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FORMATION OF METHODOLOGICAL COMPETENCIES OF FUTURE CHEMISTRY TEACHERS TERMS, CONDITIONS AND FACTORS

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ABSTRACT

In the article, it is emphasized that the level of knowledge, ability and methodical competence of the teacher plays an important role in improving the quality of education in general education schools. The experiment conducted on the formation of methodical competence of future chemistry teachers and the conditions, conditions and factors of formation of methodical competence as a result of it are described in detail.

KEYWORDS

Competence, methodical competence, methodical competence, conditions, conditions, factors of formation of methodical competence.

INTRODUCTION

Wide-scale practical work is being carried out in our country to raise the general secondary education system to a new level in terms of quality, to educate an all-around mature and well-rounded person. In this regard, to fundamentally improve the quality of education in chemistry and biology, to introduce a

completely new system of teaching these subjects in secondary schools, to provide educational institutions with modern laboratories, textbooks and other educational equipment, in order to attract qualified teachers-coaches to these directions, train personnel and establish close communication and cooperation

between education, science and production sectors in the use of scientific results. Decision PQ-4805 of the President of the Republic of Uzbekistan dated August 12, 2020 "On measures to increase the quality of continuous education and the effectiveness of science in the fields of chemistry and biology" is programmed for this field [1].

It is well known to all of us that one of the most important factors of ensuring the quality of education in general education schools is related to the level of knowledge, ability and methodical competence of subject teachers. The future perspective of educational development is closely related to the issue of methodological competency of educators. In this regard, it is important to form the methodological competency of future teachers in higher education institutions. Because today's student studying at the Higher Education Institution will be a teacher in educational institutions tomorrow as the main engine in educating the younger generation.

In modern pedagogical literature, the concept of methodical competence is interpreted differently. Including

- ❖ the knowledge of the pedagogue in the field of various methods of teaching, didactic methods, methods, and the ability to use them in the educational process. Knowledge of the psychological mechanisms of acquiring knowledge and skills in this process (Pechnikov, A.N., Prenzov, A.V.);

- ❖ an integrative, multi-level, professionally significant description of the teacher's personality, expression of a unified approach to the

teaching profession, acquiring knowledge and skills (Syasina T.V.);

- ❖ an integral feature of the teacher's business, personal and moral qualities, reflecting the systematic level of methodical activity; methodological and methodical knowledge, skills, experience, motivation, ability and readiness to fully express creative self in methodological and pedagogical activity in general (Zagrivnaya T.A.) [2].

The teacher's analysis of research on this issue allows to draw a conclusion about methodological competence. Methodological competence is one of the types of pedagogical competence of a teacher, it means the unity of his theoretical and practical preparation for teaching and educating students, it is based on the sum of general pedagogical and methodical knowledge, skills, experience and personal qualities.

Methodical competence is formed in the process of preparing the future chemistry teacher for professional activity. From the point of view of the competence approach, we paid special attention to the conditions, conditions and factors for the formation of methodical competence in future chemistry teachers.

In the course of our research, experimental tests were conducted with future chemistry teachers - students of the 4th year during the 2023-2024 academic year. At the beginning of the experiment, 2 groups were selected as control and 2 groups as experimental groups. At the beginning of the experiment, a survey was conducted on these questions: what do you understand by competence, methodical competence, methodical competence from all groups? What do you

think are the conditions, conditions, and factors of forming methodical competence? The analysis revealed that the positive opinions of students in the experimental and control groups did not differ from each other (27% in the control group and 29% in the experimental group).

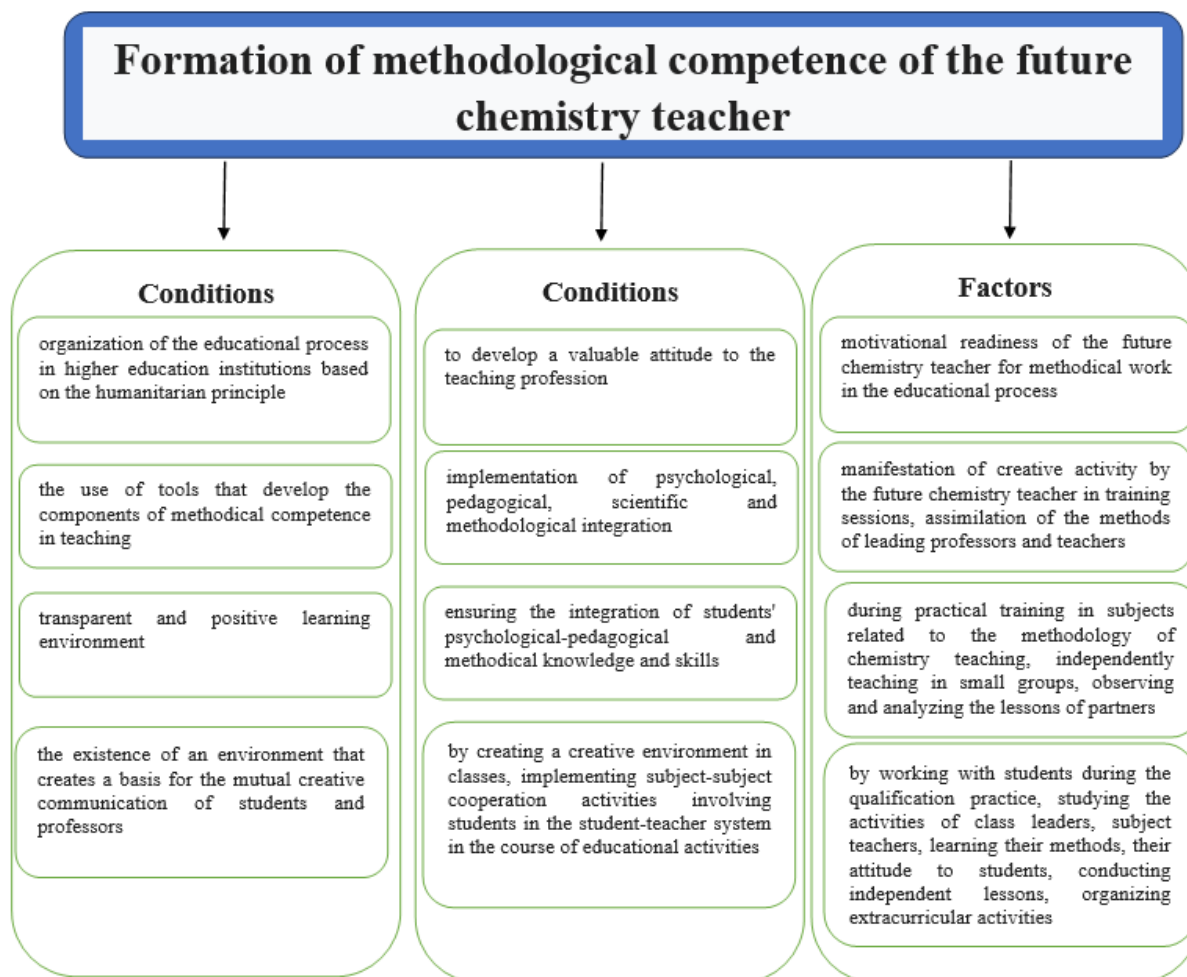
During trial work, in addition to providing them with theoretical knowledge of methodical competence during practical training in the subjects "Private issues of chemistry teaching methodology" (12 hours), "Extracurricular activities" (8 hours), the technology of "Cooperative teaching" "Cooperative learning in small groups" In the practical training part of the 12-hour course, using the "Qiyymyz" method, explanations were given on the methodology of teaching selected topics in the school chemistry course. Before starting the practical training, small groups of 4 students were formed among the students of the group. The given topic was divided into 4 parts, and each student was given a task to prepare for the relevant part, direction and instructions in this regard.

On the designated days, small groups taught the rest of the group students about the topic assigned to them. The rest of the small groups in the group were given assignments on general pedagogical analysis of the activity of the group. Including, for example, the first group: the achievements of the small group that attended the lesson, the second group: the shortcomings, the third group: evaluation, and the fourth group: making suggestions. During the lesson, the tasks of the groups changed. The lessons conducted during each session were initially analyzed by the students in the above order, after summarizing their opinions, the teacher conducted a final general analysis and evaluation process. In this regard, special attention was paid to the formation of methodological

competence of future chemistry teachers. In particular, the entrance of the future chemistry teacher, 4th year student to the auditorium, greeting with the group, attendance, behavior, dress code, fluency of speech, communication, working with the audience, impact on the audience, lesson topics and plans having chosen the methods and tools of the lesson suitable for the topic, covering the content correctly based on the purpose, the method of teaching, using the lesson time productively and effectively, connecting the new material with practical life and making it comprehensible and along with the ability to deliver in a simple, fluent manner, the scientific, methodical and psychological mistakes made during the lesson were analyzed, and recommendations were made to avoid such mistakes in the future. During the course of the lesson and during the analysis of the previous lessons of their partners, the students said that their methodical competence has significantly increased, that these practical exercises were very useful, and that the obtained methodical knowledge and recommendations were also useful during the qualification practice. they emphasized that their knowledge, skills and qualifications in this regard are getting stronger.

This situation confirmed the effectiveness of the conducted experimental tests, that in the tests conducted with them at the end of the experiment, the level of knowledge of the students in the experimental test groups was 81%, while in the control group this indicator remained almost unchanged (29%).

Based on the above, we found it appropriate to mention the following as conditions, conditions and factors for the formation of methodical competence in future chemistry teachers.



After all, the quality and efficiency of education depends on the teacher's methodical competence, pedagogical skills, continuous systematic work on himself, and communicative interaction with students.

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