

THEORETICAL APPROACH OF CRITICAL THINKING IN EDUCATION

Alina Felicia ROMAN, Ph.D.,

Aurel Vlaicu University of Arad

romanalinafelicia@yahoo.com

Carina NĂDĂBAN, Ph.D., cnd.,

Babes Bolyai University from Cluj Napoca

carina.mihaela1996@gmail.com

Abstract: *We have chosen this research topic because we believe that critical thinking has a key role in the formation and development of self-assessment capacity. Critical thinking takes information, evaluates it and processes it so that it can be understood and form its own point of view. In order to develop this type of thinking for young school-age students, it is necessary to approach the activities specific to this age, activities that are understandable to students, that will arouse their interest. The student who forms his critical thinking will more easily understand mathematical problems, understand a text and analyze it without having to resort to mechanical memory. Because through critical thinking new information and knowledge is accumulated, voluntarily, thus, an own opinion will be formed. If the student comes to have his own opinion which he supports through valid arguments, he will become able to decide for himself.*

Key words: *critical thinking; primary school; benefits; decision.*

Introduction

Critical thinking is based on self-analysis and self-knowledge, and these are two essential components in the formation and development of self-assessment. The role of self-assessment is to communicate to the student their own abilities and knowledge through self-discovery. The student, once placed

in front of his own successes, will understand what his strengths are, but also where more work is needed for success. Thus, the use of critical thinking methods will help to develop the capacity for self-assessment.

Critical thinking has been used (albeit in a different form) since antiquity. Socrates, for example, is the one who encouraged the importance of asking questions before accepting a proposed idea. In the Middle Ages and the Renaissance, the concept of critical thinking is found in perceptions of religion, art, society and human values. Roger Bacon explains the importance of studying the world in a systematic approach to critical thinking.

Didactic methods with a role in the development of critical thinking must be introduced in the teaching activity. Teaching is the activity through which the learning process is organized and conducted. It is based on didactic communication, through which the relationship between teacher and student is achieved. Teaching is done with the help of teaching strategies aimed at achieving teaching objectives. Through teaching, the teacher aims to form specific skills, from the curriculum, to students. The teacher has the role of designer of the learning experiences, as well as the role of leader of the instructive-educational process.

Theoretical foundation

It is necessary to deal with the subject of critical thinking at a young age. The teaching-learning process aims to develop the student's knowledge, skills and abilities. After studying the specialized literature, we have discovered some conceptual delimitations, perspectives of different pedagogues from the country, as well as from abroad.

According to the author Dorina Sălăvaru, critical thinking is defined as follows: "For testing and evaluating possible solutions and explorations, however, another way of thinking is needed, namely critical thinking. (...) We need to produce new ideas, creative ideas, but these ideas must then be tested and evaluated to make sure we are not wrong." (Sălăvăstru, D., 2009)

From the perspective of Robert H. Ennis, critical thinking is "reasonable and thoughtful thinking centered on the ability to decide what to believe and to act." (Ennis, R., 1987). In the opinion of Robert Ennis, critical thinking focuses on all the capabilities and attitudes of transmitting information. Critical thinking is based on asking questions, deepening information and expressing an opinion in a debate.

The student learns to think and is stimulated towards free thinking, when he participates in an active and interactive teaching, flexible and efficient. In designing an instructive-educational activity, in order to develop critical, creative, active thinking, guidance towards the connection of new knowledge with the accumulated ones, the teacher must consider the application of interactive teaching strategies. (Bocoș, M., 2013)

In teaching new knowledge, we must start from concrete facts, from real life, experienced by the student, to create the connection between knowledge and awaken the desire to know the new contents. Through concrete representations and materials, we provide students with examples as a starting point and investigation. Given the diversity of a class of students, during the teaching act we need to present several examples to provide each student with personal experience in the educational process, actively participating and with interest in the activity. (Roman& Bran, 2015).

Recent perspectives in education

For the development of critical thinking, it is necessary to integrate teaching methods, which aim to develop the skills needed for this thinking. In the research part of the paper, I proposed the following didactic methods of critical thinking for the development of self-assessment: Method I know- I want to know- I learned, Debate, Concept map, Thinking hats, Scenarios, R.A.I., P.M.I. method, Glue notes. In the research part, I want to discover the most suitable activities to form the skills and abilities needed in the development of self-assessment at a young school age.

I will briefly present some of these methods to highlight their role in contemporary teaching as well as in the development of critical thinking and self-assessment.

1. **The thinking hats method**, or the so-called six hats, came to life through the proposal of Edward de Bono. The purpose of the discussion is to resolve the problem situations. This method takes into account: the awareness of the different ways of thinking exists in different groups of people, the observation of problems from several points of view, the different way of approaching and solving problems. This method is interactive and gives students the opportunity to present their own point of view on the proposed topic. They are challenged to ask questions, to argue their point of view, but also to accept the opinion of other hats. (Bocoş, M., 2013)

2. The **debate** is based on the competition between two teams, with a confrontation on a chosen and studied topic. The topic will be chosen so that the topic can be supported with both pros and cons. The two teams will be named affirmatives and deniers. The number of students in a team is set, and each team will have the same amount of time to present their arguments. The debate will be judged, and at the end the winning team is designated. This method involves more of the part of deepening the knowledge, after acquiring it.

3. The method **I know- I want to know- I learned**. The specificity of this method is to place the student in the middle of the learning process. The confident student will make connections between knowledge, intuiting what he is going to learn. This method guides the student to learning through

discovery, which arouses his interest in learning and actively involves him in the whole teaching-learning process. Teaching is done through cooperation.

In the teaching process, ensuring the transfer of knowledge is the key moment of the teaching activity, the mental operations are not performed only after a simple example. The student of small school age will not perceive the count just by observing a row of colored pencils, placed on the bench, will not assimilate the concept of multiplication by equal organization, in groups of some stars and so on. In directing the cognitive act of the class, the examples must be associated with visual aids, explanations, discoveries of the necessary information. (Chiş, V., 2005)

In order to perform these mental operations, the teacher integrates cognitive organizers into the teaching act. The right ways are: clear description of new concepts, objects, notions; highlighting and highlighting secret information; explaining and making connections between ideas. All this develops the way of thinking and understanding of the world around us.

Development in thinking is predominant at a young age. Thinking is changing, as it moves from preoperative to operative thinking. Mental skills are separated from the information received and stored, are generalized, and then will be transmitted to new content assimilated during early schooling, performing automation and solving operations.

The thinking of the young student works with the help of representations, so it is recommended to use the following activities:

- Use of concept maps - association of relationships between concepts, visualization of connections;
- Divergent and convergent thinking development activities;
- Synthetic Method - association of ideas;

In designing the teaching activity, the teacher takes into account the level of the group and the appropriate way of carrying out the activity. Diversification and new elementary will capture the student's attention and interest, giving the teacher the opportunity to develop and train skills. Through contemporary instructional activities, different abilities are developed (self-assessment, creativity, imagination, critical thinking), and the activities applied repetitively to different learning units will ensure the permanent development of the student.

Self-evaluation is a process of obtaining, measuring and appreciating the acquired information, evaluating one's own performance, by assessing the results obtained following a task performed. (Roman, A., 2014, p. 175)

Marin Manolescu argued that "self-assessment cannot be reduced to self-correcting situations based on a scale provided by the teacher, as this situation would induce a situation of conformity with the norm." (Manolescu, M., 2004)

Within the instructive-educational process, the didactic methodology must be closely related to the new tendencies, both didactic and social. The transformations coming from the aims of education will have an impact on the contents and requirements coming from the students and the society. (Cucoş, C., 2014) The didactic methodology must be open to changes that will intervene in the training system. We can exemplify certain requirements that need to be considered in order to ensure a contemporary, effective teaching for today's society:

- Applying new teaching methods and procedures, which provide solutions for current learning situations, ensuring “problem situations” that challenge students to find the right solutions.
- A frequent use of active-participatory methods, in order to activate the cognitive and oppressive structures of children.
- Use of appropriate teaching aids to enrich and streamline the teaching and learning process.
- Using different forms of organization to educate the student both in individual and team work, but also to improve the student-teacher, teacher-student relationship.
- Parents call for the development of interdisciplinary, non-formal, attractive programs and projects for children. (Coşarbă, E., Roman, A. F., & Costin, A., 2021)

Classroom assessment is divided into two types of assessment, namely traditional and contemporary. The traditional methods are: written test, oral test and practical test. (Stan, C., 2001) I believe that both types of assessment are effective if used correctly, diversified, without threatening the student about the assessment.

The proposed research work focuses on the development of self-assessment capacity. If we manage, as teachers, to train and develop the student's self-assessment capacity, he will have benefits, after acquiring this capacity, both professionally and personally.

The main ways of self-assessment, determined by pedagogical theory and practice, are oriented towards the following: self-correction of answers by students, correction of colleagues' answers, self-grading supervised by the teacher, mutual grading (between colleagues). For these types of self-assessment requires a well-established scale and understood by students.

- **Self-correction and mutual correction**, is the first step towards achieving autonomy in school assessment. Through such a practical exercise, the student is directed to discover some errors in the learning task performed.

- **Supervised self-assessment** is done in an assessment, and the student is encouraged to give a grade, which is discussed with the teacher and then with colleagues. The processor guides, provides explanations regarding the correctness or incorrectness of the assessments made.
- **Reciprocal grading** is the educational moment in which students are asked to grade their classmates' assignments, both written and oral. This activity does not necessarily have to end with the actual grading.

Conclusions and discussions

The current education system is based on the close link between teaching-learning-development.

The teaching-learning-assessment relationship is formative and formative, because if the instructive-educational process, in traditional didactics, is based on one-way communication, in modern didactics teaching-learning is based on the formation of skills, abilities, specific study skills, cognitive processes based on which the student acquires autonomy in learning. (Roman&Balaş, 2014), Analyzing the formative and formative relationship, which offers the student the opportunity to actively participate in the learning process, this relationship also includes self-training, where the essential concept is that of assessment, which determines self-assessment.

In contemporary teaching, the approach is the opposite of the traditional one. The student is placed in the middle of the educational act, the learning is realized centered on the student. Teaching consists in transmitting information, ensuring transfers, by approaching modern teaching methods that involve the student active in the instructional-educational process. Contemporary teaching is part of the modern dialectic and offers the student pleasant, interesting and captivating learning experiences.

References:

- Albulescu, I., (2014), *Pedagogii alternative*, Editura All, Bucureşti.
- Bocoş, M., (2013), *Instruirea interactivă: repere axiologice și metodologice*. Polirom, Iași.
- Chiş, V., (2005), *Pedagogia contemporană- Pedagogia pentru competențe*. Editura Presa Universitară Clujeană, Cluj- Napoca.
- Cosmovici, A., Iacob, L., (1998), *Psihologie școlară*, Editura Polirom, Iași.
- Coşarbă, E., Roman, A. F., & Costin, A. (2021), Parents' perception regarding the concerns, competencies and perspectives of involvement in non-formal activities. *Technium Social Sciences Journal*, 26(1), 177–185.
- Cucoş, C., (2014), *Pedagogie*, Polirom, Iași.
- Ennis, R., H., (1996), *Critical thinking*. Prentice Hall, Upper Saddle River, NJ 07458

- Cvetanovic, Z., Negru, M. (2015), *The pedagogical access on interculturalism as a methodological challenge in education*. Arad: Educatia-Plus/Journal Plus Education, Editura Universității „Aurel Vlaicu”, Vol. XIII, No. 2, ISSN: 1842-077X, pp. 95-101.
- Florea, N. M., & Hurjui, E. (2015), *Critical thinking in elementary school children*. *Procedia-Social and behavioral sciences*, 180, 565-572.
- Kelemen, G., *Developing early childhood education competences (early childhood education and care, ECEC)*, Educația Plus, Volumul XXVII, Nr. 2, 2020, pp.304-312,ISSN: 1842-077X, E- ISSN (online) 2068 – 1151, Editura Universității „Aurel Vlaicu”, Arad, 10.24250/JPE/2/2020/GK
- Manolescu, M., (2004), *Activitate evaluativa intre metacognitie si cognitie*. Editura Meteor Press, Bucuresti.:
- Manolescu, M., (2010), *Teoria și metodologia evaluării*, Editura Universitară, București.
- Roman, A. F., & Balaș, E. (2014), *Proiectarea situațiilor de învățare școlară*. Editura Eikon, Cluj-Napoca.
- Roman, A. F., & Bran, C. N. (2015), The relation between prospective teachers' beliefs and conceptions of learning and their academic performance. *Procedia-Social and Behavioral Sciences*, 209, 439-446.
- Roman, A., (2014), *Evaluarea competențelor. Perspective formative*, Editura PRO Universitaria, București.
- Sălăvăstru, D., (2009), *Psihologia învățării*, Editura Polirom, Iași.
- Stan, C., (2001), *Autoevaluarea și evaluarea didactică*, Editura Presa Universitară Clujeană, Cluj- Napoca.
- Stan, L., (2014), *Pedagogia preșcolărității și școlărității mici*, Editura Polirom Iași.