Мавлонов Р. А. Исследование напряженно-деформированного состояния резаксайской плотины с учетом физически нелинейных свойств грунтов //Science Time. – 2017. – №. 3 (39). – С. 464-468.
5. Mavlonov R. A., Vakkasov K. S. Influence of wind loading //Символ науки: международный научный журнал. – 2015. – №. 6. – С. 36-38.
6. Mavlonov R. A., Numanova S. E., Umarov I. I. Seismic insulation of the foundation //EPRA International Journal of Multidisciplinary Research (IJMR)-Peer Reviewed Journal. – 2020. – Т. 6. – №. 10.
7. Mavlonov R. A. Qurilish konstruksiyasi fanini fanlararo integratsion o'qitish asosida talabalarni kasbiy kompetentligini rivojlantirish metodikasi //Oriental renaissance: Innovative, educational, natural and social sciences. – 2021. – Т. 1. – №. 9. – С. 600-604.
8. Мавлонов Р. А. ПРОФЕССИОНАЛ ТАЪЛИМ ТИЗИМИДА ФАНЛАРАРО ИНТЕГРАЦИЯНИ АМАЛГА ОШИРИШНИНГ ДОЛЗАРБЛИГИ //Oriental renaissance: Innovative, educational, natural and social sciences. – 2022. – Т. 2. – №. 5-2. – С. 347-351.
9. Abdujabborovich M. R. THE IMPORTANCE OF APPLYING INTEGRATED APPROACHES IN PEDAGOGICAL THEORY AND PRACTICE //Scientific Impulse. – 2022. – Т. 1. – №. 2. – С. 325-328.
10. Abdujabborovich M. R. QURILISH KONSTRUKSIYASI FANINI FANLARARO INTEGRATSION O'QITISH ASOSIDA TALABALARNI KASBIY KOMPETENTLIGINI RIVOJLANTIRISH METODIKASI //Eurasian Journal of Academic Research. – 2021. – Т. 1. – №. 9. – С. 73-75.
11. Mavlonov R. Integration of Pedagogical Approaches and their Application in the Educational Process //CENTRAL ASIAN JOURNAL OF SOCIAL SCIENCES AND HISTORY. – 2022. – Т. 3. – №. 6. – С. 25-27.
12. No'Manova S. E. Ta'lim jarayonida talabalarning amaliy bilimlarini rivojlantirish metodikasi //Oriental renaissance: Innovative, educational, natural and social sciences. – 2021. – Т. 1. – №. 9. – С. 585-589.
13. No'Manova S. E. Qurilish materiallari, buyumlari va konstruksiyalarini ishlab chiqarish //Oriental renaissance: Innovative, educational, natural and social sciences. – 2021. – Т. 1. – №. 9. – С. 605-608.
14. Ergashboevna N. S. METHODOLOGY OF DEVELOPING STUDENTS'PRACTICAL KNOWLEDGE ON THE BASIS OF CLUSTER APPROACH IN THE PROCESS OF TEACHING BUILDING MATERIALS AND PRODUCTS //Scientific Impulse. – 2022. – Т. 1. –



№. 2. – С. 629-632.

15. Ergashboevna N. S. USE OF MULTIMEDIA TECHNOLOGIES IN THE PROCESS OF TEACHING BUILDING MATERIALS AND PRODUCTS //CENTRAL ASIAN JOURNAL OF THEORETICAL & APPLIED SCIENCES. – 2022. – Т. 3. – №. 6. – С. 126-129.
16. Ризаев Б. Ш., Мавлонов Р. А., Мартазаев А. Ш. Физико-механические свойства бетона в условиях сухого жаркого климата //Иновационная наука. – 2015. – №. 7-1. – С. 55-58.
17. Ризаев Б. Ш., Мавлонов Р. А., Нуманова С. Э. Деформации усадки и ползучести бетона в условиях сухого жаркого климата //Символ науки. – 2016. – №. 5-2. – С. 95-97.
18. Mavlonov R. A., Ergasheva N. E. Strengthening reinforced concrete members //Символ науки. – 2015. – №. 3. – С. 22-24.
19. Мавлонов Р. А., Ортиков И. А. Cold weather masonry construction //Материалы сборника международной НПК «Перспективы развития науки. – 2014. – С. 49-51.
20. Мавлонов Р. А., Ортиков И. А. Sound-insulating materials //Актуальные проблемы научной мысли. – 2014. – С. 31-33.
21. Ризаев Б. Ш., Мавлонов Р. А. Деформативные характеристики тяжелого бетона в условиях сухого жаркого климата //Вестник Науки и Творчества. – 2017. – №. 3 (15). – С. 114-118.
22. Juraevich R. S., Gofurjonovich C. O., Abdujabborovich M. R. Stretching curved wooden frame-type elements “Sinch” //European science review. – 2017. – №. 1-2. – С. 223-225.
23. Abdujabborovich M. R., Ugli N. N. R. Development and application of ultra high performance concrete //Иновационная наука. – 2016. – №. 5-2 (17). – С. 130-132.
24. Абдурахмонов С. Э., Мартазаев А. Ш., Мавлонов Р. А. Трещиностойкость железобетонных элементов при одностороннем воздействии воды и температуры //Символ науки. – 2016. – №. 1-2. – С. 14-16.
25. Numanova S. E. Energy-efficient modern constructions of external walls //Экономика и социум. – 2021. – №. 1-1. – С. 193-195.
26. Хамидов А. И., Нуманова С. Э., Жураев Д. П. У. Прочность бетона на основе безобжиговых щелочных вяжущих, твердеющего в условиях сухого и жаркого климата //Символ науки. – 2016. – №. 1-2. – С. 107-109.
27. Mamadov, B., Muminov, K., Cholponov, O., Nazarov, R., & Egamberdiev, A. Reduction of Destructive Processes in Concrete Concrete Processing in Dry-hot Climate Conditions. International Journal on Integrated Education, 3(12), 430-435.
28. Muminov, K. K., Cholponov, O., Mamadov, B. A., oglu Bakhtiyor, M., & Akramova, D. Physical Processes as a Result of Concrete Concrete in Dry-hot Climate Conditions. International Journal of Human Computing Studies, 3(2), 1-6.
29. Juraevich, R. S., Gofurjonovich, C. O., & Abdujabborovich, M. R. (2017). Stretching curved wooden frame-type elements “Sinch”. European science review, (1-2), 223-225.
30. Raximov, A. M., Alimov, X. L., To'xtaboev, A. A., Mamadov, B. A., & Mo'minov, K. K. (2021). Heat And Humidity Treatment Of Concrete In Hot Climates. International Journal of Progressive Sciences and Technologies, 24(1), 312-319.
31. Алимов Х.Л. Определения динамических характеристик свайных оснований сооружений. Автореферат на соисканий учёной степени к.т.н. Ташкент-1991 г. 20 с.
32. Бузруков З.С., Алимов Х.Л. Исследование совместной работы сооружений на свайных фундаментах при динамических воздействий. Научно-технический журнал ФерПИ. 2019. Том 23 спец. вып. №2. Стр. 50-57
33. Alimov X.L., Z.S.Buzrukov, M.M.Turgunpulatov. Dynamic characteristics of pile foundations of structures. E3S WEB Conf. Volime 264, 2021 International Scientific Confetence “Contruction Mechanics, Hudraulics and Water Resources Engineering”. (CONMECHYDRO – 2021). Published online 02 june 2021.
34. Юлдашев, Ш. С Юлдашев, Ш.С., Алимов Х.Л., Карабаева, М. У. (2016). Уменьшение уровня вибрации в грунтах с помощью виброзащитных экранов типа щелей. Узбекский журнал «Проблемы механики». № 3, 2016 г. Стр. 123-125
35. Raximov A. M. et al. Heat And Humidity Treatment Of Concrete In Hot Climates //International

- Journal of Progressive Sciences and Technologies. – 2021. – Т. 24. – №. 1. – С. 312-319.
36. Mardonov B., Latifovich A. H., Mirzoxid T. Experimental Studies of Buildings and Structures on Pile Foundations //Design Engineering. – 2021. – С. 9680-9685.
  37. Алимов Х. Л. ПОЙДЕВОР ОСТИ АСОС ЧЎКИШ ЖАРАЁНЛАРИНИНГ НАЗАРИЙ ТАДҚИҚИ ВА УЛАРИНИНГ БИНО ВА ИНШООТЛАР СЕЙСМИК ҲОЛАТИГА ТАЪСИРИНИ БАҲОЛАШ //PEDAGOG. – 2022. – Т. 5. – №. 6. – С. 220-228.
  38. Alimov K., Buzrukov Z., Turgunpulatov M. Dynamic characteristics of pilot boards of structures //E3S Web of Conferences. – EDP Sciences, 2021. – Т. 264. – С. 02053.
  39. Алимов Х. Л. и др. ЭНЕРГИЯ САМАРАДОРЛИККА ЭРИШИШ—ТАРАҚҚИЁТ КАФОЛАТИ //PEDAGOG. – 2022. – Т. 5. – №. 7. – С. 645-653.
  40. Алимов Х. Л. и др. МАЪРУЗА МАШҒУЛОТЛАРИНИ ЁРИТИШДА ИНТЕРФАОЛ УСУЛЛАРДАН ФОЙДАЛАНИШ //PEDAGOG. – 2022. – Т. 5. – №. 7. – С. 637-644.
  41. Алимов Х. Л., Турғунпўлатов М. М., Хошимжонов Э. Р. ЁҒОЧ КАРКАСЛИ БИНОЛАРИНИНГ ЧЕТКИ УСТУН ТУГУНЛАРИНИ КУЧАЙТИРИШ ВА МУСТАҲҚАМЛИГИНИ ОШИРИШ //O'ZBEKISTONDA FANLARARO INNOVATSIYALAR VA ILMIY TADQIQOTLAR JURNALI. – 2022. – Т. 1. – №. 9. – С. 363-365.
  42. Алимов Х. Л. Определения динамических характеристик свайных оснований сооружений. – 1991.
  43. Saidmamatov A. T. et al. Mathematical Model of the Optimization Problem Taking Into Account a Number of Factors //European Journal of Research Development and Sustainability. – 2021. – Т. 2. – №. 3. – С. 1-2.
  44. Saidmamatov A. T. et al. Analysis of Theory and Practice of Optimal Design of Construction. – 2023.
  45. Saidmamatov A. T. Theory of Optimal Design of Construction //Eurasian Journal of Engineering and Technology. – 2022. – Т. 11. – С. 43-48.
  46. Kholboev Z., Matkarimov P., Mirzamakhmudov A. Investigation of dynamic behavior and stress-strain state of soil dams taking into account physically Non-linear properties of soils //E3S Web of Conferences. – EDP Sciences, 2023. – Т. 452. – С. 02009.
  47. Холбоев З. Х., Мавлонов Р. А. Исследование напряженно-деформированного состояния резаксайской плотины с учетом физически нелинейных свойств грунтов //Science Time. – 2017. – №. 3 (39). – С. 464-468.
  48. Раззаков С. Ж., Холбоев З. Х., Косимов И. М. Определение динамических характеристик модели зданий, возведенных из малопрочных материалов. – 2020.
  49. Абдуллаева С. Н., Холбоев З. Х. Особенности Модульного Обучения В Условиях Пандемии Covid-19 //LBC 94.3 Т. – Т. 2. – С. 139.
  50. Khodievich K. Z. Environmental Problems In The Development Of The Master Plan Of Settlements (In The Case Of The City Of Pop, Namangan Region Of The Republic Of Uzbekistan) //Global Scientific Review. – 2022. – Т. 8. – С. 67-74.
  51. Холбоев З. Х. Аҳоли Пунктларини Бош Режасини Ишлаб Чиқишдаги Экологик Муаммолар //Gospodarka i Innowacje. – 2022. – Т. 28. – С. 142-149.
  52. Razzakov S. J., Xolboev Z. X., Juraev E. S. Investigation of the Stress-Strain State of Single-Story Residential Buildings and an Experimental Theoretical Approach to Determining the Physicomechanical Characteristics of Wall Materials //Solid State Technology. – 2020. – Т. 63. – №. 4. – С. 523-540.
  53. Фозилов О. Қ., Холбоев З. Х. ҚУМ-ШАҒАЛ КАРЬЕРИ СИФАТИДА ДАРЁ ЎЗАНИДАН ФОЙДАЛАНИШДАГИ ЭКОЛОГИК МУАММОЛАР //PEDAGOG. – 2022. – Т. 5. – №. 6. – С. 229-238.
  54. Холбоев З. ТАЛАБАЛАРДА КАСБИЙ КОМПЕТЕНЦИЯЛАРИНИ ШАКЛАНТИРИШ МУАММОЛАРИ //PEDAGOG. – 2022. – Т. 5. – №. 7. – С. 673-682.
  55. Холбоев З. Х. КАНАДАДА ҚУРИЛИШНИ ТАРТИБГА СОЛИШ МЕЪЁР ВА ҚОЙДАЛАРИ //PEDAGOG. – 2022. – Т. 5. – №. 7. – С. 683-692.

- 
56. Kholboev Z., Usmonkhuzhaev S. Influence of Soil Humidity on the Stress-Strain State of Earth Dam //Web of Synergy: International Interdisciplinary Research Journal. – 2023. – Т. 2. – №. 6. – С. 189-193.
  57. Жураев Д. П., Маткаримов П. Ж., Холбоев З. Х. СОБСТВЕННЫЕ КОЛЕБАНИЯ ПРОТЯЖЕННЫХ ГИДРОТЕХНИЧЕСКИХ СООРУЖЕНИЙ //PEDAGOG. – 2023. – Т. 6. – №. 11. – С. 1-5.
  58. Жураев Д. П., Маткаримов П. Ж., Холбоев З. Х. ОЦЕНКА ДИНАМИЧЕСКОГО ПОВЕДЕНИЯ ГРУНТОВЫХ ПЛОТИН С УЧЁТОМ ВОДОНАСЫЩЕННОСТЬ ГРУНТОВ //PRINCIPAL ISSUES OF SCIENTIFIC RESEARCH AND MODERN EDUCATION. – 2023. – Т. 2. – №. 10.
  59. Холбоев З. Х., Бахритдинов С. Ш., Улуғхўжаев С. М. РАСЧЕТ ФРАГМЕНТОВ КРУПНОПАНЕЛЬНЫХ ЗДАНИЙ И ИХ АНАЛИЗ //INTERNATIONAL SCIENTIFIC RESEARCH CONFERENCE. – 2023. – Т. 2. – №. 18. – С. 141-145.