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Using Complementary Strategies for Students' Didactic Evaluation

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Abstract

The didactic evaluation represents one of the most important components of the teaching / learning process, that can offer professors the image of the level in which their students acquire the knowledge they were taught. In the present paper, we are planning to describe the status and role of self-evaluation in student assessment and a possible way to implement this activity. The sample of research was composed from 116 students attending the initial training in didactic career from University of Oradea Romania, who should anticipate the mark that they estimate to obtain at Pedagogy exam, before and over to solve the task that two marks were compared with the one accorded by the teacher. The results showed that many students sub-evaluate themselves. It is recommended to identify some possibilities to improve the capacity of students for realistic self-evaluation.

Keywords: complementary strategies, didactic evaluation, objectivity, students' self evaluation

1. Introduction

In recent decades, Romanian education, but also worldwide, underwent significant changes, both in terms of modernizing the information content (as an effect of the development of science and technology), and in terms of activating teaching / learning / assessment strategies (as the effect of the need to involve students in their own personal and professional training process). However, the activation of teaching strategies was achieved, predominantly, only at the level of teaching and learning by introducing new working methods specific to critical thinking, cooperative learning or other currents. The evaluation of students' school progress remained somehow dependent on conservatism, many teachers preferring not to "risk" involving their students in a sensitive activity, with immediate effects, but the process also had long term effects (Marinescu, 2018; Kiss, 2018).

The classical approach to the evaluation process seems relatively restricted, in the sense that it limits the student's role to that of "object" of teaching. Also, recently, in the context of the restrictions imposed by the COVID-19 pandemic, there have also been several significant challenges and changes in the assessment process with the transition to online activities (Tosun, 2020). Taking into account the axiom that the evaluation reflects the way in which the training and learning was done, it can be appreciated that, in this case, we are dealing with a teacher-student interaction of expository, recitative type (Radu, 2000), in which the teacher's role is to expose informational contents more or less ready, respectively to evaluate how they are mastered by students, most often using their mnemonic processes. On the other hand, conducting an "interactive" assessment would also involve students, turning them into "subjects" of the process. In this case, according to the quoted author, teaching and learning should be done in the form of a frontal dialogue (with multiple communication paths) or by organizing student learning, through cooperation or in the form of independent work. This approach involves shifting the emphasis on the requirements needed for the student to develop properly, to notice new problems or relationships, to ask questions, to apply the knowledge acquired in new contexts (Vlădescu, 2016).

Comparing the two views on the evaluation of school results (classical / modern), it can be seen that, in the case of the “modern” one, the degree of student involvement in the decision-making process is much more pronounced. If in the “traditional” evaluation, the communication relationship between the evaluator and the evaluated was unilateral, the student having the role of transmitter (by reproducing the acquired knowledge), and the teacher having the role of receiver (by recording, interpreting and making the decision); in the case of the “interactive” evaluation, the evaluator evaluated communication becomes bilateral, the roles of sender and receiver being alternative. This achieves what could be called "interactive listening" (Pânişoară, 2001).

In summary, a possible difference between assessment by traditional methods and that by interactive or complementary methods would be the type of communication that is established between the examiner and the examinee. Without intending to present them in antithesis, it can be argued that while traditional assessment methods are too unstimulating and conducive to heuristic thinking, generating ”oppositional” relationships between the teacher and the students and having a relatively low academic efficiency, interactive ones develop a creative personality, the results of the assessment are more easily accepted and favor communication and cooperation in the classroom. It should be noted, however, that according to this approach, assessment by traditional methods / assessment by complementary methods depends mainly on the examiner (e.g., graphic evidence can be included in both the “traditional methods” category - when administered to students and corrected by the teacher according to the classical procedures, as well as in that of the “interactive” or “complementary” methods - when the

documents obtained as a result of their application are subject to self-correction or mutual notation). It is thus possible to make the transition from the evaluation made by the teacher to the one in which the initiative belongs to the students themselves (self-evaluation / peer-evaluation).

Regarding self-assessment, the literature addresses this issue from various points of view. Through the prism of social psychology, Breakwell (1992) relates self-assessment to social self-efficiency and defines it as representing the perception of each individual on their own abilities, which influences their mode of action, their cognitive patterns, motivational level or emotional reactions in various situations. The perception of one's own effectiveness is positive if the individual has been successful in performing the tasks and is negative if he was wrong or was unable to correctly anticipate future actions. The authors' observations have applicability in different areas of social life such as orientation towards various forms of schooling, choosing a career or involvement in political or social activities (Breakwell, 1992).

With reference to the educational phenomenon, self-evaluation represents "the student's ability to make value judgments on his / her own school competences and performances, of his / her own person, in general" (Stan, 2001, p.11). Analyzing this definition, we can see a number of similarities with the conception of Breakwell and his collaborators. As in the case of the social dimension of this phenomenon, in schools, self-assessment targets their own cognitive, affective and practical skills that will lead to obtaining school performance as an expression of accomplishing a learning task. However, the two components are not always in a direct relationship, sometimes students may have high availability, but not materialized by performing a school task at optimal parameters. However, an inverse situation is also possible, in which students obtain special teaching performances in the conditions of reduced skills for that activity. In such situations, the role of self-assessment is precisely to capture the real level of their school skills, to facilitate the achievement of expected performance.

The main strategies used in self-assessment / peer-assessment could be the following (Blândul, 2014):

Self-correction or mutual correction - students are asked to detect their own mistakes or those of their colleagues; the method can contribute to the awareness of learning one's own skills. Neacşu M.G.(2011) considers it necessary to develop students' self-evaluation capacities, as an act of reflexive self-observation of own cognitive processes, of own behaviors, conducts, attitudes, but also of one's own deficiencies in exercising the didactical behavior; in terms of motivation-attitude, self-evaluation cultivates students' inner motivation as regards the future teacher profession and makes them responsible, making them much more aware of the importance of their upcoming didactic mission.

Controlled self-grading - in the verification/evaluation process, the student is asked to give a school grade which is then negotiated with the teacher (and argued by him/her), or with the colleagues. This method can be administered as follows: prior to the oral or written examination, the designated students will be asked to estimate the school grade they believe will obtain based on how they know they prepared for the lesson, asking them they become motivated to do so; after the oral examination, but before the teacher announces his/her school grade, students will be asked to give another school mark (which may be identical or different from the previous one), but based on the actual answer provided and this time they will have to motivate their choice; the final school grade recorded in the school mark book will be the one given by the teacher, who in turn has to argue it. The method can be used identically in the case of the written assessment. However, it is extremely important that students always know the objectives and criteria considered by the teacher in the didactic evaluation.

Mutual grading - students have the opportunity to grade each other in oral or written tests. This method has the advantage that it can make students responsible and be aware of the importance of the school grade given, that their assessments can influence the school performance of their colleagues.

The method of objective assessment of personality (rating method) - is related to the name of Gheorghe Zapan, who was the method's proponent in Romania. So, for each school topic, before administering an assessment test, students will be asked to anticipate on a piece of paper, what they consider to be the first, respectively the last 30% of the colleagues who will obtain the best / poor results in that test (if they consider it necessary, the subjects can also mark themselves in one of the two extremes). The reason why only 30% of the students at the two ends of the scale are targeted is given by dividing it (according to Gaussian curve for a statistically normal distribution) into 5 classes, with weighs of 10%, 20%, 40%, 20 % and again 10%, corresponding to the levels "very good", "good", "average", "satisfactory" and "unsatisfactory". This type of exercise is recommended to be applied for at least 3 or 4 months, once a week, to as many school subjects as possible. The presented method contributes to a better knowledge and appreciation of other colleagues (as well as of the subject himself in relation to them), which will determine him to be more careful in capturing the behaviors of others, but also his/her own behavior in curricular and extracurricular activities.

Unfortunately, there are frequent situations in which teachers do not use such didactic self-assessment strategy, firstly due to its high degree of subjectivity, and then secondly due to the complexity in designing the implementation (Bradea, 2015). In higher education, self-assessment of students' school performance is even less encouraged, as most teachers either do not know the specifics of this process or do not appreciate its advantages. Therefore, there will be very few students who will be able to authentically

develop their specific self-assessment skills. In this context, in disciplines such as "Theory and Methodology of training. Theory and methodology of evaluation", respectively "Psychology of education", that are included in the school curriculum for the initial training of teachers in Romania, we tried to stimulate the students' self-evaluation capacity, asking them during the semester to issue value judgments on essays, presented by their colleagues at the seminar, to appreciate their own papers, respectively to self-evaluate their own performance in the exam, before and after solving the work task. We present, in the following, the design of the research and the results obtained after its administration.

2. Method

Starting from those presented in the previous paragraphs, the main goal pursued in this research was to assess the degree of awareness by students, of the importance of training self-assessment skills for their professional and personal development. The main objectives pursued were the following: (1) identification of students' competencies to correctly anticipate the school grade at an exam; (2) analysis of possible differences between the results of self-assessment in students before and after solving the work task, respectively (3) elaboration of an intervention program based on non-formal strategies for developing students' self-assessment competences. We consider that these mentioned objectives are able to cover a sufficiently wide area of the issue of the subject under discussion.

The research sample was represented by 116 students (N = 116) who study the courses of the Training Program in Psychopedagogy and Methodology at the University of Oradea, Romania. Of these, 10.1% study at the Faculty of History, 37.1% at the Faculty of Physical Education and Physiotherapy, 27.4% at the Faculty of Geography, and the remaining 25.4% study at the Faculty of Baptist Theology, from a partner university, 13.3% study "Psychology of education" in the first year of studies, and the other 86.7% study "Theory and methodology of training. Theory and methodology of evaluation" in the second year of studies. Of these 35.4% are boys and 64.6% are girls. We consider this sample large enough to be interpreted as representative for the entire University of Oradea, Romania.

During the first semester of the academic year 2019/2020, in the mentioned disciplines, students were asked to make 3 essays at an interval of one month between them, analyzing different topics selected from the didactic contents that have been studied. These 3 essays had to be taught at the end of each calendar month, respectively sustained during their seminar activities. The colleagues of the student who presented his/her essay were invited to give an assessment, if the material discussed seemed original, but scientifically consistent, respectively to make valuable judgments on how to

present the essay. The final examination in the subjects in question was carried out by means of written tests. Prior to their administration, students were asked to anticipate the school grade they considered they would obtain, depending on how they knew they had prepared, respectively taking into account the evaluation criteria announced by the teacher. After solving the work task, the students were again asked to anticipate the school grade that they consider they will obtain, in relation to the quality of the answer provided. The school grade given after solving the assessment task, could be equal to, or different from the one initially anticipated. The quantitative interpretation of the data was made by comparing the school grades anticipated before the exam, with the final ones, given by the teacher, the school grades anticipated after the exam, with the final ones, given by the teacher, respectively the school grades anticipated before and after the exam. Each time the students were asked to argue the chosen option.

3. Results

The results obtained are presented via figures as in the following.

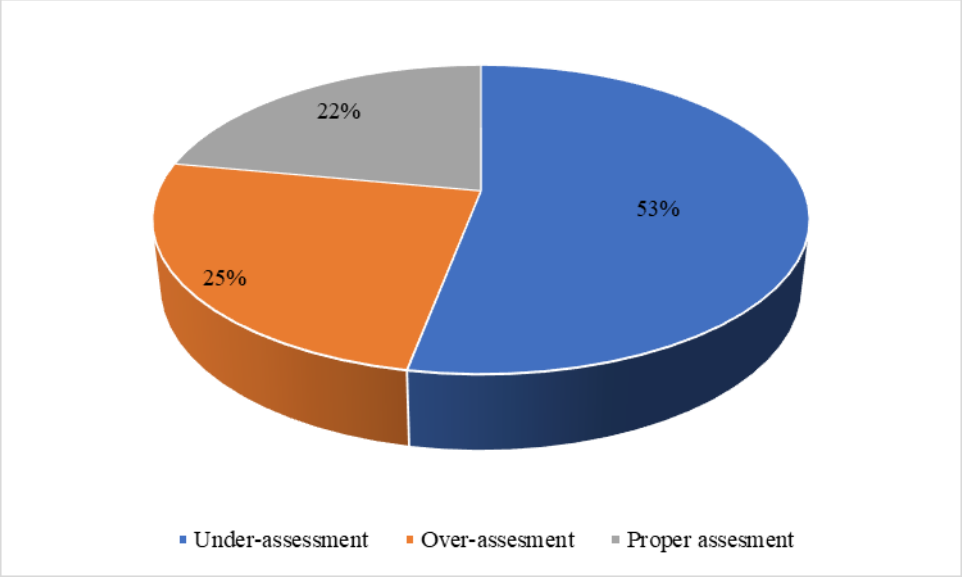

Figure 1. Comparison between anticipated school mark by student before the exam and the final one, given by professor

An interesting first aspect for the present research was the realization of a comparison between the school grade, anticipated by the student before the exam, and respectively the final grade, given by the teacher. Out of the total number of students investigated, 62 (representing a percentage of 53%) were underestimated, 28 (25%) were overestimated, and the other 25 students (22%) were evaluated objectively. The reasons why students gave a certain grade differed depending on the category in which the

students could be placed. Thus, the students who underestimated themselves did so, convinced that their level of academic preparation for the exam would not have allowed them to obtain an important school grade. At the same time, some of the students with unsatisfactory school results in other educational disciplines, were underestimated, as a result of lack of confidence in their own abilities. It was found that a student with low performance in other subjects or with a low level of school motivation will not give too much importance in preparing for an exam and will always tend to underestimate himself. On the contrary, students with a high level of self-confidence, amid serious exam preparation and increased motivation for learning, tended to overestimate themselves. The interpretation of the answers given by the students showed that those who self-assessed themselves objectively had the same arguments in support of their choice as their colleagues who overestimated themselves - the appropriate level of training, self-confidence, increased school motivation.

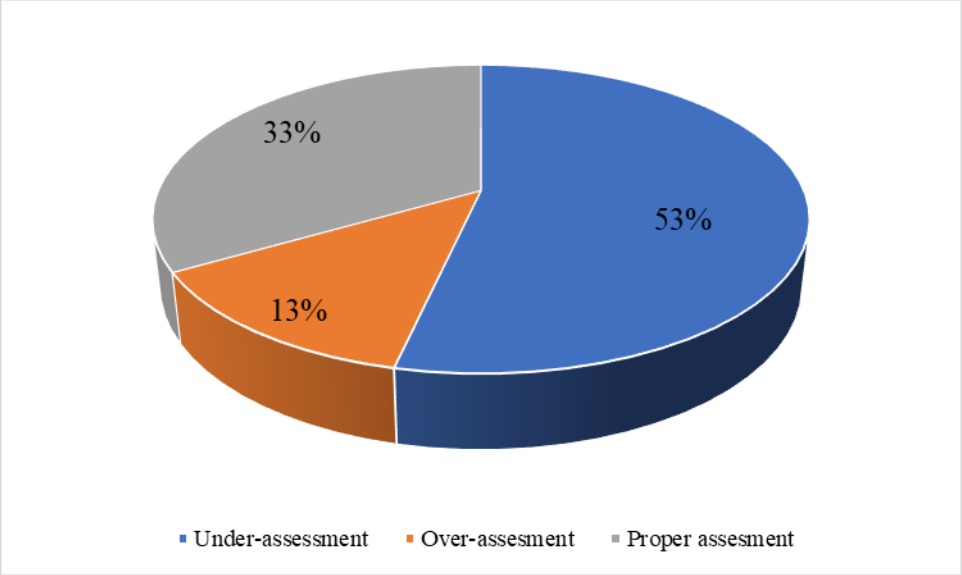

Figure 2. Comparison between the anticipated school mark by the student after exam and the final one, given by the professor

Somewhat, similar results were obtained in terms of comparing the school grades, anticipated by students after solving the assessment tasks and the final grades given by the teacher. Thus, if the number of students who underestimated, remained the same (62, representing 53%), the number of those who overestimated decreased (16 - 13%) and the number of students who were able to evaluate themselves objectively, increased (38 - 33%). The reasons behind the underestimation of the 62 students remained relatively the same, but the most interesting answers come from the other two categories. It was found that some of the students, who in the first moment overestimated themselves, now gave

the deserved school grade correctly. Being aware of their level of academic preparation for the exam, respectively a high dose of self-confidence, the students in the second category were able to correctly assess the degree of difficulty of the work task and were able to relate it adequately to their own level of preparation. It can be concluded that informing students about the purposes and criteria of didactic evaluation, proper preparation for the exam and understanding the difficulty of the content of the assessment test, can help some students to assess themselves more objectively in relation to the teacher's requirements.

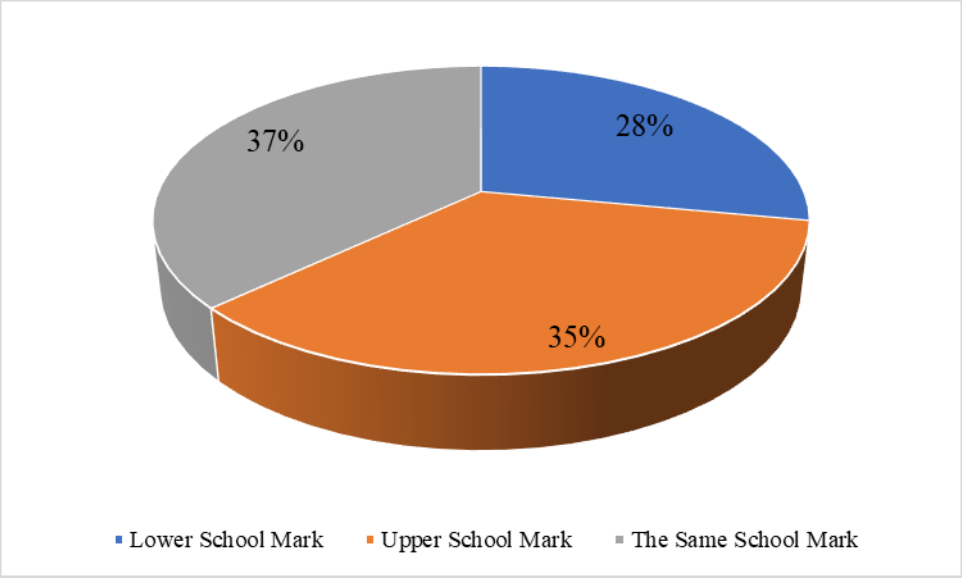

Figure 3. Comparison between school mark anticipated by student before and after the exam

The results are much more balanced in terms of comparing the scholar marks expected by students before and after the exam. Thus, 33 students gave lower school grades than the first time (28%), 41 gave higher grades (35%), and the other 42 students gave the same grades as in the first moment of research (37%). The reasons were given by the evaluation of the degree of difficulty of the work task, related to one's own academic training. Students with modest school performance in the other subjects of the educational curriculum, continued to underestimate themselves and anticipate that they will obtain even lower school grades than they have thought initially. However, some of them went to the other extreme, anticipating higher grades than they should have, but most remained consistent to the first option. The results obtained attest to the existence of a multitude of factors that are taken into account by students when self-assessing, some objective (related to the specifics of the assessment test) and others subjectively (connected by the personality characteristics of the student, his motivation for learning,

self-confidence, etc.). Therefore, it is important for a teacher to know these factors and to take them into account in developing programs, that stimulate the formation of interactive didactic assessment skills in students' mind.

4. Discussion and Conclusion

A first important aspect that can be taken into discussion, refers to the steps that must be taken to form the capacity for self-assessment in students' mind. According to a recent research conducted by L. Sera and M. McPherson (2019, pp. 664-668), there are 4 stages of the formation of self-assessment skills in the minds of students: (1) being unaware of their own incompetence; (2) being aware of their own incompetence; (3) being unaware of their own competence, respectively (4) being aware of their own competence. Detailing the subject, the authors found that, in the first stage, the student does not even have the skills to allow for a minimum assessment of his or her level of training, which causes him or her to either underestimate or overestimate, but without any objective basis. In the second stage, the student acquires a minimum of self-assessment skills, at least enough to assume the limits in his or her own training. In the third stage, the student continues to underestimate himself/herself, having difficulties in appreciating his/her own professional training at its true value. Finally, the highest level of self-assessment skills is reached, when the student can make realistic assessments of his/her own degree of professional training and can bring strong arguments in support of his/her ideas. It seems that in our study, most students are in stages 2 and 3, because more than half of them tend to underestimate themselves, either becoming aware of their own limitations or unable to understand how well prepared they are. Most of these students had modest academic results in the other subjects of study, in the faculty curriculum, and against the background of insufficient self-confidence, respectively poor school motivation, the temptation to underestimate is obvious. On the contrary, students with high academic performance can reach level 4 of self-assessment and can correctly assess their chances of success in an exam. Unfortunately, they are quite few, and this should be a challenge for all teachers, regardless of the subject they teach.

The second topic proposed for debate refers to the fact that self-assessment can be considered an excellent way to achieve non-formal education. In this context, in a recently published study, M. Summers et. al. (2019, pp. 270-273) emphasizes some characteristics of non-formal assessment: students and teachers become partners in conducting didactic assessment, the process becomes authentic and captures both quantitative and qualitative aspects of the student behavior, participation in this form assessment is voluntary, determined by the intrinsic motivation of the students for knowledge, the results of the assessment are qualitative and do not involve the award of school grades, etc. Due to its specificity, self-assessment can be considered a non-formal strategy, because it is optional for students, it captures not only the level of theoretical

knowledge gained, but also the attitudes that accompanied the learning process and the results are indicative, helping students to better interpret school success and failure, respectively allowing the teacher to validate their own school grade from the perspective of the examined students (Bradea, 2014). Therefore, any program to stimulate students' self-assessment, should include elements specific to non-formal education, including in teaching, learning and assessment activities. Also, the use of complementary strategies in carrying out the didactic evaluation (observation, investigation, project, portfolio, etc.) could contribute substantially to the formation of self-evaluation skills in the students' mind. Although the process is a complex one, the effort is fully justified, as long as the didactic self-assessment skills can influence the personal and professional development of the person as a whole, with beneficial effects on his success in life.

A possible conclusion that emerges from the analysis of the previous paragraphs would be that the interactive didactic evaluation (self-evaluation / inter-evaluation) keeps the same design, regardless of the educational form in which it falls. Thus, in the context of non-formal education, the school evaluation respects the 3 consecrated moments, even if the decision-making act materializes, rather in a qualitative characterization and less in a school grade or qualifier. In most cases, the classification of the evaluation carried out in non-formal education is done according to the temporal criterion, being able to mention here the initial evaluation (in order to determine the level of preparation of students at the beginning of an activity), continuous (to monitor the evolution along the way) and final (to check the level of skills acquired, compared to the start time). Non-formal evaluation can be carried out through both traditional and complementary strategies, the latter being most often preferred. It can be seen, therefore, that the school assessment conducted in non-formal education has a predominantly formative character in which the emphasis is on the quality of students' acquisitions and the extent to which they are able to apply them in concrete situations. Practically, in this way, the traditional, formal evaluation is completed, offering a more correct and integrative image on the level of preparation of the students (Blândul, 2015).

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