INTERNATIONAL JOURNAL OF HUMAN COMPUTING STUDIES

https://journals.researchparks.org/index.php/IJHCS e-ISSN: 2615-8159 | p-ISSN: 2615-1898

Volume: 05 Issue: 03 | Mar 2023

Model for the Development of Independent Cognitive Activity in Primary School Students through Self-Assessment

Makhmudova Nodira Alisherovna

Independent researcher at Namangan State University

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Abstract: this article provides an idea of the importance of independent work or creative assignments in educational activities in order to improve the model of development of independent cognitive activity in students through self-assessment, modeling, the process of self-assessment, as well as in the methods of self-assessment.

Keywords: self-assessment, model, modeling, independent work, creative assignment, lesson, conscious cognitive activity, component.

Introduction: Self-assessment is of great importance in making the student an active subject in learning. One of the main pedagogical activities of a teacher in teaching is managing the students' cognitive activity. Effective organization of this activity allows students to plan educational activities, increase their motivation, clarify educational goals, and successfully implement control and evaluation.

Before detailing the model and its components developed within the framework of research, it is appropriate to clarify the concept of model and modeling. The analysis of scientific literature on the problem studied in the research work shows that the concept of model is very widely used in the field of modern science.

Literature analysis and methods: according to I.M. Gorbachenko, the model is, first of all, a special description of a certain problem, situation, which allows to use the formal-logical apparatus of mathematics in the process of its analysis. In turn, under the concept of modeling, the researcher means the special study of objects of knowledge by means of something by analyzing other auxiliary objects [3; 224 p.].

According to I.B. Novik, N.M. Mamedov, a model is a subject, symbolic or hypothetical system that reflects or imitates the internal structure or functioning principles, specific features, signs and descriptions of the research object (the original) [5; p. 180]. According to M. L. Fedyunin, the model is a unique object, which is created to receive and store information in the logical form of the image described on the basis of specific tools. In addition, according to the author, a model can be a material object that reflects the main, defined characteristics, description and connections of the original object [6; p. 160]. M.L.Borgoyakova stated that the modeling method is a complex process of creating, analyzing and studying object models, that is, systems, constructions, processes. At the same time, modeling has its own structure, which the author divides into the following four stages:

- defining the task;
- selection and creation of models for the purpose of studying the original;
- studying the model;
- transferring the information obtained as a result of studying the original model [2; 98-105 p.].

V.B.Kudryavtsev, P.A.Aliseychik, K.Vashik, D.Knap, A.S.Strogalov, S.G.Chekhovtsov describe the methods of their reconstruction, for example, the means of building the model and the description of the modeled

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object, the characteristics of the objects in the environment classifying them based on their characteristics and grouping them into two large groups:

- material (physical);
- ideal (marked).

Mathematical modeling stands out in character modeling. Under physical modeling, it is understood that the model and the original one have the same physical characteristics, and they differ only in the quantitative parameters of their parameters [4; 228 p.].

Research methodology: The prepared model (see Figure 1) is a system of interrelated components, including the main goal, relevant tasks, content and expected results, based on previously selected methodological approaches. In the preparation of the model, the characteristics of the state educational standards, curriculum and programs of primary education were considered. In addition, it is desirable to consider in more detail the structural aspects of the model for the development of independent cognitive activity through self-assessment even in the context of the use of innovative technologies of primary education.

Thus, the purpose of the model was to form a social order. The content of the social order is approved by the Resolution No. 187 of the Cabinet of Ministers of the Republic of Uzbekistan dated April 6, 2017, "On approval of state educational standards of general secondary and secondary special, vocational education", "State standards of general secondary education" based on Chapter 4, 13 and in accordance with "The qualification requirements of general secondary education specified in the state educational standard of general secondary education, the mandatory minimum of the content of education in general education subjects and the requirements for the final goals, the volume of training loads and the quality of education." Based on this, the goal of the model was defined as "to develop independent cognitive activity in elementary school students through self-assessment, to ensure the achievement of the mandatory minimum and final goals of the educational content."

The content of the model is determined by the specially prepared methodological guide "Technology of developing independent cognitive activity through self-assessment in primary school students". The important aspects of the implementation of its content are as follows:

1. Self-assessment activities of elementary school students.
2. Pedagogical-psychological necessity of increasing the activity of independent knowledge in elementary school students.
3. The structural structure of the development of independent cognitive activity through self-assessment in elementary school students.
4. Use of interactive teaching methods in the development of independent cognitive activity through self-assessment in elementary school students.
5. Innovations aimed at the development of independent cognitive activity in elementary school students.

The "Content" blog of the model consists of the "Self-Assessment" and "Independent Cognitive Activity" components. The "Self-assessment" component includes assessment functions, self-assessment methods and its effective factors. "Independent cognitive activity" component, in turn, consists of 4 subcomponents. These subcomponents include:

independence of each student during the lesson;

providing students with emotional connection to their activities;

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motivating the student's independent cognitive activity;

presence of independent work or creative tasks in the lesson.

In the sub-component "Evaluative functions", the performance of such functions as qualification, selection, legitimacy, information and socialization is mentioned. In the model, it is expressed that the assessment functions are interconnected with the achievement of conscious cognitive activity and independence of each student during the lesson. The “Self-Assessment Component” includes the Self-Assessment Techniques subcomponent. As methods of self-evaluation, the following variable authoring methods are mentioned: self-evaluation sheet, learning map, "Blitz lamp" method, self-evaluation, evaluation dialogue, self-evaluation, study diary, standard method of self-evaluation.

In order to improve the process of self-assessment, recommendations are offered on the introduction of authorial variable methods.

Self-assessment methods aim to direct the student to provide emotional connection to his own work and the work of others. Therefore, the model describes that these two components are interrelated.

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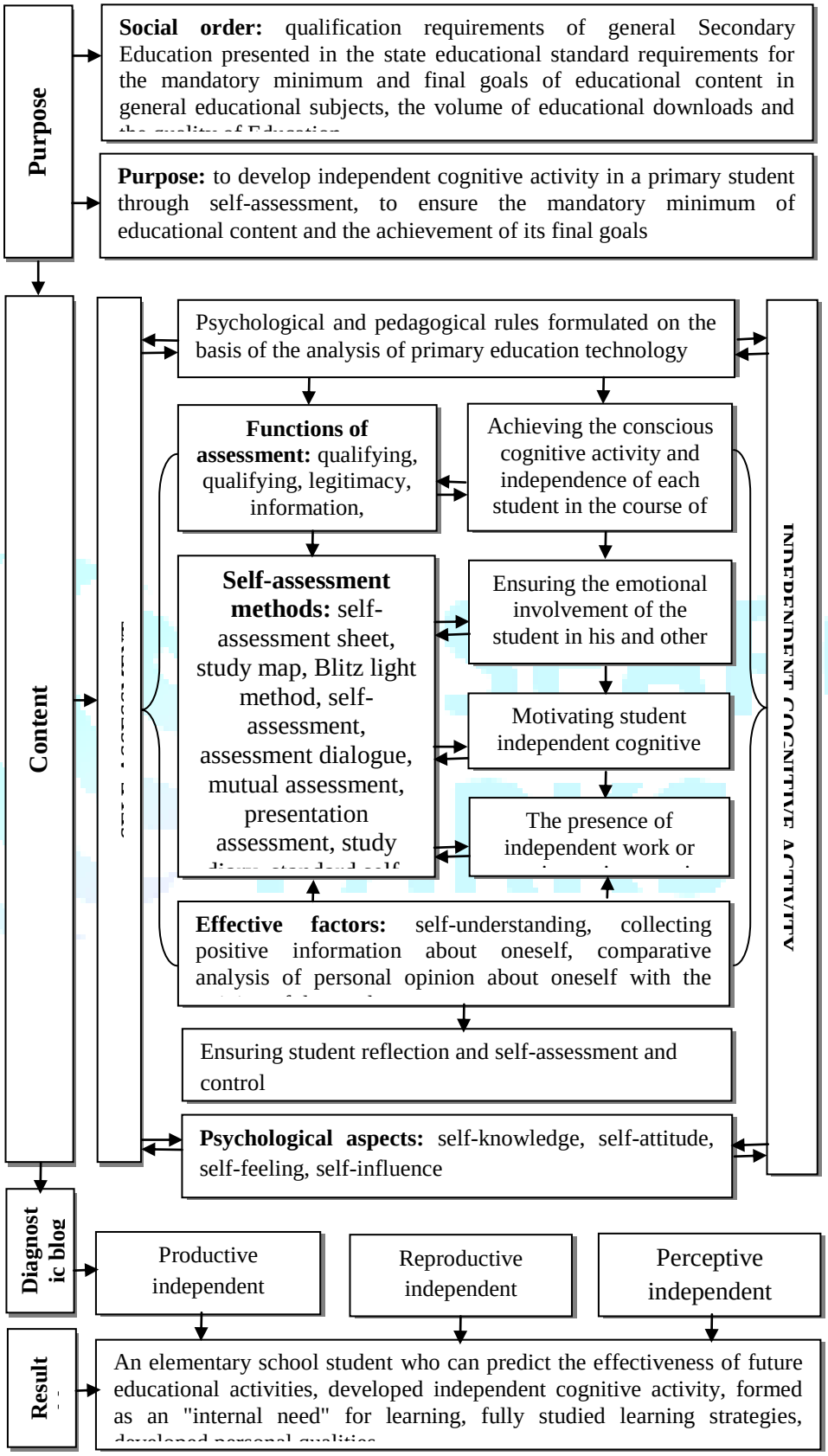

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Figure 1. A model for the development of independent cognitive activity in elementary school students through self-assessment.

Self-assessment methods also motivate the student's independent cognitive activity. Through the methods of self-assessment, the student's needs are formed, he has the opportunity to systematically analyze his work. Needs increase the student's interest in learning and motivate independent cognitive activity. Self-assessment methods require independent work or creative assignments in the training sessions. Through independent work or creative tasks, students can be activated and guided to acquire new knowledge. It requires the presence of independent work or creative tasks to assess various aspects of students' independent cognitive activity.

Effective factors are mentioned as a common subcomponent of self-assessment and independent cognitive activity components. The student's self-understanding, collecting positive information about himself, comparative analysis of his personal opinion with the teacher's opinion are listed as effective factors. Regular self-evaluation ensures that the student's educational activities are success-oriented, prevents "doubts" about his success, educates the purposeful use of his capabilities, and increases self-confidence. As another sub-component of the components of self-assessment and independent cognitive activity, "psychological aspects" were mentioned. The development of independent cognitive activity in the student through self-assessment simultaneously performs an important positive effect function in them, such as self-knowledge, self-attitude, self-feeling and self-influence. Through self-assessment, the student simultaneously acts as "evaluator" and "evaluator", "object" and "subject". It is reflected in the model that the psychological aspects of the assessment are closely related to the components of self-assessment and independent cognitive activity.

Analysis and results: The "Diagnosis" blog of the model shows the division of independent cognitive activity into 3 classifications by self-assessment of elementary school students. If self-assessment allows to assess the real state of independent cognitive activity of some students (perceptive independent cognitive activity), it allows some students to reactivate their activity, define new learning strategies (reproductive independent cognitive activity). In another group of students, through self-evaluation, not only reactivation, but also creative activity, motivation to learn with new thoughts and ideas (productive independent cognitive activity) develops.

The "Diagnosis" blog defines the content of the model as an indicator of the "Result" blog. In the "result" blog of the model, it is mentioned that he is a primary school student who can predict the effectiveness of future educational activities, has developed independent cognitive activity, has developed learning as an "internal need", has fully learned the learning strategy, and has developed personal qualities.

Conclusion: In general, the analysis of scientific literature on the studied problem shows that it is necessary to develop independent cognitive activity of primary school students through self-assessment from the first school period. One of the most important functions of assessment is to regularly motivate the student to be active, to work on himself, to think independently, to achieve high efficiency.

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