Tools for the formation and evaluation of the competencies of future teachers in the development of the discipline «Methods of teaching chemistry»

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Teaching a student of the pedagogical direction of training involves arming him with a large set of competencies. We are convinced that when mastering the discipline "Methods of teaching Chemistry", subject-methodical competencies are priority. They include chemical knowledge and skills, as well as the ability to plan and organize the process of teaching chemistry in accordance with regulatory requirements and educational prospects.

In addition to the formation of students set of competencies, the task of evaluating the effectiveness of the educational process arises. As a part of the development of methods of teaching subjects, the most important tool for the formation and evaluation of students competencies are tasks for the creation of educational and methodological products [1]. Systematic work on such tasks, followed by demonstration, discussion and correction of the results, is the essence of the formative assessment.

One of the approaches to creating a bank of tasks for the development of educational and methodological products can serve as a "didactic" approach, which is based on the isolation of step-by-step actions of a chemistry teacher in the preparation and conduct of different types of lessons. Tasks vary in scale and complexity. For example, before students receive a task to develop a summary of a combined lesson, they are asked to: analyze the content of the chemistry lesson and formulate its goals; develop options for a combined survey when checking homework; give examples of tasks for the formation of sign-symbolic universal educational actions among schoolchildren; describe various forms of combining a word with a demonstration experiment, etc. Generalized criteria for evaluating the created methodological products are: their quality, degree of independence and the time of presentation. The quality criteria for each type of methodological products are different.

References

[1] E.V. Mirenkova Creating educational-methodical products as means of formation and assessment of competencies of future teachers (2017)