Developing cognitive skills in the course of mathematics

Alla Stolyarevska, International Solomon University, Ukraine

The contents of pedagogical activity in the contemporary education process differ from traditional one. The main changes in the pedagogical activity are the following. Building course in mathematics has become more complicated because of necessity to take into account the new technological basis. This requires special knowledge and methods of pedagogical work. The teaching material is now mainly in the open access, and this aspect requires more control on the quality of these materials. That’s why it is necessary to strengthen the functions of students’ assistant, to help students in the organization of individual learning process, to provide the feedback from teacher to every student.

The main parts of the course are the following. The teacher has to define the goal of the course, the way to achieve this goal, the method of material representation, the training methods, the types of problems and the questions for discussion, the ways of discussion organizing, the mode of communication.

One of the productive means in the course creation is to define it in terms describing students’ behavior. At this stage we can use the Bloom's Taxonomy, which provides a structured presentation of human cognition from low-level thought processes like simple recall to higher-order thinking skills like synthesis and evaluation.