

THE DEVELOPMENT OF METACOGNITIVE COMPETENCES IN THE PROCESS OF LEARNING ROMANIAN LANGUAGE AND LITERATURE

Anca EGERĂU, Ph.D.

Faculty of Educational Science, Psychology and Social Sciences, Aurel Vlaicu University of Arad, Romania
anca_petroi@yahoo.com

Abstract: *Current studies present the criteria and conditions for effective learning of Romanian language and literature, these being associated with autonomy in learning, which integrates the efficient use of metacognitions. Exercising explicit metacognitions with students in various learning situations in Romanian language and literature, leads to increased chances of success in learning and transferability of acquisitions, increasing autonomy in learning, optimizing strategic thinking, and building a positive self-image.*

Keywords: *metacognitive strategies; autonomy; responsibility; monitoring; progress;*

1. Introduction

The preoccupation for the process of learning the Romanian language and literature is becoming more and more important, and the responsibility for achieving this goal is equally of educators, pupils, the community and decision-makers in education. Current studies present the criteria and conditions for effective learning of Romanian language and literature, these being associated with autonomy in learning, which integrates the efficient use of metacognitions.

Cognitive psychology defines metacognition through the knowledge that the subject has about the functioning of its own cognitive system and which can optimize its functioning (Miclea, M., 1999, p. 323). The implications for the process of learning Romanian language and literature are obvious: the metacognitive approach to the training process assists students in assuming control over their own learning by formulating learning objectives and monitoring their progress in their realization (Bransford, JD, Brown, A., Cocking, R., 2002).

2. The coordinates of the research

The premise we have started from in the design of this research was that in order to become autonomous in the process of efficient learning of Romanian language and literature, it is necessary for students:

- Be aware of their own learning processes;
- Develop strategies of procedural nature (how do I do to solve the task of learning?);
- Develop strategies of procedural nature (how do I do to solve the task of learning?);
- Use contextual-relational strategies (when and why do I in a certain way? When and why do I change my approach to a work task?).

The overall hypothesis of research was as follows:

Exercising explicit metacognitions with students in various learning situations in Romanian language and literature, leads to increased chances of success in learning and transferability of acquisitions, increasing autonomy in learning, optimizing strategic thinking, and building a positive self-image.

The following specific hypotheses were derived:

- Autonomous students activate their previous knowledge to build a clear and articulate representation of the solving process, perceiving the task of learning as a challenge.
- Students become aware of their own competence in achieving the task, positive attitude conditional on their level of cognitive engagement.
- Students allocate energy to actively monitor their own approach, using cognitive and metacognitive strategies selected by themselves.
- Critical analysis carried out during and at the end of the Romanian language and literature learning process, regarding the degree of accomplishment of the objectives, respectively the way they did, contributes to the diversification of the metacognitive strategies repertoire.

The research targeted a sample of 110 subjects, of which 55 subjects constituted the experimental sample (pupils in grades IX-X). They were trained in a metacognitive development program during the two semesters of the school year 2018-2019, by inserting reflection sequences on learning into Romanian language and literature. Task learning strategies have facilitated the explicit use of metacognitive monitoring / control methods, techniques and tools that do not add cognitive activity to pupils, and can be flexibly tailored to the specifics of the learning situation.

The objectives of the formative experiment are as follows:

- development of the metacognitive skills of students in a complex and dynamic process of learning Romanian language and literature;
- elaboration of metacognitive strategies with adaptive role, marked by originality and uniqueness (through contextualization);
- actively involving students in monitoring and controlling their own learning, increasing autonomy and responsibility;
- creating optimal conditions for the structuring of metacognitive skills in different learning situations;

3. Quantitative and qualitative analysis of research data

The portfolio within the metacognitive development program concentrates a large part of the tools and products of the pupils achieved during the activities on Romanian language and literature, both through personal effort and especially through team work. We focused on the outline of a complex information system on metacognitive training, with data and indicators to provide a clear picture of the progress made by each student in terms of learning autonomy, by reference to his whole educational and educational activity. This portfolio includes the following:

The self-evaluation sheet for the effectiveness of the learning strategies of the Romanian language and literature;

- Self-diagnosis sheet for learning difficulties and improvement needs;
- Protocols for observing metacognitive approaches to learning tasks;
- The self-analysis sheet of the process of solving a learning task;
- The inventory of cognitive regulation;
- Reflection log on the case study;

Other products and tools used during the formative experiment. We used the portfolios of students in the experimental sample, a multicriteria grid, for the following aspects:

- Systematization and interpretation of collected information;
- Metacognitive approach to learning tasks;
- Relevance and opportunity of methods and tools for monitoring / controlling the learning process;
- Situational adaptation of metacognitive regulation strategies;

- Diversity and complexity of products included in the training portfolio;

Using the t-test for a single sample, averages were calculated, resulting in an average observed (26) significantly higher than the theoretical average (20), demonstrating active involvement of students in metacognitive training in language learning and Romanian literature, but also their effort to elaborate in an original manner the portfolio (table no.1).

<i>Variable metacognitive development portfolio</i>	Theoretical	Observed
Minimum score	8	17
Maximum score	32	35
Average	20	26
Meaning of the difference between environments	t= 6,017 significant for p<.01	

Table no.1. Variable scores for metacognitive development portfolio - comparison of observed and theoretical average

<i>Variable metacognitive development portfolio</i>	
Mediate	23,34
Median	23,40
Module	23
Standard deviation	7,211
Variation	72,143
Minimum	17
Maximum	35

Table no.2. Variable metacognitive development portfolio – sufficiently descriptive

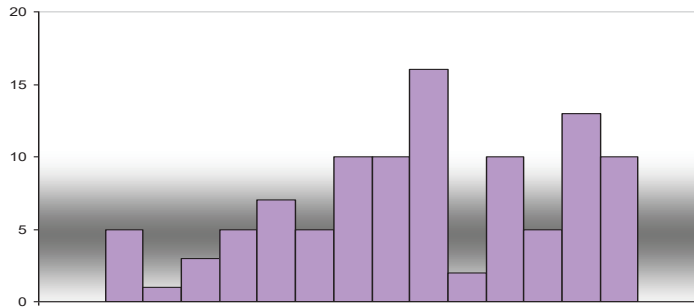


Figure no.1.

Variable metacognitive development portfolio - Score distribution

The central trend values are equal (23), the maximum frequency having the values in the middle of the data series, so the obtained scores are distributed according to a normal and symmetrical curve (Figure 1). We carried out a comparative analysis of the averages obtained by referring to the following independent variables: the type of investigated subjects (table no. 3), the age category (table no.4) and the specialization (table no.5).

In relation to these criteria, we find that there are no significant differences between the averages obtained, this being evidenced by the additional calculations made by SPSS (calculating the variance with the ANOVA method and calculating the partial regression coefficient). Evolution of the variable's metacognitive development portfolio is therefore very poorly predicted by the variables: subject type, age category and specialization.

	<i>Gender</i>		Total
	M	F	
N	17	38	55
Average	20,81	21,97	21,39

Standard deviation	7,120	8,032	7,576
--------------------	-------	-------	-------

Table no.3. Differences between averages obtained by the variable - gen

	<i>Age category</i>		Total
	15-16	16-17	
N	26	29	55
Average	20,00	21,57	20,78
Standard deviation	8,062	7,914	7,988

Table no.4. Differences between the averages obtained by the variable - the age category

	<i>Specialty</i>				Total
	Filology	Social Sciences	Nature sciences	Mathematics- Informatics	
N	12	18	16	9	55
Average	20,12	23,85	20,07	22,83	21,71
Standard deviation	5,423	7,201	8,254	9,063	7,485

Table no.5. Differences between the averages obtained by the variable – specialization

The complex quantitative and qualitative analysis of the products included in the metacognitive development portfolio as well as the strategies used during the formative intervention determined among the students in the experimental group the tendency to restructure the way of addressing the learning tasks, in the sense of assuming responsibility, action, but also an intensification of personal efforts for the implementation of metacognitive strategies in the learning of Romanian language and literature.

4. Conclusions

Research has proven the efficiency of engaging capabilities to anticipate learning outcomes, awareness of success or failure in understanding the learning task, learning action planning, time and resource management.

Because metacognitive approaches often take the form of an in-house dialogue, many students are unaware of their importance for organizing, monitoring, and controlling learning. Moreover, the tacit character of metacognitive behaviors leads many educators to assume that students will acquire them by themselves and will use them successfully without their intervention in this respect. That is why metacognitions are often implicit purchases, which are rarely explicit or objectified in visible behaviors, possibly required by the teacher. Without being aware of their ownership and importance in learning, students are likely to access them sporadically and unsystematically and will not be able to successfully transfer them to new learning situations (Lin and Lehman, 1999).

The implicit learning of metacognitions occurs when the teacher does not underline the metacognitive behaviors of the learner (eg, does not ask questions such as: How did you learn this, how did you reach this result?, How long did it take you to learn this? do you already know what you do not know about this subject?) and does not propose new behaviors of this kind (eg, it does not require students to come up with their own learning behaviors), either because he is not aware of the importance of learning and controlling learning and does not have didactic strategies to train them in school, either because it is centered on the acquisition by students of cognitions specific to the given field.

Frequently, students experiencing challenging learning tasks or with the need to scrutinize and assimilate a large amount of information from diverse sources acquire individual strategies to organize, monitor and regulate their own learning. They often remain unconscious or become less well aware, students being unable to verbalize learning or explain how they have achieved their predetermined goals.

The training of metacognitions can be targeted, but metaphysical, unexplained, non-exhaustive metacognitive experiences remain implied and are often based on the student's understanding of effective metacognitive approaches.

As we have already mentioned, studies that support the importance of explicit coaching of metacognitions imply, on the one hand, the explanation of metacognitions acquired implicitly and the increase of pupils' consciousness relative to the holding of metacognitive strategies (approach centered on access) through verbalization (Doly, 1997), structuring in stages (Borkowsky, 1992, Doly, 1997), guiding and using intuitive support (eg by design), and often by correcting the wrong beliefs about own learning that the student holds (Tirosh, 1994) and, on the other hand, the explicit teaching of metacognitions and their practice in various contexts (structure-centered approach).

The formative experiment demonstrated the efficiency of the reflection activity on the learning of Romanian language and literature as a didactic means of intentional training of students' metacognitions.

References

- Bransford, J., Brown, A., Cocking, R., (2002), *How people learn. Brain, mind, experience and school*, National research Council, Washington D.C.
- Delacour, J., (2001), *Introducere în neuroștiințele cognitive*, Ed. Polirom, Iași
- Doly, A.M., (1997), *Metacognition et médiation à l'école*, în M. Grangeat, *La metacognition, un aide au travail des élèves*, ESF, Paris.
- Ferreiro, E., (1994), *Literacy development: construction and reconstruction*, în Tirosh, D., *Implicit and Explicit Knowledge: an educational approach*, Ablex Pbl. Norwood New Jersey.
- Jacobson, R., (1998), *Teachers improving learning using metacognition with self-monitoring learning strategies*, Education, Summer 98, vol.118 Issue 4, p.579
- Joița, E., (2002), *Educația cognitivă. Fundamente. Metodologie*, Ed. Polirom, Iași
- Lafortune, L., Jacob, S., Herbert, D., (2000), *Pour guider la metacognition*, Presse Université du Quebec
- Radu, I., (2000), *Strategiile metacognitive în procesul învățării la elevi*, în Ionescu, M., Radu, I., Salade, D., *Studii de pedagogie aplicată*, Ed. P.U.C. Cluj- Napoca