INSTRUMENTS THAT AID THE STUDENT-CENTRED ASSESSMENT

Viorica BOACĂ, Alina – Lidia Mărghitan, Codruţa GAVRILĂ

Banat's University Of Agricultural Sciences And Veterinary Medicine „King Michael I Of Romania" Timişoara
Faculty of Agriculture,Department of Teacher Training, Aradului Boulevard,Nr.119,
vioricaboaca@gmail.com

Abstract. *The new directions for the development of assessment in postmodern pedagogy are based on a dynamic kind of assessment that is centred on the student's mental processes; these directions encourage self-regulation, self-reflection, while replacing the static concept based on control, examination and punishment. In the current educational context, when it is firmly required to switch the focus from assessing the products of the teaching/learning process to assessing the student's cognitive processes during the activity of learning, alternative assessment methods constitute methodological and instrumental options which enrich the practice of evaluation. In this sense, among alternative methods of assessment, graphic organizers prove their efficiency in the evaluation process, as they offer the student the possibility to put the pieces of information in a logical order, being actually a mental model that helps in constructing new knowledge. The paper presents two graphic organizers: "the spider web mind map" and "the double bubble map", which provide an overview of several teaching units of the subject called "Specialized Didactics".*

Key words: *modern assessment, alternative assessment methods, graphic organizers*

INTRODUCTION

The concept of assessment in pedagogy is defined in "Dictionnaire de pedagogie", Larousse (1996: p.124) as a mechanism that was created in Britain towards the end of the 20th Century, which results from the transposition into education of certain concepts and models applied in 19th Century economics, particularly in industry.

MARIA ELIZA DULAMĂ (2010: p. 217) defines *pedagogical assessment* as "a complex action that includes a set of mental, actional, intellectual and affective operations and activities which make it possible to collect, organize and interpret the data obtained through the application of measurement instruments, for the purpose of issuing a judgement of value on which a certain educational decision is made".

Evolving away from the traditional view on assessment, which placed it at the end of the teaching-learning activity, nowadays the assessment is more than a final process or a process parallel with learning. Rather, it is organically integrated in the same learning process, creating interactive and circular relations. While they are learning, students go through repeated processes of valorization and critical appraisal which serve as a basis for decision-making, orienting their formation and development" (OPREA, CRENGUŢA – LĂCRIMIOARA, 2007: p.224).

In this respect, the fact that modern assessment is considered to be an integral part of the learning process, which it is intimately linked to, has put a distance between it and the traditional "knowledge checking" or even the traditional school appraisal (CERGHIT, I., 2002: p. 292).

Promoting the transition from the notion of checking the knowledge accumulated to the concept of evaluating the results of learning together with the processes it involves, *modern*

assessment represents the transition from a pedagogy of transmitting knowledge to a pedagogy of acquiring knowledge and the science of becoming (POTOLEA, D., MANOLESCU, M., 2005).

At present, the evaluative phenomenon is becoming ever richer in meaning, expanding its reach. In this respect, when analysing the evaluative practices, Ion T. Radu noted that "assessment of performance in school is less and less understood as an action of control – punishment that is limited to checking and marking. Instead, it is more and more seen as a process that is organically intertwined with the other processes of the teaching act; it performs an essential-formative function, materialized in informing and aid decision-making regarding the improvement of the activity as a whole" (2000, p. 42).

As mentioned by OPREA, CRENGUȚA – LĂCRIMIOARA (2007: p. 242), the new directions of assessment development in the postmodern pedagogy require the transfer from control-centred assessment to learning-centred assessment. In other words, the assessment centred on the teacher's initiative to control, to the assessment that emphasizes the student's initiative to reflect on their own knowledge, learning from mistakes. From this point of view, school assessment must become dynamic, focused on the student's mental processes, must help the student to self-regulate and self-reflect and must replace that static concept based on control, examination and punishment.

The introduction of the concept of "formative assessment" into the theory and practice of pedagogy has determined pedagogues to realize that, according to the ideas of cognitive psychology, the object of their evaluation has to be mainly the students' learning processes, rather than the behaviour presented by students as a result of learning.

At present, the goal is to reach a complex type of evaluation, performed through complex methodology and a diverse set of instruments. We witness an increase in the quantity and an improvement in the quality of the evaluation devices.

Thus, the range of classroom assessment methods has expanded, and there is more and more talk about how the traditional methods (oral assessment, written tasks, practical tests, etc.) have to be completed by new and modern ones (portfolio, project, investigation, self-assessment etc.) which in fact are alternatives in the current context of education, when it is required to switch the emphasis from assessing the products of learning to assessing the student's cognitive processes during the learning activity.

It is well-known that alternative evaluation methods are methodological and instrumental options with a formative character, which improve the practice of assessment, avoiding routine and monotony.

In what follows we will present two graphic organizers that have been used experimentally in the assessment process of second-year students attending the course of Specialized Didactics, which is part of the Psycho-pedagogical module.

RESULTS AND DISCUSSION:

The assessment method is the way in which the teacher gives the student the possibility to prove the knowledge they have accumulated, their capacity and skills, for this purpose making use of a variety of instruments suited for this objective. The *instrument for assessment* is an organic part of the method; it is a product of the teacher's methodological option for assessing student performance in a well-defined educational situation (DULAMĂ, MARIA ELIZA, 2010, p: 219). At the same time, the *task* is any instrument for assessment that is designed, given and marked by the teacher (STOICA, A., 2003: p. 121).

The results obtained by students in the assessments performed in the Specialized didactics course indicated that graphic organizers are efficient in the assessment process, because they give the student the possibility to organize the information in a logical way. They were revealed as a mental model that helps build new knowledge and develops those skills which involve abstractization, conceptualization and algorithmization of information. (CĂPIȚĂ, LAURA, 2011).

In support of the above-mentioned idea, two graphic organizers are presented: "the spider web mental map" and "double bubble", which give an overview of several contents from the themes approached within Specialized didactics.

Cognitive maps, ***conceptual maps*** or ***mind maps*** are an important instrument for teaching, learning, researching and assessing at all levels and in all school subjects, as they ensure the visual representation of the information, structure that describes the way in which all concepts in a field are interrelated (OPREA, CRENGUȚA – LĂCRIMIOARA, 2007, p: 255, 256).

At the same time, mind maps are sets of data or concepts structured graphically, non-linearly, logically, hierarchically or semantically around a concept/key term (DULAMĂ, MARIA ELIZA, 2008, p: 331).

A mind map includes (OPREA, CRENGUȚA – LĂCRIMIOARA, 2007: p.259):

- concepts, which can be: *central* (located in the centre of the map) and *secondary* (located towards the map limits);
- ranking, to determine their place;
- connexions established between concepts;
- interpretations that reveal relations among different parts of the map.

In ***the spider web mind map***, the central concept, as a unifying theme, is in the centre, and the secondary concepts are linked to the central one by ray-like links.

In the assessment of the learning process, the way in which the mind map is achieved can be strictly controlled or left for the student to choose.

In the strictly-controlled model, the teacher imposes the concepts to use, the links, as well as the way in which they relate to each other. The student's task is to fill in the gaps in the structure of the map.

With the model based on the student's choice, the students are encouraged to act on their own when choosing the concepts and when establishing the relations among them. In this case, cognitive demands are bigger than in the case of the strictly-controlled model.

The following figure presents the mind map used for assessing students within the subject named Specialized Didactics. The model used is of the strictly-controlled type. The students had to fill in the information corresponding to the secondary concepts placed around the key concept.

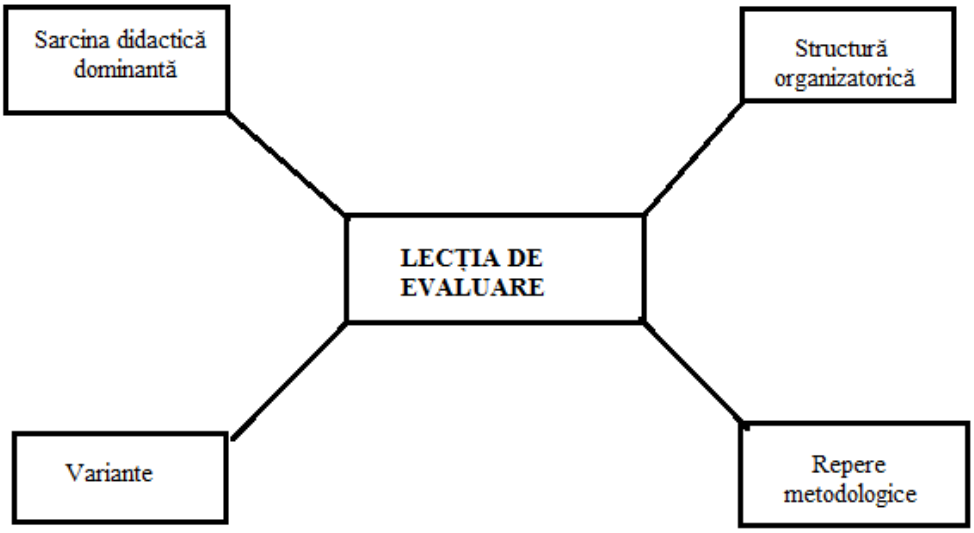

Figure 1. Spider web mind map. Assessment lesson.

The evaluation criteria formulated in the assessment of the spider web mind map were based on the quality of the statements (representing all correct information), as well as the ratio between correct and incorrect.

"***The double bubble***" is another graphic organizer described by Maria Eliza Dulamă (2010, p: 254), used for grouping the resemblances and differences between two aspects, ideas or concepts.

This type of organizer is made of two large circles which are linked to other smaller circles through lines. The large circles contain the key terms, which are compared. The smaller circles in the middle specify the resemblances (the common points), and the outer circles present the differences or the particularities for each term.

This type of graphic organizer helps students develop their analysis skills, as well as their capacity for comparing, discerning, and assessing.

When the "double bubble" is an item of a test, the number of answers required for obtaining the highest score must be specified, for the assessment to be objective.

Figure 2 presents such an item, used for the assessment of students attending Specialized Didactics. The students had to fill in with characteristics of traditional methods of assessment, two characteristics of alternative (modern) methods of assessment and two features that both methods of assessment have in common.

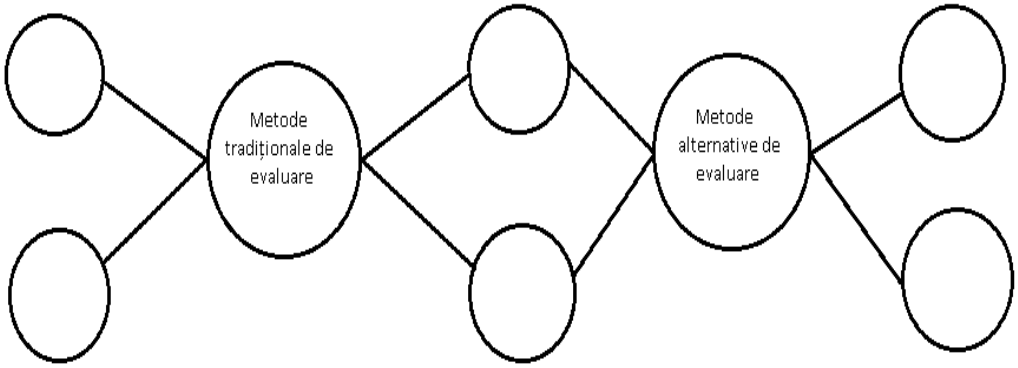

Figure 2. Double bubble. Resemblances and differences between traditional and alternative assessment methods

CONCLUSIONS

The two graphic organizers presented in this paper, which are used for student assessment, have multiple advantages, such as:

- making it possible for the students to visualize the relations among the different items that they have learnt; the scheme works in the direction of synthesizing information, avoiding the use of long explanations.
- offering the general image of the theme it deals with, tapping into students' divergent thinking.
- giving students the possibility to put the information into logical order; in this way, students can prove their skills concerning the abstractization, conceptualization and algorithmization of information;
- making it easier to assess performance, as they reveal the way in which students think and how they use what they have learned.

BIBLIOGRAPHY

1. CERGHIT, I. (2002). *Sisteme de instruire alternative și complementare. Structuri, stiluri și strategii*. București. Editura Aramis.
2. CERCHEZ, NICOLAE (2005). Didactica specialităților agricole. București: Editura Polirom
3. CĂPIȚĂ, Laura (2011). *Didactici și evaluare*. Suport elaborat în cadrul proiectului "Inovație și performanță în dezvoltarea profesională a cadrelor didactice din mediul urban". București.
4. DULAMĂ, MARIA ELIZA (2008). *Metodologii didactice activizante – teorie şi practică.* Cluj – Napoca. Editura Clusium.
5. DULAMĂ, MARIA ELIZA (2010). *Didactica axată pe competenţe - Teorie şi Aplicaţii*. Cluj – Napoca. Editura Presa Universitară Clujeană.
6. Dictionnaire de pedagogie *(1996)*. Paris: Larousse, Bordas.
7. IONESCU, M. (2000). *Demersuri creative în predare și învățare.* Cluj Napoca: Editura Presa Universitară Clujeană.
8. OPREA, CRENGUȚA – LĂCRIMIOARA (2007). *Strategii didactice interactive*. București: Editura Didactică și Pedagogică, R.A.

9. POTOLEA, D., MANOLESCU, M. (2005). *Teoria şi practica evaluării educaționale*. M.E.C. Suport elaborat în cadrul Proiectului pentru învățământul rural.
10. RADU, I. (2000). *Evaluarea în procesul didactic*. Bucureşti. Editura Didactică şi Pedagogică.
11. STOICA, A. (2003). *Evaluarea progresului şcolar*. Bucureşti. Editura Humanitas.