

# THE ASSESSMENT OF THE SKILLS OF THE PUPILS IN PRIMARY SCHOOL - FROM THE INDIVIDUAL TRADITIONAL APPROACH TO THE COOPERATION IN THE WEB TECHNOLOGICAL ENVIRONMENT -

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## **Abstract:**

Modernizing of the assessing activity requires many transformations in its transition from individual traditional assessment to the collaborative one in the web environment. Of these, we mention as important: the programming and the networking of the learning and individual assessment tasks with the collaborative ones, identifying the actions of the assessment process in the context of the web collaborative environment, developing the skills to use communication and interactive learning, assuring the reflexive activities and the adjusting feedback.

Through the undertaken research project, we studied the effectiveness of the collaborative assessment using the weblogs and teaching practice improvement regarding their positive effects in pupils skills assessment, at the expense of the traditional individual assessment.

The basic method of our research was the focus-group. The investigation batch consisted of 50 primary school teachers who teach in III and IV grades. In the undertaken study, we proposed to prove that, teachers' informing of the main benefic effects of the collaborative assessment using the weblogs, determines their integration into the current assessing practices and the rethinking of the hierarchy of pupils learning results.

The research results were positive, determining the development of some skills to the teachers in order to sustain the collaborative weblog pupils assessment.

**Keywords:** assessment skills, traditional individual assessment, cooperative assessment, weblog environment.

## **Introduction**

The problematic of school assessment was very diversified and complicated recording a significant mutation: passing from valuation and certification of "what the pupil knows" to "what the pupil knows to do" and especially of "the way he proceeds to be a performer and also to obtain the success"(Manolescu 2004).

The assessment must be regarded as a process that promote learning and not as an extern action unfolded by the teacher concerning on "what he does" and

“how the pupil does”. Being integrated in the action of learning, the assessment requires an increase attention also from the teacher but for the pupil, concerning the involved processes in the action of learning and about the causes that can identify mistakes and about the stimulating factors for knowledge.

In this way, the most important is the implication of pupil to perfect his own learning, as an answer of the determinations of the evaluative act, regarded as a process of certification or acknowledgement. The assessment gets the values of a reflexive process in which the one who learns becomes aware of his own acts and of himself, and aware of his own capacities and the teacher becomes a guide who directs him to attainment the informative-formative objectives.

Online environment of learning and assessment represents a place in which every requirement may be addressed and where pupils may interact different from face-to-face interplay, as in the classroom (Davidson-Shivers and Rasmussen 2006).

On the other hand, online learning and face-to-face assessment can be combined to create an efficient medium to unfold their activities. In this way, online and face-to-face interaction and communication have also some individual advantages, but also combined advantages resulting blended learning.

In the specialty literature, blended learning is presented as an integration of internet-based learning and face-to-face learning (Bonk and Graham 2006; Kerres and Witt 2003; Rooney 2003). In the assessment medium, blended learning, skills assessment involves: messenger, tele-video, conferencing, debate rooms, forums, emails and web-skills, all these being very important for teachers (Cuhadar 2008).

Interactive teaching strategies of teaching-learning corresponded with assessment, lead to the efficacious of teacher's activity with his pupils. The Learning process represents a correlation of all these three processes of teaching, learning and assessment, essentials and complementary which cannot be separated, only by theoretical reasons.

The assessment strategies focused on learning and also the dialogued ones, formative and formatore apply for the interactive assessment strategies in web technological environment.

Weblogs or blogs involves interactive web skills communication 2.0 in web technological environment. Blogs are defined as web environment easy to create which involves texts, images, audio and video files, which can be shared and updated individually from different locations and at different times (Baggetun and Wasson 2006; Glogoff 2003; Martindale and Wiley 2005).

Using blogs in education provides teachers and pupils the opportunity to interact between them and also with other persons. Blogs raise pupils individual responsibility, recording performance and help them to have a critical thinking, reading other pupils' comments about their posted individual performances in their entertainment space. (Du and Wagner 2007; Shelly and Gunter 2010).

Postmodern assessment transfers the assessment focused on the teacher's

initiative of controlling to that, which is focused on the pupil's initiative, to reflect all the time on the process of knowledge in which he is involved. From this point of view, co-operation learning integrates organic the assessment and also the self assessment.

The objectives of the co-operative assessment are: the quality of assessment by meetings of group's members to establish the assessment objectives; cognitive processes and application of the assessment strategies by standard tests; abilities and competences by tests composed by teachers; attitudes and opinions of pupils by their written compositions or debates; abilities of working by posting comments, texts, images, audio-video files which can be shared and updated, messenger, tele - video, conferencing, debate rooms, forums, emails.

The way in which all these co - operation activities are structured, establishes different types of interaction between pupils, which can also influence the quality and quantity of results of these activities. From this point of view, co - operation learning involves the hypothesis- that the way in which the activities are planned, they will establish the quality of the interaction between pupils. The results of the activities are the consequences of the interaction between pupils.

One of the main elements which must be created in class is the positive interdependence or the co-operation. The positive interdependence encourages the interaction between persons who work together, stimulating the success of every member to contribute reaching common objectives. This is named as an interaction based on co- operation and stimulation.

The negative interdependence is characterized as an each other obstruct of the members in a group to reach an aim, being named interaction based on opposition and competition. The interaction doesn't exist when members of a group work independently. These types of interaction have different consequences.

Graham and Harris (2009) consider that individual web environment based on blended instruction, can improve systematically scanty features elaborating a good plan for learning, using the timely strategies, necessary and sufficient applications and significant reviews.

The objectives of the research project were:

- Studying the efficient co – operative assessment using weblogs;
- Improving the pedagogic teaching experience regarding the positive effects of weblogs evaluating pupils' competences to the prejudice of traditional, individual assessment.

We proposed as a general hypothesis:

If teachers are well informed about the main effects and their benefits of the assessment by co – operation using weblogs, then this will establish the motivation of pupils' learning and rethinking the hierarchy of criteria for assessment of student learning outcomes in web environment.

Specific hypothesis:

1. If we inform teachers at the organized focus group about the main beneficial effects of the assessment in web environment, then these

- will identify the necessity for developing blended learning abilities to motivate learning and raising pupils performance;
2. If we require surveyed teachers to prioritize the criteria for assessing student outcomes compared to traditional, individual assessment and web environment assessment, then these will rethink the hierarchy of criteria for assessing learning outcomes.

## **Methodology**

### **The sample**

The investigation group was composed of fifty teachers from primary education, who are teaching in the third and fourth grade of the schools in Craiova, Bechet, Băilești and Poiana Mare.

### **Methods**

The methods of our researches were the focus group and analysis, based on questionnaire. Using the analysis method based on questionnaire, I applied a questionnaire to the teachers in primary education, who are teaching in the third and fourth grade.

### **Instruments**

To demonstrate the major impact of assessment in web technological environment on student learning outcomes, due to support motivational and interactive participation to improve learning and school performance, we've proposed the expansion of a focus group composed of fifty teachers from primary education who are teaching in the third and fourth grade of schools in Dolj county.

So, we intend that by conducting interviews in the focus group to determine teachers in every school to participate at the investigation, to realize the beneficial effects of assessment in web technological environment, the utility of cooperative techniques and interactive online communication, complementary with traditional, individual assessment and the importance of their integration in current evaluative practices by developing blended learning competences. We've also proposed to develop the competences of teachers to identify the communication and cooperation impact in web environment on the level of educational attainment of pupils.

### **Researches results**

*The teachers' review about assessment's role in technological web environment to increase students performance and their motivation for learning*

We will refer to the following items of focus group ( I.1; I.2; I.3; I.4) to verify the first research hypothesis aimed to determine the extent in which the

interactive cooperation and communication techniques in web environment can produce the raising of students performance and their motivation for learning.

*At the I.1 item – “What are the main motivations for you, as a teacher, using the interactive cooperation and communication assessment techniques?”*, teachers express the following motivations: “pupils become active partners in assessment”, “pupils fulfill different tasks that substantiates the understanding of school achievements”, “develop pupils self- assessment capabilities” or “pupils are more motivated”.

*At the I.2 item – “What are the main factors depending on which you choose the assessment and learning techniques in web environment?”*, the study respondents identified the following factors as a landmark, choosing the assessment methods: the specific of the class, the content of the assessment, educational objectives, the required material resources and available time.

*At the I.3 item – Asking teachers to list at least three socio – psycho – pedagogical characteristics of web interactive evaluation techniques*, they identified: raising pupils motivation for learning, increasing the quality and efficiency of educational process in school and also the high psychological comfort of pupils and teachers.

*At I.4 item – About the benefits of skills development of blended learning as a consequence of involving pupils in different ways of web assessment*, the study respondents identified many advantages, among which: ”encourages the creation of a pleasant, relaxing learning environment, pupils being evaluated in their natural learning environment through contextualized tasks”, “provides a perspective on student’s activity on a long period of time, overcoming the disparity of the traditional assessment techniques and methods as a survey in the field and between students”, reduce stress to the extent that the teacher is a counselor and the assessment has got as the first aim improving the activity and to stimulate the pupil and not to sanction him, the assessment activities include developed materials on a long time term (posts, comments, texts, images, audio-video files that can be shared or updated, messenger, tele - video, conferencing, debate rooms, forums, emails).

### ***The ranking criteria for the assessment of learning outcomes in response to traditional, individual assessment***

To obtain the adhesion of teachers to use more often the assessment techniques and the web environment and other combinations of all these with the classic ones, I asked them first to order the assessment results in ranks depending on the frequency of the current evaluative practice and to assign the rank depending on their opinion on the hierarchy of learning outcomes.

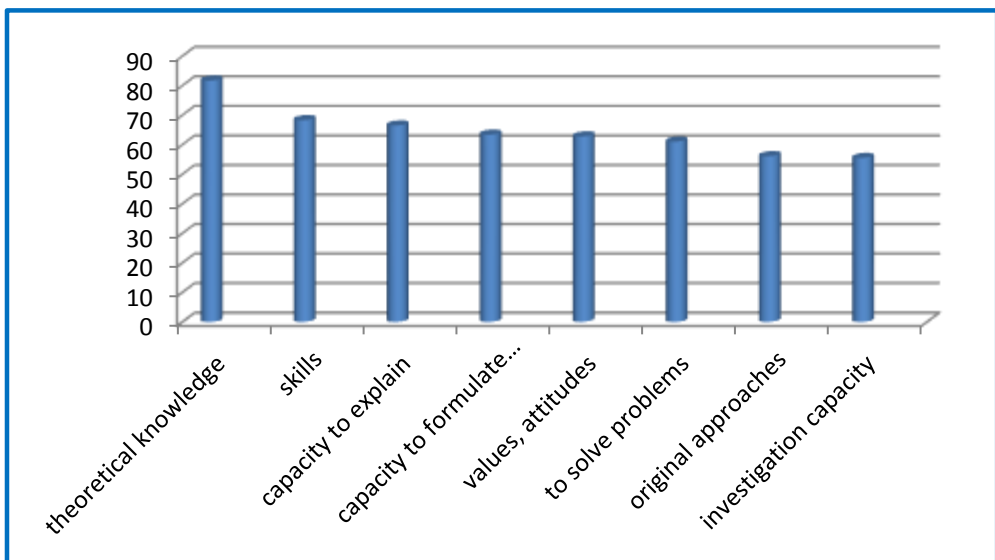
As graphical representations below, we can see that respondents teachers have established the following order of the learning outcomes depending on their request practice: the first rank – theoretical knowledge ( 81, 7%); the second rank – skills (68, 3%); the third rank - the capacity of solving problems (61, 0%); the fourth rank– values, attitudes (62, 8%); the fifth rank – capacity to explain and to

interpret (66, 5%); the sixth rank– investigation capacity and scientific exploration capacity (55, 5%); the seventh rank – original approaches, new ideas (56,1%); the eighth rank – capacity to formulate judgments (63,4%).

If the educational assessment put on the top ranks theoretical knowledge, skills and the capacity of solving problems, then this is justified with a high frequency of traditional, individual ways of assessment.

We noticed that the results which research subjects assigned lower scores are on higher ranks. This fact is due to the achievement of a reporting of each result of every eight ranks, but we mustn't neglect the percentage organization.

For sharing current practice closer to reality evaluation, we consider very necessary reordering the learning outcomes achieved in relation to the percentage value, in this way: the first rank - theoretical knowledge ( 81, 7%); the second rank – skills (68, 3%); the third rank - capacity to explain and to interpret (66, 5%); the fourth rank – capacity to formulate judgments (63, 4%); the fifth rank – values, attitudes (62, 8%); the sixth rank – capacity to solve problems (61, 0%); the seventh rank – original approaches, new ideas (56,1%); the eighth rank – investigation capacity and scientific exploration capacity (55,5%). (Figure 1).



**Figure 1. The hierarchy representation criteria for assessing learning outcomes in response to traditional, individual assessment**

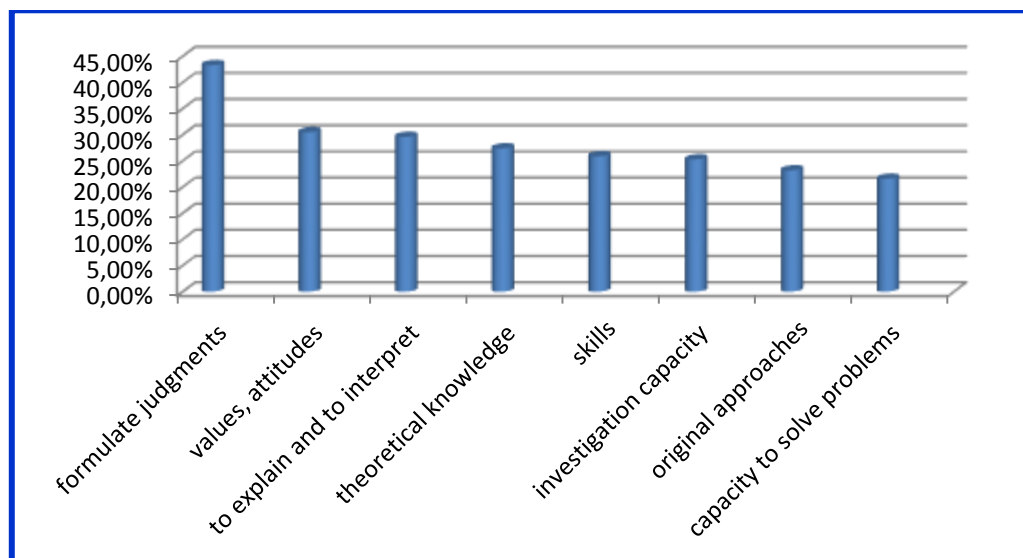
***The ranking criteria for the assessment of learning outcomes in response to evaluative practice in interactive web environment***

We propose to all the teachers to reflect on this situation and to establish a hierarchy of the learning outcomes in response to assessment criteria in the communication and cooperation web environment.

To choose the right assessment techniques, we must know what are the students achievements and what do we want to assess. So, the respondents established in this context the following classification reporting each result at a rank: the first rank - theoretical knowledge ( 27, 4%) skills (25, 9%); the third rank - capacity to solve problems (21, 6%); the fifth rank – values, attitudes (30, 5%); the sixth rank – capacity to explain and to interpret (29,6%), original approaches, new ideas (23,2%); the seventh rank – investigation capacity and scientific exploration capacity (25,3%); the eighth rank – ability to formulate judgments (43,3%).

We notice that many achievements of pupils are situated on the same steps of classification, while some ranks have not been assigned learning outcomes. This situation is due to the fact that each learning outcomes has been described by a variable whom was assigned a value from one to eight according to rank target, so it has been done a reporting of each result of the eight ranks (which is presented in the charts).

If we want to establish the correct hierarchical value we must take into account the percentage value. For a fair distribution we consider absolutely necessary to reorder the learning outcomes compared to obtained percentage value, in such as: the first rank - capacity to formulate judgments (43, 3%); the second rank – values, attitudes skills (30, 5%); the third rank - capacity to explain and to interpret (29, 6%); the fourth rank – theoretical knowledge (27, 4%); the fifth rank – skills (25, 9%); the sixth rank – investigation capacity and scientific exploration capacity (25,3%); the seventh rank – original approaches, new ideas (23,2%); the eighth rank –capacity to solve problems (21,6%) (Figure 2).



**Figure 2. The hierarchy representation criteria for assessing learning outcomes in response to evaluative practice in interactive web environment**

It is necessary to know the nature of the achievements that we want to assess, the learning outcomes to which we plan the assessment procedures, because only reporting ourselves to all these aspects we could choose the assessment techniques that fit properly.

If it is a priority for us to assess the theoretical knowledge, it is appropriate to select traditional evaluation methods and techniques that requires the individual participation of pupils. If our assessment is targeting ability to formulate judgments, then the most suitable assessment techniques are those of communication and cooperation in web environment. All these require establishing a correlation between traditional and cooperation methods involved in blended learning activity.

We remark the visible difference between learning are outcomes concerned by the current evaluative practice and their ranking expressed by the teachers' opinion specific to assessment and cooperative learning in web environment and this situation demonstrate the need for changes in school practice evaluation.

### **Discussions**

The evaluation methods and techniques and cooperative learning requires new types of methodological thinking, learning programming tasks and especially an assessment and a continuous and precise tracking of the actions, roles and achievements of each pupil and group.

The teacher's role is different from the traditional one, focused on front teaching and individual activities of students. The teacher's role is less visible and more associated with thorough planning of learning tasks, especially if we take into consideration that every pupil in the class will have a role to fulfill in the learning process and in its related tasks.

This means that the learning objectives and tasks and blended learning must be formulated, so that they cannot be fulfilled without the active involvement of all pupils in web learning environment.

If we want that all the activities to be appropriately allocated to pupils, the teacher should know each student well.

The teacher should know the potential, motivations and other aspects of each pupil if he wants to form effective and cooperative groups.

In cooperative learning, the teacher creates proper conditions, so that the cooperative activities to be more constructive and productive than those based on competition.

Secondly, learning process must be planned so that to provide sufficient possibilities for face-to-face interaction in the virtual web environment.

Thirdly, all pupils must become aware of individual responsibility and collective responsibility necessary to achieve the group's objectives.

Finally, work skills in small groups and social skills should be practiced and used continuously.

School assessment as a result of learning based on cooperation can be achieved through interactive activities that promote cooperation and communication relations and achieving individual and groups performances; it also involves the use of modern techniques and methods of assessment that may cause constructive involvement of students in the educational act.

The modern techniques and methods of assessment in the virtual web environment may identify the student's personal mental exploration, the essence of reality and representations.

I have also focused on internal processes in cognition, the cognitive capabilities and skills, methodological structuring and reflection on the multiplicity of interpretations due to the performance of some activities, such as: posts, comments, texts, images, audio and video files that can be shared and updated, messenger, tele-video conferencing, debate rooms, forums, emails.

### **Conclusions**

In this study I've presented the issue of assessment and learning through collaborative web environment. I've identified many changes involved in switching its assessment from traditional, individual assessment to the modern online communication and collaboration.

So, I've referred to programming tasks of learning and individual assessment with those of the collaborative, identifying the actions of assessment process in the context of collaborative web environment, developing the abilities of using communication and interactive learning, providing the reflexive activities and regular feedback.

In this researching project, I have brought an important contribution by analyzing streamline collaborative assessment by using weblogs and improving teaching practice regarding their positive effects in assessing students' competences to the detriment of traditional, individual assessment.

This researching had the following limits: deficit collaboration of some teachers, the uncertain answers of some teachers in the sample to the open questions from the focus group; the open answers of teachers in the applied interview qualitative analysis.

As prospects for the development research, we can identify: expanding investigations on a larger sample of teachers and its rigorous satisfaction; analysis of several techniques and methods of communication in technological environment; development of some training courses of teachers in pre-primary and primary education in order to develop their abilities to integrate information technology in teaching, learning and assessment.

Interactive assessment in web communication and cooperation, implies the existence of a partnership between educational agents, which is based on collaboration and negotiation processes and which targeting the empowering trainee and mobilization of its initiatives in evaluation and learning processes.

The main purposes of the interactive assessment are: to stimulate self-

evaluation capacity of the subject involved in this process, of its awareness required and to increase the self confidence of the trainee.

## References

- Manolescu, Marin. 2004. *Activitatea evaluativă între cogniție și metacogniție*. București: Editura Meteor.
- Baggetun, R. and B. Wasson. 2006. Self-regulated learning and open writing. *European Journal of Education* 41(3-4): 453-472.
- Bonk, Curtis J. and Charles R. Graham, eds. 2006. *Handbook of blended learning: Global perspectives, local designs*. San Francisco: Pfeiffer Publishing.
- Cuhadar, Cem. 2008. *Improving interaction through blogs in a constructivist learning environment*. Doctoral Dissertation. Anadolu University. Graduate School of Educational Sciences.
- Davidson-Shivers, Gayle V. and Kay Rasmussen, eds. 2006. *Web-based learning: Design, implementation and evaluation*. Upper Saddle River, NJ: Pearson Publishing.
- Du, H. S. and C. Wagner. 2007. Learning with weblogs: Enhancing cognitive and social knowledge construction. *IEEE Transactions of Professional Communication* 50 (1): 1–16.
- Glogoff, S. 2003. Blogging in an online course: A report on student satisfaction among first-time bloggers. In G. Richards. *Proceedings of World Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education*: 2160-2162. Chesapeake, VA: AACE.
- Good Habits in Programming. *Lecture Notes in Computer Science* 1839: 262-271.
- Graham, S. and K. R. Harris. 2009. Almost 30 years of writing research: Making sense of it all with the wrath of Khan. *Learning Disabilities Research and Practice* 24 (2): 58-68.
- Kerres, M. and C. De Witt. 2003. A didactical framework for the design of blended learning arrangements. *Journal of Educational Media* 28 (2-3):101-113.
- Martindale, T. and D. A. Wiley. 2005. Using weblogs in scholarship and teaching. *Tech Trends* 49(2): 55-61.
- Rooney, J. E. 2003. Blending learning opportunities to enhance educational programming and meetings. *Association Management* 55(5): 26-32.
- Shelly, G. B., Gunter, G. A. and R. E. Gunter. 2010. Integrating technology and digital media in the classroom. Boston, MA: *Course Technology Cengage Learning*.