FORMATIVE ASPECTS OF THE CHEMICAL CALCULATION PROBLEMS FROM THE PERSPECTIVE OF FOCUSING ON STUDENTS' INTERESTS

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Application of more active student-centered methodology involves students in the didactic process and contributes to the formation of fundamental skills to learn, to work in groups and to solve problems. In this paper we tried to analyze several formative aspects of calculation problems in chemistry. Student-centered methods involve students into the processes of evaluation of the effectiveness of their learning and setting goals for further development. These advantages of student-centered methods help to prepare individuals for both a smoother transition to future employment as well as for lifelong learning.

We conducted a didactic experiment on the students of the bilingual classes X-A, X-B, XI-A and XI-B from the lyceum "Gh. Asachi ", Chișinău. Thus in the X-A class Pearson square method was applied for calculations on the basis of solutions composition and method of diagonals was used for equalizing of the redox reactions. The X-B class worked as usual.

Problematic education can be easily implemented using calculation problems. The process of solving these problems represents an ascent from the abstract to the concrete. Thus, the solving of problem situations was used in the XI-A class and traditional calculation problems were used in the X-B class.

As a result of the realized formative experiment in was found that:

- the correct and frequent algorithmization generates students' competence of learning to learn, which eventually results in self-management and leads to self-control and self-affirmation;
- problematic method applied in the didactic process leads to the formation of student's ability to process information and use the knowledge in unconventional situations of life;
- the systematic use of algorithmic schemes and problematic method contributes to the formation of students' specific chemistry skills and also contributes to the improvement of their understanding of fundamentals of chemistry and development of their creativity;
- this experiment had a significant impact on some of these students. Their interest for chemistry and chemical specialties has increased.