LEARNING HOW TO LEARN – A KEY TO ACADEMIC SUCCESS

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Abstract: *The European key-competences derived from the paradigm of cognitive education focus on the need for long-life learning defined by the syntagm: „learn how to learn". These competences are aimed at by the new Law of Education which directs the teaching activity towards the topic of metacognition. The present work presents the conclusions drawn from a study on the perception metacognition phenomenon among teachers and brings up possible path to follow in order to make metacognitive practices more efficient.*

Key words: *metacognition, „learn how to learn", cognitive education, European key competences*

As expected, we start by outlining the main features of the concept of metacognition in order to set the framework of the research carried out by us. We go on by describing the research method we employed as well as the structure of the sample and we end by presenting the conclusions drawn from interpreting the results of the questionnaire.

Metacognition is defined as "knowing about knowing", in fact the personal reflection on the way we learn, solve problems, etc. As a result, the metacognition is the knowledge an individual has about the functioning of his own cognitive system. In this context, it is stated the novices call on metacognition to a greater extent than the experts do, monitoring and controlling their own cognitive functioning. Hence the importance of developing the young children's metacognitive skills, a task undertaken by school through its teachers.

The metacognition does not represent a unitary domain, and, as a result, it sometimes helps the subjects complete a task (i.e. planning, developing a strategy, global monitoring), and sometimes unnecessarily slows down the development of the cognitive action (re-awareness, checking, conceptualization etc.) As for the students involved in learning, the

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metacognitive skills give them the advantage of awareness: the planning, monitoring, and control over actions and processes.

If we consider the advantages of the metacognitive skills, we first notice that they play an important part in the development of the ability to transfer, the transfer from one domain to another of the metacognitive processes, i.e. the use of the skills and abilities in real life perceived as a course of continuous learning, of permanent adaptation to the various social and economic requirements. This essential ability, the metacognition, can be developed in children. Thus, through self-assessment, the student is forced to become aware of his representations, to reflect upon his strategies, to compare his actions to those taken by other students, to integrate external criteria into his own frames of reference, to actively manage the relationship between different tasks.

Another element that must be emphasized is that metacognition can combine with learning regulation in at least three situations, regulating the cognitive activity without interference from any metacognitive reflection if: a. the student's cognitive activities are guided by a procedure, a path to follow (work patterns which accurately describe the sequence of steps to be taken, without requiring the explanation, the analysis or the assessment of the process); b. the students controls his cognitive activities without interference from any metacognitive reflection (routine activities); c. the subject develops the actual metacognitive reflection.
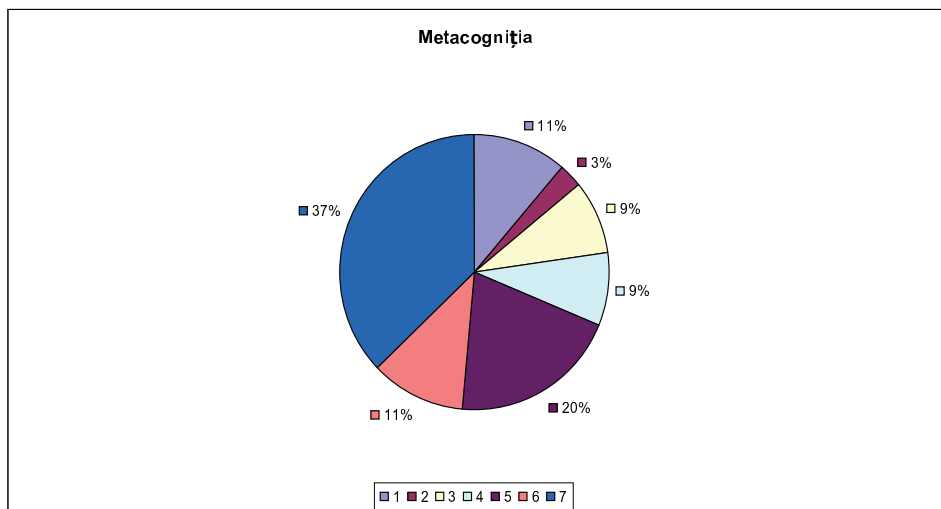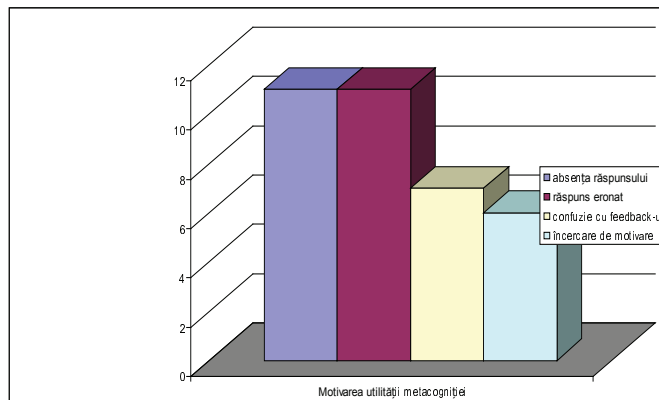

FIG.1 Metacognition
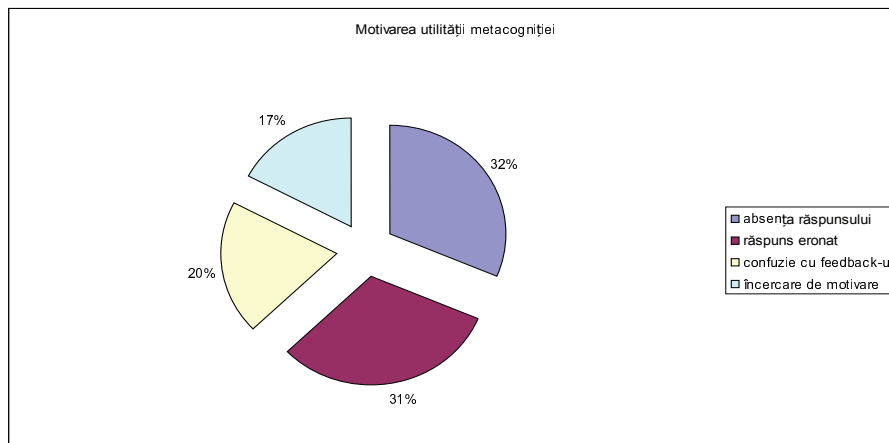
The research method we have chosen is of the quantitative type. The questionnaire (appendix 1) helps to create a holistic picture of the subject of research. The scientific literature states that quantitative methods ensure a higher degree of accuracy. The questionnaire comprises opinion questions and control questions concerning the topic of the research. The subjects were chosen on the following criteria: a. stage of education (pre-school, primary, secondary, high school); b. urban or rural milieu; c. mass education and special education; d. age. The questionnaire was administered in the following schools: 1. Liceul Pedagogic „Dimitrie Țichindeal" Arad; 2. Colegiul „Csiky Gergely" Arad; 3. Centrul Școlar pentru Educație Incluzivă Arad; 4. Școala Generală Vladimirescu.

The interpretation of results revealed the following key aspects which are to be remembered and analyzed.

The first task set in the questionnaire reveals the general opinion of the teachers who provide high quality education in accordance to the syllabuses which define the skills that are to be developed. These, as opposed to the methodology which put emphasis on the contextualized learning and places the students at the centre of the teaching process, promote teaching *techniques* such as *exposition*, followed by *explanation of terms and their exemplification.*

The diagrams below clearly show the high percentage of teacher who prefer to take actions which are necessary but not enough for a teaching process based on cognitivism. Nowadays teachers excessively focus on the traditional teaching approach at the expense of actions that favor feed-back, metacognition and even error correction and exercise, activities which are considered to be essential in the process of developing skills and abilities.

	Explicarea noţiunilor	Corectarea greşelilor	Expunerea	Feedback-ul	Metacogniţia	Exemplificarea noţiunilor	Exerciţiul
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Exemplificarea noţiunilor

Expunerea

Corectarea greşelilor
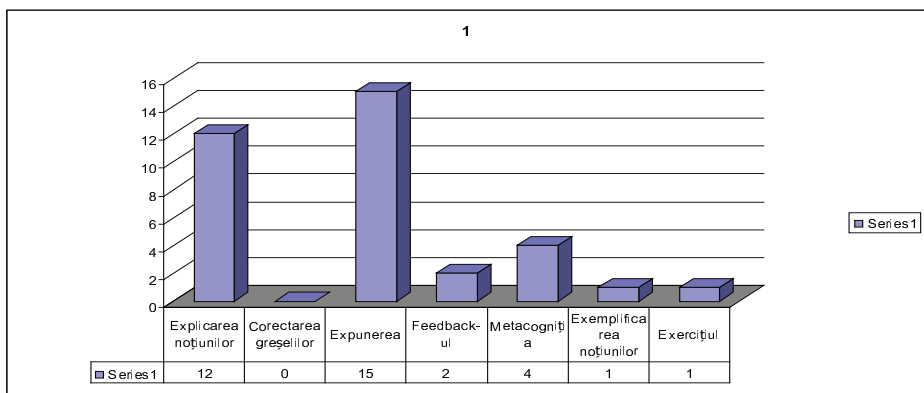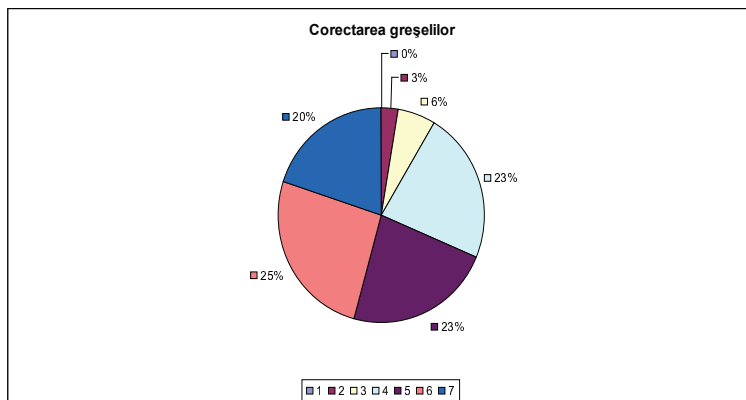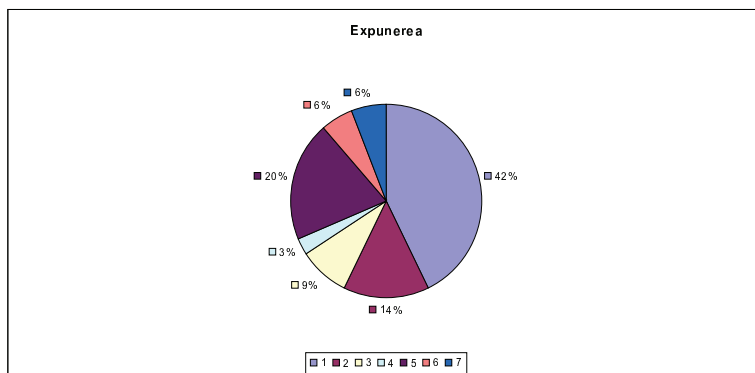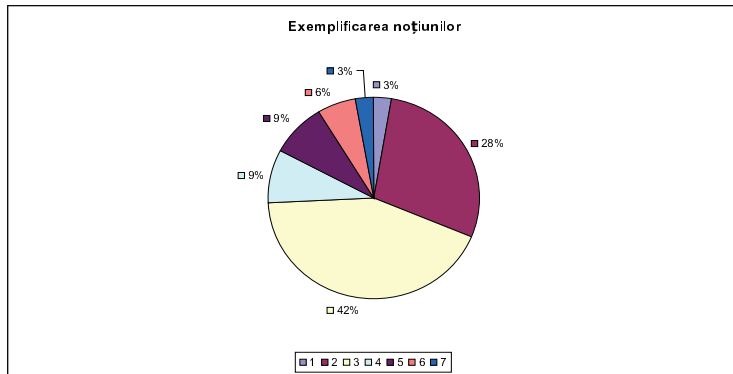
On the other hand, it can be noticed the teachers' preference to state and support the necessity of reflection upon the process of learning as well as

the necessity of students to verbalize it. Moreover, a contradiction of statements reveals the false perception of the promotion upon the metacognitive processes among students. The teachers claim a high frequency of these actions although they do not fall among their major concerns in their teaching activity.

Another conclusion drawn from the analysis of the answers to the questionnaire is the insufficient understanding of the concept of metacognition and is pedagogical and psychological configurations. What is more, we can notice the confusion in terminology or concept with the feed-back, i.e. the immediat or subsequenresonse to the process or its results.

In conclusion, metacognition is a concept adopted by teachers at a declarative level, either due to its furtherance in the present-day books of methodology, which are part of the compulsory bibliography for the teaching exams, or due to their presence in syllabuses and teaching guides that are used by teachers in their teaching practice. Nevertheless, the concept is not known, it is inexactly or incorrectly defined, which makes impossible the use of metacognitive strategies: clarification (evocation, description of the cognitive processes by the subject itself), analysis (establishing relations between processes, associating processes with contextual variables or with results), and conceptualization (deriving the properties of one's own cognitive functioning from various situations previously analyzed).

The nowadays teachers are not familiar with the objects on which the metacognitive activities can be carried out: one's own cognitive functioning (past, present or future), the external variable that influence it.

All in all, we can say that the majority of the present-day teachers choose to put into practice the principles of the traditional teaching knowledge to the expense of modern teaching.

APPENDIX 1

Questionnaire

1. Order the following activities you perform in the classroom ==*(add a number from 1 to 7 to establish a hierarchy)*==:

Explanation of concepts	
Error correction	
Exposition	
Feedback	
Metacognition	
Exemplification of concepts	
Exercise	

2. How do you encourage students to reflect on their own learning process?
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   ....
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   ....
   ....
   ....

3. How often do you encourage students to reflect on therir own learning process? ==(circle the chosen answer):==
   a) every class;
   b) monthly;
   c) every semester;
   d) ocazionally.

   4. How do you encourage students to verbalize their own lerning strategy?
   ....
   ....
   ....
   ....
   ....
   ....

5. How often do you encourage students to verbalize their own lerning strategy? ==(circle the chosen answer):==
        a) every class;
        b) monthly;
        c) every semester;
        d) ocazionally.

6. Do you consider metacognition to be beneficial? ==(circle the chosen answer):==
        a) yes;
        b) no;
        c) don't know.

7. Motivate your answer to the previous question:
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8. Define your teaching style using 5 key words:

9. Write three questions that you use to encourage your students to reflect upon their own learning process:
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10. Write three questions that you use to encourage your students to verbalize their learning strategy:
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11. Choose the items you would never use in your teaching activity <mark>(circle the chosen answer(s)):</mark>
   a) What is the relationship between the two concepts we have studied today?
   b) Which are the similarities between the things studied today and those you have studied before?
   c) How can you explain the difference between the two concepts?
   d) Can you distinguish between the two concepts you have studied?
   e) Which was the element that made the exercise difficult to solve?
   f) What haven't you understood in the lesson?
   g) Which element in the lesson was the easiest to understand?

12. Motivate the answer to the previous question:
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13. What instruments do you use in order to encourage your students to reflect on their learning process?
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   ....

Thank you very much!

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