

*Materials of Conferences***COMPREHENSION OF EDUCATIONAL INFORMATION AS A PROCESS OF THE SELF-ORGANIZATION**

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The modern world is more and more sated with new information. In this regard, the problem of modern education consists not so much in giving new knowledge to students in schools and Universities, but mostly in teaching them how to work with the information they receive.

Within the concept of self-organization process comprehension of new information can be presented as formation of an order from the chaos with transition through a bifurcation point. During the process, the consciousness of the pupil will work as the self-organizing system.

Let us present the cumulative experience of the pupil as a unit consisting of separate blocks of information. The relative number of communicative links between information blocks defines its integrity and stability. The newly received information enters student's consciousness and it has to fit into the available structure. The quicker and more stoutly the fitting in process of information is going, the stronger the process of assimilation of data will be. Such methodological approach works when the studying material can be coordinated with the previous material, which is available in consciousness.

If we begin studying of essentially new subject, which material is difficult to coordinate with the personal experience begins (for example, axiomatic in Geometry, symbolism of chemical elements, etc.) For description of this, process the model of formation of self-organizing system. Separate fragments of material are perceived as chaos – the system accepts information to a certain limit then there comes the moment when further absorption of information is impossible. The following step is the formation of the new information block, through the uniting of the separate elements chaotic information into the parameters of the order – this process reminds of the “creating an archive” of information, and the whole new block is perceived as system of knowledge with certain parameters of an order. The student who has minimum of facts memorized, can

“extend” all information from the new block as the links of a chain. After such “processing” it will be much easier to enter, the new block of information into the available structure using the methodology stated above.

It is necessary to consider that the consciousness of the person is capable of generating the new information and to create essentially new blocks, which will help to comprehend the incoming of material and to accelerate process of structuring system of knowledge.

From all that was mentioned before, there is a possibility to interpret all well-known systems and methods of education a little differently. Firstly, while explaining the new material it is necessary to place emphases on the questions which are closer connected with the previous material and are the most important in perception of new information (to allocate parameters of an order of system). Secondly, the new material should be given with a large number of examples, coming from different approaches, it is important to have the maximum number of possible associations, according to the different experience of each student (to provide the choice between the information).

Thirdly, to give the student a freedom of choice to establish of interrelations of the new and “old” available information – not to force them simply to retell the textbook or the abstract of the lecture, and to give them a chance to express the opinion on the= studied question. That means to understand the material at the creative level. At such approach, everyone will have their own structure of knowledge, however the basic elements of any of them will be same – namely, parameters of an order of the system, from which the new block of knowledge is formed. Although, the interrelations between the separate blocks are going to be different for each student (nonlinearity in development of the self-organizing systems).

That way, the methodological concept that was described above, gives the chance to look at the educational process and well-known didactic methods and receptions in a new light.

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