

## METHOD OF DIAGNOSING THE FORMATION OF COMPENSATIONS IN FUTURE TEACHERS

**Qo'qonboeva Shaxlo Rafikjonovna**

Tashkent State Pedagogical University named after Nizami,

Independent researcher of the scientific research institute of Pedagogical Sciences of  
Uzbekistan named after T.N.Kari-Niyazi

### **Annotation**

The article discusses the issue of methods for diagnosing the formation of competencies in future physics teachers.

**Keywords:** teacher, professional competence, general competence, general professional competence, special competence, basic competence, laboratory.

It is carried out by diagnosing general (UK), general (UKK) and special (MK) competences, which must be formulated in order to assess the professional competence of the future physical science teacher. How to determine if professional compensations are formed? To what extent if it is formed?

There are no specific methods that were previously recommended to verify that 28 sets of competences indicated in general, General and special competences were formed in students. There are also no studies and conclusions as to which subjects of study can better formulate which compensations. The research mainly deals with the methodology and methods used to formulate future professional competence in the lessons [3.2.1].

It is known that it is possible to quantitatively assess the formation of science-related competences in students either in the usual 5-point system, or through rating, credits. But it can not be overestimated in the usual system that base compensations are formed in future teachers. For example, to quantify the communicative (interventional) competence related to the base competence, there is no definite dimension. It can be assessed only through qualitative observation, Conversation, special pedagogical and psychological tests.

Within the framework of the study, various methods of assessing general (UK), general (UK) and special (MK) competences were tested and the higher ones were distinguished from them. It was also found out what kind of compensation can be successfully formed in the training sessions. For example, let's look at laboratory sessions. Laboratory training can be divided into four stages.

1. Independent study of laboratory work materials. Bunda develops science-related, information work, organizational competencies.
2. Examination of the student's readiness to perform laboratory work by the teacher. Filling the gaps. Bunda develops communicative competence in the student.

3. Perform the experimental part of the laboratory work. Perform calculations. Preparation of the report of the laboratory work. Bunda student will develop science-related, communicative, organizational and information interpersonal competences.

4. Protection of the results of laboratory work: answering theoretical questions about laboratory work; discussion of the results of laboratory work with the teacher; study and correction of the causes of its occurrence if there is a shortage in the work. Bunda student will develop science-related, communicative and information-driven competences.

The formation of science-based compensation in laboratory work or physical practice is assessed by the following criteria:

№	Evaluation criteria	Ball
1.	Experience and measurement work is carried out in accordance with the safety techniques in the appropriate sequence, be able to use the necessary equipment independently, be able to accurately calculate the absolute, relative error of the results of the experiment and correctly draw conclusions.	5
2	If the experiment and measurement work are carried out in accordance with the safety rules in the appropriate sequence, be able to use the necessary equipment independently, be able to correctly calculate the absolute, relative error of the results of the experiment and make a giusian defect in the correct conclusion.	4
3	Experience and measurement work is carried out in accordance with the safety regulations in the appropriate sequence, if it is able to independently use the necessary equipment, if the absolute, relative error of the results of the experiment was calculated and allowed to draw conclusions correctly.	3
4	If the experiment and measurement work are not carried out in accordance with the safety regulations in the appropriate sequence, if it is not possible to independently use the necessary equipment, if it is possible to make a mistake in obtaining the result of the experiment and make a mistake in writing the conclusions.	2
5.	In the case of experiments and measurement work, if the corresponding sequence is not observed, then the experiment is tried to perform, but the result is an error.	1

The base compensation formed in the students can not be assessed in the usual 5-point system. In addition, usually the student's knowledge, skills and qualifications are not supported by the practice of putting a score in comparison with another student in the group (course). Because the base is associated with the individual characteristics of the schoolboy by the compensations. Someone is a sergap, someone is shy, someone is an organizer, someone can be a good performer. Accordingly, the evaluation of base compensation can be conducted in the manner of diagnosing the results of the student's personal development. It can be carried out in various forms (diagnostic studies, results of observation). In any case, such a diagnosis

should be made by the student, assessing the actions of his behavior, setting his own life position, choosing a culture, motivating, dictating the manifestation of his personal goals. Accordingly, it will be necessary to teach the students how to evaluate themselves and record their results. Bunda they should be able to do it basically independently, under the advice of the teacher and under the supervision of the elected.

The three levels (lower "q", middle "o" and upper "yu") of the formation of base compensations in students are assessed on the basis of the following criteria.

Lower level (l)	This course has the base compensation that the student needs to be formed. Bunda will need the assistance that the student will receive from outside(teacher, co-student, etc.) during the period of his / her activity.
Medium level (m)	This course has the necessary compensations to be formed in the student. Bunda student receives minimal support from outside(teacher, student, etc.) during his / her career and is able to help others at the level of opportunity.
High level (h)	This course has the necessary compensations to be formed in the student. Bunda does not need the help that the student will be given from outside(teacher, co-worker, etc.) during his / her career, and is able to help others in his / her joint activities.

The methods of diagnosis of concomitant diseases, which are formed in future teachers of physics, are presented in the table below.

№	Competencies to be formed	Diagnostic method
1	Mastering the definition of concepts such as physical phenomenon, physical object, physical size, physical instrument, scientific fact (MMK - 1).	Tests, physical dictation
2	To know the basics of the theory and laws of physics, to conduct their scientific and methodological analysis, to determine the relationship between theory and practice (MMK-2).	Tests
3	Ability to draw diagrams or codes to explain physical texts, draw schematic diagrams of experimental devices, create graphs for problems, select the official text of the physical text (MMK-3).	Written work, competency-oriented assignments
4	Analysis of qualitative and quantitative laws, their representation, comparison and evaluation in tabular and graphical form (MMK-4).	Tests and case assignments
5	Defining the purpose of experimental, research, or design work; make a plan for its implementation through drawings and diagrams (MEK -1).	Presentation
6	Reasonable selection of tools and materials needed for the experiment; predicting the probable outcome of the work (MEK -2).	Laboratory work report
7	Consider reducing their impact in cases where the accuracy of the experimental results may be reduced (MEK-3).	Laboratory work report
8	Evaluate the results and draw conclusions about the relationship between the theory of physics and the experiment (MEK-4).	Laboratory work report
9	Implementation of a competency-based approach, focusing the teaching of physics on meta-subject education, gaining experience in the	Polls

	implementation of the ideas of humanization of physical education (MUK-1).	
10	Identify elements of the content of teaching physics, taking into account the age, abilities and personal qualities and cognitive interests of students in setting learning goals and planning ways to achieve them (MUK-2).	Questionnaire, observation in pedagogical practice, interview
11	Selection of active and interactive teaching methods in accordance with the normative requirements of the state educational standard, use of innovative forms and means of teaching (MUK-3).	Questionnaire, observation in pedagogical practice, interview
12	Organization of independent creative, research activities of students in physics classes in accordance with the methodology of scientific knowledge (MUK-4).	Questionnaire, observation in pedagogical practice, interview
13	Assessment of students' achievement in science, personal and meta-subject learning (MUK-5).	Report on pedagogical practice, final conference

The above diagnostic methods provided an opportunity to quantify the professional competence of future physics teachers. These methods are currently being developed and refined.

## REFERENCES

1. Ravshanbek, J. (2022). CREDIT-MODULE SYSTEM, ITS BASIC PRINCIPLES AND FEATURES. *Yosh Tadqiqotchi Jurnali*, 1(4), 304-309.
2. O'G'Li, J. R. M. (2022). METHODS OF ORGANIZING INDEPENDENT STUDY OF STUDENTS IN THE CREDIT-MODULE SYSTEM. *Ta'lim fidoyilari*, 25(5), 93-97.
3. Inomovna, K. N. (2022). Principles of Educational Psychology and Pedagogy. *Spanish Journal of Innovation and Integrity*, 5, 191-193.
4. Botirova, M., & Seytsaliyeva, I. (2021). Formation of the Ability of Primary School Students to Evaluate and Diagnose the Future Professional Activity of the Child. *European Journal of Research Development and Sustainability*, 2(4), 68-70.
5. Kaxramon, K. (2022). XIX ASR OXIRI VA XX ASR BOSHLARIDA TURKISTONDA XALQ SUDYA (QOZILAR) FAOLIYATIGA KIRITILGAN O'ZGARISHLAR. *Yosh Tadqiqotchi Jurnali*, 1(5), 240-245.
6. Скрипко З.А., Артемова Н.Д. Методика и диагностика профессиональной компетенции студентов педвуза на лабораторных работах по физике. *Вестник ТГПУ (TSPU Bulletin)*. 2014.6(147). 38 -42 с.
7. Sh.R.Qo'qonboyeva. On the diagnosis of the level of professional training of future physical teachers. *Web of scientist: International scientific research journal*. Volume 3, Issue3, Mar., 2022., 85-90.
8. Sh.R.Qo'qonboyeva, *Pedagogik amaliyot jarayonida bo'lajak fizika o'qituvchisi kompetentligini shakllantirish masalasi*. *Academic research in educational sciences*, Volume 2(CSPI conference 3), 108-112. (2021).