FORMING COGNITIVE SCHEMES IS ONE OF THE CONDITIONS OF DEVELOPING STUDENTS' INTELLECTUAL ABILITIES

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Educational process is the system of constructing links between teaching and learning. Its contents, methods, skills and techniques should be, first of all, directed to exposure and usage of every student's experience. M.A.Kholodnaya (Kholodnaya, 1997) singles out such forms of intellectual experience as cognitive, metacognitive and intentional. Cognitive experience includes such mental structures as the ways of information coding, cognitive schemes, semantic structures and, finally, conceptual structures. Cognitive schemes are responsible for receiving, collecting and transforming information. Here arises a question: "What are the conditions which help students to form cognitive schemes in process of teaching?"

In the course of long experiment we have pointed out the types of school texts, which help forming a repertoire of students' cognitive schemes. First of all, we pointed out some types of cognitive schemes. These are, for example, "focus-examples" (Bruner, 1971). Focus-examples are schematized images, which are used as the starting point by a person who solves this or that problem. To create generic focus-examples is necessary to have a set of specific focus-examples, which are used to form a concept.

Another variety of cognitive schemes is a frame (Minsky, 1979). On the one hand, to create frames is possible with the help of texts, which form students' ability to perform the procedure of identifying objects, phenomena, properties and links between them. On the other hand, there should be school texts, which could develop students' flexibility of thinking and ability to reconstruct a frame.

Special attention in our research was paid to forming controlling cognitive schemes-plans of actions in a problem situation (Pascal Leon, 1970, 1987). Here we pointed out the types of texts which help students to construct plans of their activity, their fixation, pointing out separate elements of these plans, correlation of different plans and so on. It is very important for a teacher to be well aware of the activity, which is connected with forming cognitive schemes: if the familiar cognitive scheme becomes stronger, larger and reaches or a new cognitive scheme is created.

Success of students' school activity depends on the repertoire of student's cognitive schemes and how a student can analyze them in a certain situation.

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