Student Evaluation, Basic Element for Quality Improvement in the Higher Education

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Abstract
The student is the person who, through certain native or gained qualities, assimilates the information and knowledge provided by the Professor. He is the main beneficiary of the educational system, because the main educational effects are registered at his level: the social effects (the improvement of the individual’s inter-human relations inside a society, the healthier behaviour of the educated persons etc.) and the economical effects (especially materialized as supplementary incomes for the higher-educated persons). Therefore, we can say that the student, together with the teacher, occupies a central position in the educational system.

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1. Introduction

This form of evaluating the students is represented by the school performances evaluation. Even from the start, we must underline that this evaluation has major implications in many areas. This way, it can refer both to persons (students, teachers) and higher educational institutions, and other complex structures (faculties, universities, study programs etc.). There is no doubt that the most affected entity by the school performances evaluation is represented by the students.
We will next analyze the issue of the qualitative evaluation of the students, under more aspects:

A. General considerations over the qualitative evaluation;
B. The principles and components of the evaluation.

A. General considerations over the qualitative evaluation

The evaluation of the school performances is a very complex process, with special implications, both from the didactic staff and over the students. That is why the starting point of analysis of this process is represented by a few fundamental questions:

1. Why do we have to make evaluations?
2. What do we have to evaluate?
3. How do we have to make evaluations?
4. Who has to make the evaluations?
5. When do we have to make the evaluations?

1. The first question, “Why do we have to make evaluations?” implies aspects referring to the necessity of evaluation and to its finality. Among the basic reasons why the evaluation of the school performance is necessary, we can mention:

   a) In order to realize a hierarchy of the students – this is the most often finality accepted by those who are involved in the educational process. In fact, it is seen as an implicit professional obligation. In this sense, the teacher gives marks or ratings, approves or suspends, promotes or does not promote, select etc.

   b) In order to help the students – refers to the possibility to correct the various deficiencies from the students’ knowledge level. This finality supposes the teacher’s suggestions, recommendations, orientations etc. to facilitate the improvement of the student’s knowledge level.

   c) In order to improve the study discipline – this important finality involves the analysis of the data obtained from the evaluation activity and their use as a basis to improve the class or the discipline through timely educative decisions, referring to: time distribution, modifications of the course’s content, the underlining of certain aspects and notions that are more difficult etc.

   d) For the analysis of the teacher’s activity – there is no doubt that the school results of the students illustrate more or less the quality of a teacher. In this sense, the teacher must reflect over his activity: how he prepared the lesson, how he motivated the students, what he needs to underline, what he has to correct etc.

As long as both the teacher and the student take into account all the four implications of the question “Why do we have to make evaluations?” the educational process will improve and, as a consequence, the student’s knowledge level will improve as well.
2. The second question, “What do we have to evaluate?” comes into appears after the meaning and the finality of the evaluation are understood. From this perspective, we can say that any qualitative evaluation of the students takes into account the knowledge, the teachings gained by them both at the collectivity level and at the individual level.

The modern approaches of Pedagogy suggest a classification of this knowledge, as follows:

- **Cognoscible**
  - Memorizing
  - Comprehension
  - Application
  - Analyse
  - Synthesis
  - basic (fundamental)

- **Behaviour and affective**
- **Aptitudes and abilities**
  - superior (creativity)

**Figure 1 The knowledge classification**

Therefore, both the Professor and the student must clearly see the objectives of the course. These objectives represent the foundation of the verification tasks choice.

3. After we have answered the previous questions that referred to the finality of the evaluation and to its objectives, we have to concentrate over the concrete modality of evaluating the school performances, aiming at the implied methods, techniques, processes and criteria. About the evaluation methods and techniques, the Professor is the one who takes decisions as:

- The utilization of oral, written or mixed exams;
- The proportion chosen in the verification exam, between the theoretical questions or on the case studies;
- The type of the question: with open or closed answers (grid tests);
- Whether the group or individual etc.

Similarly, we have to take into account the criteria and the scoring norms, the minimal exigency levels etc.

Referring to the evaluation modality, it is interesting to say that the student adapts himself to the teacher’s exigencies. This was observed all around the world by Ley de Thorndike, who said that “all the persons tend to realize activities that lead them to the system’s exit”. From an educational perspective, this means that the students adopt a certain behaviour that facilitates their graduating. So, if a student knows that a teacher examines with the help of the memory based exams, he will concentrate his efforts to improve his capacity of memorizing.
On the contrary, if he knows that the exams are based on case studies and creativity he will concentrate in this direction.

In conclusion, we can say that the teacher’s evaluation method conditions the student’s learning type.

From this point of view, we consider that there must be equilibrium between the informing of the student over the evaluation methods, techniques and criteria and their permanent change and improvement. A monotonous and excessive use of a certain type of exam leads to irrelevant results. On the other side, the students’ permanent surprising with new types of tests creates a certain tension and uncertainty that leads to erroneous results.

4. As about the answer to the question “Who must make the evaluation?” this is surely the teacher.

The experience from this area supports the idea that the responsibility of evaluating the school performances belongs mostly to the teacher who realized the instruction (teaching) process. This is based on the fact that the respective professor is the only one who knows best the reality according to which is established the exam and the exigency level.

Still, we can come across different situations. In some cases, a Professor who did not make the teaching (instruction) act on the basis of the professional authority he possesses, can realize evaluation tasks for determining the school performances concomitantly with the establishment of the standard and of the correction modalities. In other situations, the responsibility of evaluation (conceiving the tests, standards and correction modalities) belongs to a collective of didactical staff who teaches the same discipline for different groups of students.

Taking into account the things we mentioned above, we can tell that the evaluation of the school performances must be made by a collective of Professors that is homogenous from the taught disciplines point of view. In this collective, the Professors who realize the teaching process must have the main role in the conceiving, application and correction of the evaluation tests of the education performances for their students.

5. Usually, the proper moment for the evaluation of the educational performances is the end of a study period (semester, university year) or the graduation (of the higher educational institution). The evaluation tests can be represented by written or oral exams, practical tests etc.

Except these moments, there can also appear situations when the Professor wants to evaluate the students’ level of knowledge, at the beginning or during a study period. This can happen through the so-called “preliminary tests” or “partial tests” (exams, colloquies etc.).

No matter when the evaluation takes place, the student is supposed to be informed in time over the exams calendar, and the different characteristics of each test should be specified.
B. The evaluation’s principles and components

The students’ qualitative evaluation must be based on the following principles:

- The veracity principle, refers to the fact that the evaluation of the educational performances must be based on the continuous and systemic gathering of all the real and representative information referring to the students’ activity;
- The objectivity principle, refers to the fact that the students’ evaluation must be made in an equidistant way, without subjectivism;
- The finality principle, that supposes that any evaluation activity should end with a clear and precise presentation of the results;
- The improvement principle refers to the fact that any evaluation action of the educational performances should subordinate to the improvement fundamental objective of the students’ level of knowledge.

Besides the aforementioned principles, in order to realize an objective and clear evaluation, we must take into account the three components of the process:

- The informing, that must be real, clear and precise. It refers to obtaining several data regarding the evaluated persons (the students), data that can be various: individual or collective, general or specific, quantitative or qualitative.
- The value judgement, which is based on the previous informing. Such judgements can be: „More than half of the number of students has acquired the minimum knowledge”, „The time for case studies was insufficient”, „The X question needs more teaching time” etc. These value judgements can be defined as estimations of some present or past studies.
- The educative decision that is based on the anterior value judgements. If the emission of the value judgement is quite simple, the problem becomes more complicated in case of the adoption and definition of the educative decision. Through is nature, the decision represents an election of the action mode from the near future. Therefore, it supposes the existence of several action solutions, from which the most adequate will be chosen.

Therefore, the evaluation process of the educational performances process can be graphically represented as follows:

![Figure 2 The evaluation process of the school performances](image)

Therefore, we notice that the three components succeed each other in a well established order; the quality of entire evaluation process depends on the attention given to each of them. So, an ample, diverse, precise and concrete informing is vital in order to issue objective and clear value judgements. These, in
their turn, represent the basis for the adoption of rational, correct and real time
decisions. During the next section we will analyze each component separately.

2. The report

This component is very important in the evaluation process of the
educational performances because any error from this phase may generate, through
the”snowball effect” greater errors during the next phases. In order to evaluate, the
Professor must possess valid and reliable information.

A report is considered to be valid when there is a correspondence between
its content and the area we want to evaluate. In other words, the information is
valid when it is close to the value judgement that is to be issued and the decision
that will be taken.

Except validity, a report must also respect the reliability condition. It is
well known that in the data multitude that form a report there are several errors. We
can practically claim that the errors appear in any report. The reliability
problematic refers to identifying the error sources and a possibility to reduce them
by establishing error rates.

The main error sources that make a report insufficiently reliable and valid
are represented by:

a) The information gathering instrument – refers to the means the
Professor uses in order to gather the necessary information. It is obvious that not all
the methods are adequate to detect certain information or knowledge, to discover
how they apply and synthesize in other knowledge or to verify how certain issues
or situations are solved. From this point of view, the Professor should select the
optimal modality to realize the report: traditional written exams, with questions or
synthesis subjects, grid tests, practical cases, case studies, dissertations etc. If the
Professor does not choose the most adequate modality, the obtained report can be
more or less close to the real situation.

More than that, there are several internal factors that can represent error
sources in the optimal modality of information gathering. For example, the variety
or monotony of the questions, the amplitude of the subjects, the time that is
allocated to the test, the clearness of instructions etc.

b) The environment where the information is gathered

Here we can take into account two kinds of ambient environment:

• The usual environment, corresponding to some normal situations when
the student has to pass an exam at the same place where he activated, at the same
hour and in the same conditions;

• The extraordinary environment, where the student has to pass an exam
in different conditions: another class room, another hour etc.

There is no doubt that the extraordinary environment can furnish an
erroneous report, more or less than the normal environment.

Other factors belonging to the environment and that can be seen as
erroneous sources are: the luminosity, the temperature, the humidity etc.
c) The evaluated person – represents the main error source from the reporting process, because of the differences between reality and registered data. These differences can generate two types of reports:

- The super-evaluated report, when it presents a situation that is better than the reality. It is the case of the evaluated person (the student) that is tested from the subjects or areas he knows best;
- The sub-evaluated report that reflects a situation that is worse than the reality. It is the case of the evaluated person that cannot illustrate neither quantitative nor qualitative the knowledge he owns. This can be due to more reasons: shyness, lack of concentration, lack of attention etc.

d) The Evaluator – refers to the Professor as a participant in the evaluation process. The Professor should adopt decisions with a certain difficulty and that consequently involves certain errors. This refers to the following aspects:

- The number and type of objectives that will be evaluated: general or specific knowledge, aptitudes etc.;
- The information gathering modality: synthesis written exam, grid tests, practical tests, oral project presentation etc.;
- The establishing of the selecting method’s characteristics: duration, difficulty, clearness etc.;
- The application of the selected method: day, hour, place, circumstances etc.

Taking into account those mentioned above, sketch of the error sources from the evaluation process of the educational performances is the following:

![Figure 3 The error sources in the evaluation of the school performances](image-url)

Figure 3 The error sources in the evaluation of the school performances
Taking into account the errors that can appear in the realizing of a report, we have to present some conditions that have to be respected in order to improve its quality:

1. The clear presentation of the objectives/objective that the Professor wants to evaluate;
2. The classification of these objectives according to the characteristics and areas they belong to;
3. The selection of the optimal method and environment for data gathering in order to verify the accomplishment level of the analyzed objective;
4. The students’ informing over the chosen environment and modality in order to make them more familiar with it;
5. The conceiving of a test according to the proposed objectives;
6. The allocation of a reasonable test time;
7. The accomplishment of the test in an adequate place at a convenient hour and in normal temperature and luminosity conditions;
8. The clear statement of the test conditions: the testing time, the eventual time remaining until the testing end period, what is allowed and what it is forbidden for the test etc.
9. The clear explanation for the students over the quota or the correction methods: what it is to be tested (pointed), how it will be pointed;

3. The value judgement

During this stage, helped by some criteria, quota or scores, the Professor values the results obtained in the report stage. We have to say there are three types of value judgements:

- **Initial judgments** that the evaluator (the Professor) issues at the beginning of the study period or at the beginning of the class. It is interesting that these judgments do not take into account the present students, but the previous generations. In fact, the report stage was realized in the previous periods, on the former generations of students. Therefore, these judgements exclusively refer to the classes’ unfurling conditions, to its difficulty etc., representing the basis of the educational programming. Usually, these value judgements can be incorrect and the professor must be permanently there to modify them, according to the real situation;

- **Formative judgements** that the evaluator issues during the class or the study period. They take into account the present students, referring to the knowledge, aptitudes or techniques level they gained. The fundamental utility of the formative judgements is represented by the help given to the students in order to underline what is correct and to rectify what is wrong;

- **The final judgements** are those judgements issued by the evaluator at the end of a certain period (semester, university year) or of a class. They generally refer to the accomplishing level of certain pre-established objectives and they take the form of qualifiers or marks. These final value judgements are very important to the students because they influence their academic or professional future.
No matter what value judgement type, it must be based on a report on certain data. This supposes the evaluation of a certain area (e.g. knowledge level) by taking into account three reference points: the criterion, the norm or the self.

The value judgements issue based on a criterion means the interpretation of the obtained data for a student in comparison with a previously established level (criterion); the value judgements issue based on a norm means the interpretation of the obtained data for a student in comparison with the results of a group (norm, normative group), while the value judgements issue based on the self means the interpretation of the obtained data for the student in comparison with his own results for a previous period of time. The three modalities can be used by the evaluators according to the analyzed area. For example:

- In the candidates selection for the access to the higher educational level the judgement issue with reference to a certain criterion must be pointed out;
- In the analysis of the results and issue of value judgements regarding a normal exam or a test the judgement issue with reference to a certain norm must be pointed out;
- In the programming of the study disciplines or even of the study subjects from a discipline, the judgement issue with reference to a certain norm must be pointed out;
- In order to analyze the progress of a student, the rhythm of knowledge assimilation, the behaviour modifications, a value judgement issue must be issued with reference to the self.

In order for a valid judgement to be correct, a few conditions must be respected:

1. The correction of the tests must be based on strong principles: promptitude, objectivity, eventually without knowing the name of the student;
2. The clear explanation of the reference point in issuing a value judgement;
3. The presentation in time of the value judgements (especially of the formative ones) to the students, so that the eventual necessary corrections can be made;
4. The analysis of the individual and group results before the taking of a decision.

4. The educative decision

During a class, a semester or even a day, the evaluators adopt educative decisions. It is obvious that they are different (they do not affect the same number of individuals, they do not refer to the same academic life area, they do not have the same duration etc.). We will next analyze the differential elements of the educative decisions.

A first differential element refers to the number of persons that will be affected by that decision. Here we have to say that there are decisions that affect only one student (e.g. repeating a university year because of the insufficient preparation) or a group of students (e.g. the exclusion of some students from the test because they tried to cheat).
According to the analyzed academic area, there are major educative decisions (e.g. the modifying of a class structure or of its content, as a result of students’ expectations), or minor educative decisions (e.g. the modifying of the allocated time for a subject for the stressing of the casualty from a discipline etc.).

A third element that differentiates the educative decisions refers to their duration.

Therefore, there are short period decisions (e.g. the exclusion of a student from the class because of different reasons) or undetermined period decisions (the expulsion of a student).

No matter what decision they take, it must be based on a precise, rigorous and objective value judgement that, at its turn, is based on an ample, valid and reliable report.

References

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