Revista Românească pentru Educație Multidimensională
ISSN: 2066-7329 | e-ISSN: 2067-9270
Covered in: Web of Science (WOS); EBSCO; ERIH+; Google Scholar; Index Copernicus; Ideas RePeC; Econpapers; Socionet; CEEOL; Ulrich ProQuest; Cabell, Journalseek; Scipio; Philpapers; SHERPA/RoMEO repositories; KVK; WorldCat; CrossRef; CrossCheck

2021, Volume 13, Issue 4, pages: 60-90 | https://doi.org/10.18662/rrem/13.4/471

Trends and Perspectives in Didactic Evaluation in Higher Education

Liliana-Luminița TODORESCU[1], **Gabriel-Mugurel DRAGOMIR**[2], **Anca GRECULESCU**[3]

[1] Department of Teaching Training, Politehnica University Timisoara, 300006 Timisoara, Romania, liliana.todorescu@upt.ro
[2] Department of Teaching Training, Politehnica University Timisoara, 300006 Timisoara, Romania, mugur.dragomir@upt.ro
[3] The Faculty of Engineering in Foreign Languages, Politehnica University of Bucharest, Bucharest, Romania, anca.greculescu@upb.ro

Abstract: This article addresses trends and perspectives in didactic evaluation in technical higher education and in order to assist teachers in their continuous training through the results obtained. Thus, 263 students from Politehnnica University of Timisoara were interviewed. The research tool was a questionnaire with 25 items, of which 5 were factual. The issues addressed were related to an analysis of the state of affairs of the evaluation, as well as the proposals made by the interviewees to improve the evaluation. The suggested changes tackle a greater understanding and empathy on the teachers' part, their objectivity, as well as a better correlation of the evaluation with the students' psychological and personality traits. Regarding evaluation, particularly interesting was the suggestion of replacing teachers with senior students or even with computers. On the other hand, there is a reluctance of respondents to replace evaluators with intelligence devices or gadgets. The article can also be a starting point for future indepth research on the matter of evaluation.

Keywords: *higher education, formative evaluation, summative evaluation, feedback.*

How to cite: Todorescu, L.-L., Dragomir, G.-M., & Greculescu, A. (2021). Trends and Perspectives in Didactic Evaluation in Higher Education. *Revista Romaneasca pentru Educatie Multidimensionala, 13*(4), 60-90. https://doi.org/10.18662/rrem/13.4/471

1. Introduction. Theoretical background

As an old topic of discussion (to which new connotations are currently attributed), controversial and at the same time central in almost all fields of activity and especially in the pedagogical domain, evaluation is an inherent process of any human activity together with preliminary design of the activity (Dragomir et al., 2013).

The current interest in the issue of evaluation in general and educational evaluation in particular is fully justified, as long as one wants to know how effective human activity (including education) is, evaluation being basically the one that generates information with a self-regulatory function so as to enhance the efficiency of human activity (Dragomir et al., 2013).

Evaluation is nowadays considered as a complex didactic act, integrated in the entire educational process, in which the principle of feedback acts (Bontaș, 2001). In school practice, evaluation is, along with teaching and learning, a fundamental operational component of the educational process, being the regulatory and self-regulatory element, which ensures the improvement of the educational instruction process, in order to continuously streamline it and achieve previously formulated operational objectives by educators.

Since the educational act is premeditated, consciously and intentionally, aiming to achieve certain goals (ideal, goals and objectives), it is natural for someone to be interested if *what had to be done was done* (Cucoș, 2002).

Without the evaluation process, with which the teaching-learning activity is in close interaction and through which the school progress can be registered, which helps us to appreciate to what extent the results obtained are in accordance with the established objectives, the learning process would not be completely. In this case, the practitioner in the classroom would not know the results of his/her work and that of him/her educators and would not know in which direction the educational process is heading, which would make it impossible to make the necessary decisions to regulate and self-regulate it.

The docimological practice highlights numerous difficulties in the correct evaluation of school results, and current findings highlight the fragility or even the absence of objectivity and correctness of assessment, both in external examinations and in daily evaluations made by teachers (Dragomir et. al, 2013).

Over the last decades, most international studies have focused on didactic evaluation and have emphasized the importance of evaluation in the

whole teaching process, the effectiveness of the types of evaluation (initial, formative, summative) and the methods and tools of evaluation used in these types of evaluation. Furthermore, research in the field has addressed teachers' perspectives regarding the didactic evaluation process as a whole, the approach of education as a system, in which evaluation represents a fundamental operational component of the educational process and the constructivist perspective of evaluation. Other studies, however, take into account the students' perception of the didactic evaluation. Even fewer focus on students' perceptions of the value and usefulness of feedback in didactic assessment (Weaver, 2006). In the following, we make a brief review of the information presented in the studies carried out in the field of didactic evaluation, without claiming that it is exhaustive.

Freeman (Freeman, 1995) shows that the didactic evaluation system determines the student's attitude and behavior towards learning. In the same vein, Gibbs et al. (2005) believe that assessment is defined as the most effective feature in the student's learning process. Palmer (2004) considers that the evaluation method chosen by the teacher influences / affects the student's learning behavior, a fact also confirmed by Biggs (1996), who states that, from the students' perspective, evaluation fosters students' learning efforts. This requires a perfect harmonization and combination of assessment methods and tools used by teachers, with the needs of students and their learning habits-behaviors, in order to ensure a qualitative and effective teaching assessment at the same time (Biggs, 2006).

From teachers' perspective (instructors, evaluators), evaluation helps them to make the necessary decisions before, during and after the educational process, being the determining factor in the decision-making process (McMillan, 2014), and also a characteristic that ensures the permanent control of the didactic activity (Tan, 2012).

When education is approached from a systemic perspective, didactic evaluation has an important role in all its stages: entry, process, exit, control (Baykul, 1992). The initial assessment (diagnosis) gives the teacher an insight into the real level of learners' training and helps him/her to make consensus regarding the planning and subsequent development of the educational process. The formative evaluation (continuous, along the way) helps the teacher to ascertain the errors, mistakes, misunderstandings that may occur in the teaching-learning process and to make decisions that will regulate and self-regulate the instructive-educational process continuously. The final evaluation (summative, cumulative) helps the teacher to find out if and to what extent the educational services offered were effective and also to make decisions in order to carry out the educational process with a new generation

of students, improving and streamlining the less qualitative aspects identified throughout the didactic evaluation.

However, the findings show that, although in theory, it is stated and argued that teaching, learning and assessment are an integrated system as a whole, in practice, they are considered separate areas, mainly in higher education (Offerdahl et. al, 2011). In higher education, didactic evaluation is a generally neglected field and it is not given enough importance in all stages of the education process, the emphasis being placed mainly on summative evaluation. Assessment in higher education is done primarily in order to see the effectiveness of the program and curriculum and not in order to measure personal success or to define student learning (Wiliam et al., 2010).

In order to increase the contribution of assessment in the instructional-educational process, studies (Torrance, 2007; Nartgun, 2009; Sambell et al., 1997; Joița, 2006; Black et. al., 2016) show that it is absolutely necessary to move from assessment of learning to assessment for learning and assessment as learning, an approach fully addressed in the constructivist theory of education.

Assessment of learning is the most common type of assessment in higher education and refers to the traditional way of performing the act of assessing the learner, at the end of a sequence, large stages of learning, in order to certify the results of learners and their ranking. Emphasis is placed on the final behaviors of the learner, on his results and not on how the student achieved these results, his/her own ways, not only the standard ones provided through teaching.

Assessment of learning is the most desirable assessment in education and it is in fact the formative assessment from a constructivist perspective, ie not only the assessment conducted during the process of knowledge and learning, promoted as in its first sense (Tyler et al., 1968 ; Bloom, 1968, De Landsheere, 1975) but throughout the entire educational process, including the final phase, limiting the supremacy of summative assessment in education. This type of assessment allows obtaining information on the student's learning activity and the teaching activity of the teacher. Assessment of learning allows both students to make the necessary changes in their learning activity to be as efficient as possible, and teachers to make the necessary changes in classroom teaching activity, depending on the needs and characteristics of students. Therefore, assessment of learning consists in using evaluation mainly to improve learning, and less so to measure it. Specifically, an assessment is formative insofar as the data extracted from the assessment are used - by teachers, students or third parties - to make better decisions about the next steps.

Assessment of learning highlights the huge benefits of feedback in teaching and learning. In education, feedback is one of the most powerful tools that influences learning and school performance. The most important assessment takes place not at the end, but during learning, when you still have time to do something about what needs to be corrected.

Assessment as learning involves the educators' understanding of their own learning process. Hence, students become aware of their own way of thinking and learning. We are talking here about metacognition and metacognition. This involves a real interest of the learner in the learning process, taking responsibility for one's own learning, developing objective self-assessment skills (using self-assessment methods, mutual assessment, peer assessment) and continuous monitoring of learning, obviously with the support of teachers, in order to establish the future directions necessary to improve academic performance. The importance of feedback is also present in assessment as learning.

Feedback, more precisely feedback provided in assessment, is seen as an antidote to the problems that learning raises for students. Authors in the field of education believe that appropriate feedback, provided to students in didactic assessment, plays a helpful role in their learning (Weaver, 2006; Gibbs et al., 2005), although so far it is not clear what proper feedback means in evaluation. This concept remains vague, elusive, poorly defined.

The chapter on feedback of the most recent synthesis of outstanding works in psychology and education in recent years, *How Learning Happens*, written by professors Paul Kirschner and Carl Hendrick (Kirschner et. al, 2020), emphasizes that what educators and teachers want their students to wish for are two completely different things. Most of the educators do not aim to reach the maximum objectives, but are content to manage a little and to pass the day, semester or year without "major disasters". Also, many of them do not see feedback as a step towards success, but rather as a judgment on them. Thus, the way teachers provide feedback should also be taken into consideration.

In order to be effective and deliver the expected results on the educable and especially on his further learning activity, feedback must be supportive, not negative, critical, humiliating and disarming.

Most authors in the field of academic education (Brown, 2001) believe that in order to be effective, feedback must be given in a timely, relevant, encouraging and understandable way to the students. Moreover, regarding assessment, feedback must be customized, depending on the characteristics and individual and personal educational

needs of each student (Race, 2001). Weaver (2006) notes that most students complain that feedback received in the didactic evaluation is too general, too vague, given in a hurry, in a few words, unexplained, focused on the negative parts of students' answers, does not contain suggestions about how to correctly fulfil the tasks. What is more, feedback is not focused on increasing learners' confidence and motivation for learning and therefore, neither on improving the activity of further learning nor on the future results of their learning. Moreover, some students state that feedback is not related to the evaluation criteria or to the grade obtained.

The importance of feedback in didactic evaluation is also highlighted by the study *Explorig student perceptions of assessment feedback*, conducted by Liamm McCann and Gary Saunders (McCann et al., 2009), which shows that 90.5% of students surveyed make time to focus on feedback received in the evaluation and to analyze it, fact for which they want feedback that will guide them in their further learning in order to improve the academic performances. However, the same paper shows that 1 in 10 students surveyed said that feedback received did not help them improve their academic performance, because at that time, they did not even understand the terms used in formulating the feedback. One of the interviewed students even stated that he should have consulted the dictionary for each word, which did not bother him anymore. Therefore, in order to have an effective evaluation with subsequent positive effects, in order to improve students' academic performance, feedback cannot be provided anyway, but with words adapted to the level of understanding of the learner. Most students appreciate that feedback should increase students' confidence and motivation for learning, helping them to achieve better results later.

It should also be mentioned that the non-existence of feedback is as inefficient as negative feedback or maybe even more than that, generating disinterest and subsequent non-involvement on the part of the student.

Starting from these aspects of the didactic evaluation, we aimed to find out if, according to the students, they are observed in the evaluation process itself (so that it is as objective and qualitative as possible). In the present study, the research tool was used to capture the reality, the evaluation trends and the feedback offered in evaluation within Romanian technical higher education.

2. Research objectives

Objective 1: Mapping the most important evaluation criteria for the students included in the study.

Objective 2: Identify the various differences between different groups of students in the assessment approach

Objective 3: Identify the factors justifying the answers collected through the questionnaire

Objective 4: Outline the need for change in assessment for the target group

3. Research methodology

The research consisted in applying an online questionnaire to a number of 262 subjects. The results were processed using the statistical program Statistical Package for the Social Sciences (SPSS) 22. To map the most important evaluation criteria for students we used the statistical averages of the answers on each item (Table 1). To identify the various differences between different groups of students regarding the evaluation we used the Chi-square analysis ($\chi 2$, Hi square) (Tables 2, 3, 4, 5). To identify the factors justifying their answers, we used the factor analysis (Tables 6,7,8). To outline the need for change in evaluation, we also used the statistical means of the answers on each item (Table 9). For the closed questions, there were five-step answer scales: *to a very small extent / not at all, to a small extent, to an appropriate extent, to a large extent, to a very large extent*.

4. Results

4.1. Objective 1: Mapping the most important evaluation criteria for students targeted in the study.

18 items addressed the evaluation criteria, and the results obtained are presented in Table 1, as statistical averages on each item.

Table 1. The averages of the answers to the items subject to the study, among the investigated students
(Authors' own conception)

1	Regarding evaluation, do teachers use transparent evaluation criteria, ie. are the criteria, modes and scales of correction presented in advance?	3,94
2	Regarding evaluation, in your field of expertize, do teachers alternate, in a balanced way, the forms of evaluation: written, oral, project-based,	3,93

	portfolios, hands-in assignments etc.?	
3	Regarding teaching, are teachers both concerned with the initial assessment (at the beginning of a training stage), the formative assessment (during training, as far as possible at the end of each course, seminar, laboratory etc., through feedback) and the summative one (at the end of a training sequence - theme, course, and at the end of the training stage - semester, academic year)?	3,87
4	Regarding didactic evaluation, do teachers always evaluate the student's knowledge and not his/her personality?	3,82
5	Regarding oral evaluation, do teachers resort to the immediate correction of the wrong answers offered by the students, if the form of evaluation permits?	3,68
6	The exams show a gradual difficulty of the items.	3,60
7	The exams focus not only on assessing the student's ability to remember, but also on testing the student's ability to think.	3,60
8	There is a permanent concern of teachers for fairness, equidistance and objectivity in evaluation.	3,57
9	Reagrding the exams in which the teacher chooses to formulate the assessment subjects on 2, 3 or more rows, he/she designs examination subjects with equal degrees of difficulty for each row.	3,41
10	The time allotted to solve the subjects in the exams is proportional to their degree of difficulty.	3,38
11	The teachers justify to students the marks given after the evaluation.	3,34
12	Regarding evaluation, teachers compare it with the projected objectives, the possibilities of each student, with his/her previous results and the results of the other students.	3,31
13	There is a permanent concern within UPT teachers to develop their students' objective capacity for self-assessment.	3,29
14	In general, the tasks proposed for solving the exams are clear.	3,24
15	When using grid tests, is there a fair balance between closed-ended questions and open-ended (free) questions?	3,24
16	Feedback provided to students is always supportive.	3,20
17	Teachers organize meetings with students to communicate the results of the evaluation and explain them where appropriate.	3,16
18	During evaluations, in your specialization, do teachers alternate, in a balanced way, the synthesis type of tests with the grid type?	3,07

With regard to the first 18 items of the questionnaire (Table 1), addressing at the current state of didactic evaluation in our university, the surveyed students mostly appreciate the answers as positive. We make a series of observations on the answers received:

● Most of the answers are in the middle area and above, even if we do not record results at the highest level;

The fact that most of the answers offered by the respondents are in the middle and above area, denotes that the students perceive positively the way of carrying out the didactic evaluation activity, as a whole, at Politehnica University of Timișoara. Thus, we are assured by the students that the path that the university teachers started in the didactic evaluation is the right one. This does not mean that improvement is no longer necessary in the field of didactic evaluation within the university, but on the contrary, the evolution is always expected and welcome.

● In the first place, by an average of 3.94, is the item "teachers use transparent evaluation criteria, ie the criteria, modes and correction scales are presented in advance". This means that the evaluations are in line with the principle of presenting the evaluation criteria;

The presentation by teachers, in the process of didactic evaluation of the correction criteria, modes and scales, offers transparency to this act and contributes to the increase of the objectivity of the evaluation made by the teacher, but also to the development of the objective self-evaluation of the student. When the student is offered clear criteria, modess and scales of correction and grading, he/she is able, on the basis of the assimilated knowledge and the received scale, to structure a written work so as to reach all the important aspects devised by the teacher, to offer the best oral answer or to carry out a project, portfolio or a hands-on assignment as correctly as possible and closer to the requirements. Based on the same criteria, later, the student is able to evaluate himself/herself objectively, as objectively as possible.

In educational practice, in order to reduce the subjectivity of the didactic evaluation, it is recommended to use rigorously elaborated evaluation tests, by establishing the evaluation objectives, the contents, the items, the correction grids and the points awarded.

The fact that the responding students placed on the first place the item regarding the transparency of the didactic evaluation, at Politehnica University of Timișoara, certifies that the professors from this institution emphasize the transparency in education, the objectivity of the evaluation act and its correctness, not leaving too much place for subjectivity and interpretations.

● On the second place, by an average of 3.93, ranks "teachers alternate in a balanced way the forms of evaluation: written, oral, project-

based, portfolios, hands-on assignments etc." leads us to the idea of a non-uniformity of evaluation unlikely to foster monotony.

The alternation by teachers, in the didactic activity, of the forms of evaluation (written, oral, project-based, portfolios, hands-on assignments etc.), offers engineering students the possibility to develop both written and oral communication skills and even practical competences on the studied fields, revealed by manifest capacities and attitudes or even by certain objective aid or concrete products of the didactic activity.

Among other advantages, written assessment fully capitalizes on the characteristics of written language, putting students in a position to develop and express ideas correctly and rigorously in writing. Oral evaluation favors the direct interaction between teacher and student and allows full communication between the two educational agents (teacher and student / group of students); helps the student to express himself correctly in an oral presentation, a dialogue, a conversation, debates, accustoms him to the real direct frequent communication as encountered in the daily social context but also in the professional activity. Project evaluation, through portfolios, hands-on assignments etc., contributes to the development of imagination, creativity, ability to analyze, synthesize, interpret and process data and develops the ability to apply and implement theoretical knowledge into practice.

Project evaluation, portfolios, hands-on assignments also contribute to reducing the distance between "knowing" and "doing", as well as the return of Romanian education to life, to practice, because the sign of our time is that of the deed, of the action that must be taken quickly and well, of the entrepreneur capable of idea, initiative and action (Dragomir et. al, 2013). Only by having a series of skills, abilities acquired through the practical-applied and experimental activities, students -the future graduates will be able to further integrate more easily into the labor market and cope with the various situations they will encounter.

Educational practice demonstrates that combined forms of assessment are more effective because they develop complementary skills, abilities, capacities and competencies, unlikely to trigger monotony, boredom and they amplify the advantages and diminish the disadvantages so as to make an assessment as accurate and objective as possible.

The fact that, in a technical university, students appreciate that their teachers alternate in a balanced way the forms of evaluation, denotes the concern of teachers to develop in students various types of skills needed as future specialists in the technical field, but also in social context. Hence, this helps both students and teachers to free themselves from the trap of

practicing a single form of constant, routine and reduced assessment as a capacity to develop multiple professional and social skills.

- On the third place, by an average of 3.87, is the item "Regarding teaching, do teachers show both concern for the initial assessment, formative assessment and summative assessment?"

This confirms that the respondents are of the opinion that teachers at UPT are equally attentive to the initial acquisitions of students, to those during the teaching activity carried out together, as well as to those held at the end of a major stage of teaching. This is important because modern didactics highlights the complementarity of the three didactic evaluation strategies (initial, formative and summative), the efficiency of each depending on the presence of the other two evaluation strategies in the teaching process. The three evaluation strategies being complementary, the teacher has the role to use them efficiently in the evaluation process, through an optimal combination of them. Only in this way, what is lost, through one strategy, can be gained through the other.

Therefore, university professors are claimed to show interest in identifying the initial knowledge that students have in the respective subject, in order to further choose the most appropriate way to teach new content, but also to think of differentiated training methods. At the same time, UPT teachers are concerned with formative assessment, verifying the results of learners throughout the training process, usually operating in small sequences, systematically, in order to regulate the teaching-learning process, as well as the summative assessment made by partial verifications during the training program and through global estimates, balance of the students' results, on long periods, generally corresponding to the university semesters, the academic year or the educational cycle.

- On the 16th place out of the 18 items analyzed, by an average of 3.20, is the item "Feedback offered to students is always supportive". Even if the result is good, there is still room for improvement in the didactic approach of helping the evaluated students to overcome some critical moments that may appear after the evaluation;

It follows that responding students would like a little more empathy from teachers for the feedback provided in the assessment. In the process of communicating the results of the evaluation, supportive feedback from the teacher should highlight and appreciate positively any effort made by the learner in learning, any positive result, any achievement, should encourage the student to continue learning in order to improve the subsequent results. Feedback offered in the evaluation should not be perceived as criticism, as a

negative judgment, it should not be discouraging, but on the contrary, stimulating, supportive, motivating for the future learning activity.

It seems that, although they make efforts in this regard, UPT teachers still have a little more to practice until they manage to provide the supportive feedback desired by students in the didactic evaluation process.

● The last but one place of the ranking, by an average of 3.16, is occupied by the item "Teachers organize meetings with students to communicate the results of the assessment and explain them where appropriate";

The dissemination of the evaluation results should be achieved through face-to-face meetings between teachers and students. The teacher should make it a habit to meet with the students in order to communicate the results of the evaluation, in order to discuss with each one the aspects observed after the summative evaluation. During these meetings, teachers should provide supportive and corrective feedback, should assess the positive results, explain the negative ones and cope with their misunderstandings. If these meetings are not organized at the initiative of the teacher, they can be organized at the proposal of the students.

Regarding the didactic evaluation at UPT, it seems that teachers still have to look into it more, to consider meetings with the students for the dissemination of the evaluation results. Probably, the dissemination of the evaluation results, throughout the university campus, or through other methods that involve only displaying or transmitting the grade to the discipline in question, is much easier and less macrophage for the teacher, but certainly never has the same impact on the learner and it is not as effective for the educational act as a whole.

● The last place of the ranking, by an average of 3.07, is occupied by the item "teachers alternate in a balanced way the synthesis type of tests with the grid type ones".

The fact that at UPT, students appreciate that their teachers do not alternate in a balanced way the synthesis type tests with the grid type tests, makes us believe that they constantly apply the same type of test, which indicates their inadequacy in the field of didactic evaluation and lack of creativity and inventiveness in terms of evaluation, or convenience from the teacher. This leads us to think of monotony, on the part of the teacher and predictability for the student in the absence of alternation of assessment methods.

In order to be as efficient as possible in the process of evaluating students and to avoid monotony, routine and boredom, it is necessary that teachers alternate and even combine strategies, forms, types and ways of

evaluation. The more diverse the evaluation, the greater the efficiency of the evaluation, the teacher having the opportunity to evaluate students' results from multiple perspectives.

4.2. Objective 2: Identify the various differences between groups of students in the assessment approach (chi square)

To achieve this, the target group was divided into two categories: students in the first year of studies and students in the second, third and fourth years. The premise was related to the adaptation to student life and possible different visions. The first year students have fresher images of the high school and maybe different visions than those in the 2nd, 3rd, 4th years, who are used to student life and the specific way of assessment in college.

Question: Regarding, didactic evaluation, in your specialization, do teachers alternate in a balanced way the forms of evaluation: written, oral, project-based, portfolios, hands-on assignments etc.?

Table 2. Results of statistical mean concerning the alternation of evaluation forms (Authors' own conception)

Question	Year of study	N	Mean	Std. Deviation	Std. Error Mean
Regarding, didactic evaluation, in your specialization, do teachers alternate in a balanced way the forms of evaluation: written, oral, project-based, portfolios, hands-on assignments etc.?	1st year	142	3.79	1.248	.105
	2nd, 3rd, 4th years	120	4.09	.935	.085

Table 3. Results of the Chi-Square test to highlight the differences between 1st and 2nd, 3rd, 4th years years related to alternating evaluation forms (Authors' own conception)

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	10.033[a]	4	.040
Likelihood Ratio	10.927	4	.027
Linear-by-Linear Association	4.726	1	.030

N of Valid Cases	262

a. 2 cells (20.0%) have expected count less than 5. The minimum expected count is 4.12.

The application of the $\chi 2$ test shows the existence of significant differences between first year and the rest of students $\chi 2$ (4) = 10.033 (p = 0.04 ie p <0.05). Students in their 2nd, 3rd, 4th years of study do specialized disciplines, benefit from diversified evaluations through portfolios, projects, hands-on assignments.

Question: Evaluation conducted by students based on scales developed by teachers

Table 4. The results of the statistical mean related to the evaluation conducted by students based on the scales developed by teachers
(Authors' own conception)

Question	Year of study	N	Mean	Std. Deviation	Std. Error Mean
Evaluation conducted by students based on scales developed by teachers	1st year	142	3.47	1.195	.100
	2nd, 3rd, 4th years	120	3.02	1.414	.129

Table 5. The results of the Chi-Square test to highlight the differences between 1st and 2nd, 3rd, 4th years related to the evaluation conducted by students based on the scales developed by teachers
(Authors' own conception)

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	13.339[a]	4	.010
Likelihood Ratio	13.563	4	.009
Linear-by-Linear Association	7.766	1	.005
N of Valid Cases	262		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 15.11.

The application of the $\chi 2$ test shows the existence of significant differences between students in their first year and 2nd, 3rd, 4th year

students $\chi 2$ (4) = 10.339 ($p = 0.01$ ie $p < 0.05$). First-year students are more willing to be examined by their older peers (average answers are 3.47) compared to second, third and fourth year students (average answers are 3.02). First-year students probably experience greater anxiety than older students, compared to new teachers and their new professional development environment, which is the university.

4.3. Obiectivul 3: Identify the factors justifying the answers collected through the questionnaire

Table 6. The value of the Kaiser-Meyer-Olkin Measure of Sampling Adequacy test to verify the accuracy of the factor analysis
(Authors' own conception)

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.912
Bartlett's Test of Sphericity	Approx. Chi-Square	1528.475
	df	120
	Sig.	.000

Table 6 illustrates the value of the KMO test (Kaiser-Meyer-Olkin Measure of Sampling Adequacy), which has a value close to 1 (0.912, $p < 0.01$), ensuring that the model can be considered valid. 91.2% of the variation of the 16 variables is explained by the three factors extracted. The KMO criterion will select the factors that have a number of eigenvalues greater than one, ie. have an explanatory power greater than a single variable. The Barlett sphericity test shows the value Hi square (1528.475), the number of degrees of freedom ($df = 120$) and the associated probability ($p < 0.01$), shows us that the data set is suitable for an exploratory factor analysis.

Table 7. Table with the 3 extracted factors
(Authors' own conception)

Total Variance Explained									
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	6.290	39.310	39.310	6.290	39.310	39.310	3.414	21.336	21.336

2	1.295	8.094	47.404	1.295	8.094	47.404	3.006	18.790	40.127
3	1.149	7.183	54.587	1.149	7.183	54.587	2.314	14.460	54.587
4	.908	5.678	60.264						
5	.831	5.196	65.460						
6	.700	4.377	69.837						
7	.647	4.046	73.883						
8	.623	3.892	77.775						
9	.592	3.701	81.475						
10	.549	3.431	84.906						
11	.514	3.209	88.116						
12	.480	3.001	91.117						
13	.417	2.609	93.725						
14	.360	2.252	95.977						
15	.339	2.118	98.095						
16	.305	1.905	100.000						

Extraction Method: Principal Component Analysis.

As illustrated in Table 7, the three factors extracted have an eigenvalue greater than 1, ie. have an explanatory power greater than a single variable. The rest of the factors that were not extracted show a variation of the error that cannot be explained. The rotation of the factors shows us that the first explains 21.336% of the variance, the second factor explains 18.790% of the variance, and the third factor explains 14.46% of the variance. In total, the two factors explain 54.587% of the variance, thus, representing a satisfactory percentage for the current study.

Table 8. The saturations of the variables-values in each extracted factor, obtained after the rotation of the factors
(Authors' own conception)

Rotated Component Matrix[a]			
	Component		
	1	2	3
1. In general, the evaluation tasks are clear.	.694	.283	.005
2. Regarding evaluations, teachers use transparent evaluation criteria, ie. criteria, modes and scales of correction are presented in advance.	.659	-.078	.235
3. There is a permanent concern of teachers for fairness, equidistance and objectivity in evaluation.	.647	.448	.121
4. Regarding didactic evaluation, teachers always evaluate the student's knowledge and not his personality.	.606	.495	-.052
5. Regarding evaluation, in your specialization, teachers alternate	.563	.081	.514

in a balanced way the forms of evaluation: written, oral, project-based, portfolios, hands-on assignments etc.			
6. The exams focus not only on assessing the student's ability to memorize, but also on testing the student's ability to think.	.548	.207	.355
7. There is a permanent concern among UPT teachers to develop students' objective capacity for self-assessment.	.534	.341	.330
8. Regarding evaluation, teachers compare the objectives with each student's possibilities, to his/her previous results and the results of the other students.	.434	.301	.392
9. Teachers organize meetings with students to disseminate the evaluation results and to explain them where appropriate.	.019	.770	.099
10. The time allotted to solve the examination tasks is proportional to their degree of difficulty.	.105	.724	.201
11. Feedback provided to students is always supportive.	.332	.628	.351
12. Teachers always justify the grades to their students after the evaluation.	.437	.581	.101
13. Regarding the exams in which the teacher chooses to formulate the evaluation tasks on 2, 3 or more rows, the tasks are elaborated with equal degrees of difficulty for each row.	.386	.540	.265
14. When using grid tests, is there an alternation between closed-ended questions and open-ended (free) questions?	-.089	.203	.780
15. During evaluations, in your specialization, teachers alternately balance synthesis-type tests with grid-type ones.	.260	.172	.758
16. Regarding oral evaluation, teachers resort to the immediate correction of the wrong answers given by students, if the form of evaluation permits.	.287	.080	.389

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
a. Rotation converged in 9 iterations.

The variables are ordered in Table 8 according to the saturation they have in the extracted factors.

Factor 1 - ***called Factor of correctness and clarity*** includes *the variable values* introduced in the questionnaire with the following saturations: *the tasks proposed to solve the examinations are clear* by 0.694*; transparent evaluation criteria, ie. criteria, modes and scales of correction* by 0.659 *are presented in advance. There is a constant concern of teachers for fairness, equidistance and objectivity in evaluation* by 0.647*; teachers always evaluate the student's knowledge and not his personality* by 0.606*; teachers alternate in a balanced way the forms of evaluation: written, oral, project-based, portfolios, hands-on assignment* by 0.563*; the exams focus not only on assessing the memory capacity, but also on testing the student's thinking ability* by 0.548*; UPT teachers show a permanent concern to develop their students' objective self-*

assessment capacity by 0.534*; teachers compare evaluation results to the objectives, with each student's possibilities, with his/her previous results and the results of the other students* by 0.434

Factor 2 - called Teacher-student communication factor - includes *the variables - values as depicted from the questionnaire with the following saturations: teachers organize meetings with students to disseminate evaluation results and explain them where appropriate* by 0.770*; the time allocated to solve the examination tasks is proportional to their degree of difficulty* by 0.724*; feedback given to students is always supportive* by 0.628*; the teachers always justify to their students the marks granted in the evaluation* by 0.581*; regarding examinations in which the teacher chooses to formulate the evaluation tasks on 2, 3 or more rows, he/she elaborates tasks with equal degrees of difficulty for each row by 0.540.*

Factor 3 - called Exam structuring factor - includes *the variables - values listed in the questionnaire with the following saturations: when using the grid tests there is an alternation of closed-ended questions and open-ended (free) questions* by 0.780*; during evaluations in your specialization, teachers alternate synthesis-type tests with grid-type tests* by 0.758*; in the oral evaluation, teachers resort to the immediate correction of the wrong answers offered by the students, if the form of evaluation permits* by 0.389.

The three factors extracted by means of factor analysis show that the students included in our study are influenced by correctness, communication with the teacher and the way the exam is structured. There are three important factors in making a good evaluation for all actors involved. From the student's perspective, the evaluation results are influenced by the way the evaluation process is devised and the way the student was used to. Its correction is done through communication and feedback received from the teacher. The emotional-deontological aspect is completed by the correctness expressed at the exam by the teacher, ie. the evaluation results likely to reflect the true knowledge. It is important for the teacher to adapt the assessment methods to the way of thinking and working of the students. Another aspect is that related to knowledge disseminated between the teacher and the student. Feedback provided by the teacher is welcome in the evolution and development of the skills of the future graduate. Also, regardless of the preferences a teacher may manifest towards certain students, it is recommended to show equidistance, an aspect all participants in the teaching act should benefit.

4.4. Objective 4: Need for change in evaluation of the target group

Question: To what extent would you be willing to make one of the following changes in the evaluation activity?

Table 9. Students' change proposals for evaluation
(Authors' own conception)

Proposal for change	Mean
1. Evaluation to be performed by students based on scales developed by teachers.	3.26
2. Evaluation to be performed only by means of computer tests.	2.99
3. Evaluation in exams to be conducted by a different teacher, not the same who teaches the course/seminar/laboratory.	2.60
4. Evaluation to be performed by a robot or any other artificial intelligence device	2.33

When asked about proposals to change the evaluator, four options were considered and the following ranking emerged:

- Evaluation to be performed by students based on scales developed by teachers – 3.36;
- Evaluation to be performed only by means of computer tests - 2.99;
- Evaluation to be performed by a teacher other than the one from the course / seminar / laboratory / project - 2.60;
- Evaluation to be performed by a robot or any other artificial intelligence device - 2.33.

Ranking first is *the fellow students* who could do the evaluation, thus, denoting a form of fear, anxiety and apprehension generated by the evaluation conducted by the evaluating teacher. It seems that, as an evaluator, the teacher inspires fear and provokes negative emotions. On the other hand, it seems that students feel much closer to their peers, who are in the same position, and who, sharing the same emotions, are supposed to better empathize with them.

Students 'anxiety towards the evaluating teacher is also confirmed by the results of another study undertaken at UPT in 2019, entitled *Teacher Dimensions in Technical Higher Education - A Student Perspective*, where, the analysis of students' free answers about different associations of teachers and various roles assigned to them place second the role of the *Professor as evaluator*, with a fifth of the answers (21.2%). "This shows the continuous fear induced by the evaluation itself, and especially, the one who does it as well as the misunderstanding by the educables of the role of teacher-evaluator, traditionally perceived as a person who criticizes, evaluates and judges negatively. A wide range of the roles mentioned by the respondents

(and included in the respective study), address the role of the *Professor as evaluator*, and allude to *"notes, tests, exam, session, incorrect, arrears, palpitations, stress, to pass etc.*" (Dragomir et. al, 2019).

This state of affairs can be correlated with the answer related to the fact that the evaluation should be done by a teacher *other than the one from the course / seminar / laboratory / project - 2.60*, which strengthens our conclusion related to the negative emotion triggered by the evaluating teacher. Even the computer in its current form is considered closer, with an average of 2.99 answers, this being a tool well known and used by students.

It is also worth mentioning the answer regarding the evaluation conducted *by a robot or any other aritifical intelligence device (2.33)*. A certain fear of the unknown lies behind this answer. Nowadays, students, digital natives by the nature of the age in which they were born, still have some reservations about the unknown of intelligent machines, about which they do not know much or have no control over (at least by the nature of the question and its wording).

Question: What suggestions would you make to teachers at your faculty to improve the evaluation activity?

Question 20 addresses possible improvement of evaluation that university professors from UPT could make. The answers were classified as follows:

● **No suggestion - 51 people (19.39%).**

The first form of reaction would be related to **no suggestion** from students in the form of statements such as: "none", "no suggestion", "no", "I have not" "None yet", "I have no suggestions", "I don't know", "no suggestions", "no comments", "I have no suggestions", ‚nothing".

On one hand, such answers as "none", "no suggestion", "no", "I have not", "no one yet", "no suggestions", "I don't know", "no suggestion ",“ I have no suggestion ",“ I would not change anything ",“ nothing ", illustrate students's satisfaction with the way evaluation is carried out at UPT, and on the other hand the fact that, even if there were still things to be improved, it is not in their power, because they have no idea what kind of proposal to make to teachers to improve didactic evaluation , since they lack knowledge in this field.

Such answers as "do not comment" show a kind of dissatisfaction regarding the implementation of didactic evaluation in the university, but

also involve a kind of fear of making suggestions, so as not to be later held accountable for it.

● **Empathy with students – 26 persons (9. 88%)**

In the case of the students who referred to this aspect of the student-teacher relationship, empathy takes on various nuances:

In general: "empathy, humor and patience", "respect for the needs of students", "greater involvement and understanding of students", "be more open with students", "patience"„ , more patience ”,“ be kind ”,“ be more understanding with the students ”,“ more understanding and fulfillment with the students ”,“ more understanding ”.

● **Related to the teaching process**: “be good to ordinary people!” (probably, to those who do not have a culture specific to the academic environment or a specialized technical culture and to approach and treat each one according to their own level and potential), "to help more those who do not understand".

● **Related to exams**: “to put oneself in the shoes of the student, who has 7 subjects in which he / she has to learn as much”, “to ask us for our opinion related to tests / exam / course ”,“ when we have an exam and we need help because we are confused and we don't know, to be able to offer us a helping hand ”; „ elaborating exercises according to the student’s degree of understanding”.

Students expect their evaluating teachers to prove *empathy, humor, patience, understanding, openness, involvement, respect, to be kind, to help more those who do not understand, to ask for their opinion on evaluation, to elaborate evaluation according to students’ degree of understanding*, ie. practicing a didactic evaluation focused on the student and his/her needs. Didactic evaluation understood in this way represents a natural extension of the teaching and learning activity and not a critical act and a negative judgment towards the students' results. The evaluation should be prepared in advance by the teacher, in collaboration with the learners, it should be done differently, depending on the potential of the students and should take place in a framework and atmosphere that inspires confidence, respect, understanding, empathy from the teacher's side. Concerning the attributes mentioned above, we infer that students would like the teacher to be not only an evaluator but also a therapist of the evaluation act, helping them if need be, capitalizing on positive values of assessment and providing objective feedback to learners.

● **Objectivity / correctness versus subjectivism in evaluation - 23 students (8.74%)**

Answers collected from respondents: "objectivity / correctness in the evaluation process", "making scales and communicating them", "conducting meetings to disseminate and discuss the results", "justification of the grade given, perhaps through a scale , or maybe even feedback for failed students ",“ so that they know what to pay more attention to in the next presentation ",“ subjectivity, a scale from the very beginning, to evaluate the course, support and encouragement of students ".

An older and yet new desideratum of the evaluation process is that of increasing objectivity and reducing subjectivism. That is why the students' suggestion is that the evaluation be done on the computer where appropriate. This desire can emanate from the fact that teachers, being humans, are sometimes influenced by subjective grading criteria (presence of students in class, how to relate to the student in teaching, aspects related to the form of the paper: writing, page layout, etc., the teacher's personal evaluation scale, etc.), whereas the computer leaves no room for errors and subjectivism in the evaluation. The perception of the lack of objectivity in the didactic evaluation, on the other hand, can also come from a deficient way of self-evaluation of the student, which tends either to be overestimated or to be underestimated. The teacher plays also an important role in the student's preparation for an objective self-evaluation and in the formation of some capacities in this sense. What is more, the teacher should, during the didactic activity, frequently apply the self-evaluation methods: self-evaluation or peer evaluation, controlled self-assessment, peer evaluation or objective assessment of personality. Following the application of these self-assessment methods, the teacher has the duty to argue and highlight the correctness or incorrectness of the evaluations made by students.

Families prone to overestimate their children, as well as the society that puts pressure on individuals, appreciating only the top students, can also be blamed for the tendency of educators to self-evaluate themselves incorrectly, in the sense of overestimation.

The lack of objectivity in the evaluation may also occur due to the fact that not all teachers use grids and correction scales, nor meetings with students in order to disseminate the results obtained.

● **Psycho-pedagogical training to be applied in the relationship with students - 16 students (6.08%).**

Answers collected from respondents: "to take psychology courses", "to use innovative and student-centered methods", "to try to

periodically enrich their knowledge of psychopedagogy and teaching and to give up some outdated methods of teaching "," not to take the exam in a stressful environment, full of negative energies "," not to be monotonous in teaching "," to make students more attracted to the subject, "a more moderate pace of the subject ",“ more interesting courses, that grab attention ",“ be calmer ",“relaxed program, examination strictly on the taught and well explained subject ",“ have patience and not be frustrated "," use a tone appropriate to the situations "," don't ask for the impossible "," respect the breaks "," structure the contents differently to favor attendance at the course "," don't put so much pressure on students. It is very important to work in a relaxing environment ".

It is worth mentioning that the relationship between the teacher and students influences, positively or negatively, the teaching-learning-evaluation activity. Many learning difficulties result from poor or tense relationships between teacher and students. Students believe that their teachers should have a wide range of knowledge, skills and psycho-pedagogical skills (obtained through psycho-pedagogical training programs), which will help them to optimize the teaching activity in the classroom. The lack of this knowledge, skills and psycho-pedagogical competences leads to the practice "by ear", "at will", "at random" of the teaching profession and to committing errors in teaching, which negatively affects the quality of education.

● **Clear / logical presentation of information - 51 students (19.39%)**

The clear, logical presentation of information and knowledge is an eternal desideratum of education. From this perspective, students suggest:

● To be taught to think logically: “to present the information more logically and explicitly”, “to emphasize the more important things”, “to avoid memorizing information, questions with practical answers, theoretical questions to be of the grid type”, ” , "to pay more attention to the way we think, both during the semester and in the exam", "more hands-on teaching activity by teachers", "to make us think as logically as possible", "I would like more emphasis to be placed on thinking and less on memorizing information that we can easily find whenever we need it."

● Teachers to present the information logically: “serious tutorials (2)”, “attention to the needs, possibilities and requests of students”, “to focus more on the practical part”, “more examples” (2), "to know very well the material taught", "not to want us to simply learn by heart some unnecessary things", "to put more emphasis on applications", "not to teach

the subject chaotically, but to make sure that we understand, structuring the contents well ",“ contents should be structured in such a way that it is understandable to all students ",“ there are many words that are difficult to remember and this makes it difficult for the student to learn ",“ learning 500 words in vain specific to the field only to remember 3 after the exam "," more dedication in bringing clear explanations "," to explain the courses, not just to read them ".

- Teachers should be available for tutorials and to provide clear explanations: “recapitulation in the last week”, “seminars and tutorials during examination session”, “to put more emphasis on thinking and problem solving than on memorization and mechanical solving”.
- Clear evaluation requirements: "questions should be clearer in expression", "pay more attention to how we think, both during the semester and the exam", "holding tutorials more often", "performing an initial test, given without grade, so as to verify the interest and level of knowledge of students."

- **Miscellaneous - 49 students (18.63%)**

Answers provided by the target group:

- „to increase students' curiosity by providing interesting projects, thus further developing students' thirst for knowledge ";
- "to a greater extent, more interest in the repertory of knowledge with which the student leaves the class",
- "in advance preparation of students through possible simulations of exams";
- „I believe that teachers should want us to pass the exams as much as possible, to help their students in this regard, not to wish as many failures as possible. If a teacher has a lot of flaws, I think it's already the teacher's fault. Somewhere, something, it's not as it should be. Our evaluations are very frequent and tiring. It would help a lot if the grading would be done gradually, at each course / seminar / laboratory by appreciating the answers, the problems we solve ";
- „all teachers put a lot of pressure on our shoulders. I understand that Politehnica is a difficult faculty, I knew that even when I decided that I had to enroll, but I feel that it is deliberately exaggerated in many situations, making it much harder ";
- "admitting creative solutions if they are correct even if it is not according to their method" (awarding at least a partial score)";
- „it would be good if teachers understood their students in terms of preparation time, which is often very short. To synthesize their material

correctly and to present it in front of the students clearly and concisely. (Not to come with 1000 slides per course because no one can follow them. It is best to remember if we write directly on the sheet, not if we read kilometric texts) ";

- „not to ask for more tests than they are able to teach. There should be no such big differences between the teaching assistants in the laboratories (some groups are assigned nice teaching assistants, which also explains other groups-incompetent people) ";
- "to take into account the fact that most of the heads of year in almost all streams do not take this matter into account when evaluating other disciplines";
- "alternating evaluation methods, constantly, as well as adopting ongoing and even initial evaluation in order to discuss the evolution after the final evaluation ";
- "tests that focus on assessing the knowledge needed to be acquired, the basic knowledge and to monitor the possibility of being put into practice";
- "to be more lenient depending on the importance of the contents taught",
- "to give mid-term tests as permanent verification";
- "to propose several models of tests";
- "less synthesis, more grids / problems";
- "to provide students with additional resources, to explain the courses (eg. manuals) as well as possible exam models";
- „ to send us more information about the completion of the classes and about the exam;
- "to communicate items beforehand"; "grids";
- "to get really involved and put themselves in the students'shoes, who have to deal with more disciplines at the same time";
- "to stick to the contents";
- "to allocate suitable time for the correction of assignments and to accept other methods of solving, not only those proposed by the teacher";
- "to be actively involved in their correction, not only to analyze the result of the assignments and on their basis to score in full or not at all";
- "to synthesize the contents to be examined in more detail";
- "justify, upon the student's request, the grades awarded";
- "firstly, to explain the requirement (s) so that there are no doubts", "secondly, to provide us with concrete course support, and not an endless series of manuals that, realistically, I can't even read during the whole semester ".

The students' suggestions mentioned above, both at point e) and f), reflect on the whole educational process as a whole, viewed as a teaching-learning-assessment activity, and direct us to the pedagogical aptitude and psychopedagogical training of teachers, as well as to the observance of the didactic principles in education (which provide all the previously mentioned aspects) starting from the principle of active and conscious participation of the educable in the educational process, passing through the principle of linking the theory of practice, the principle of unity between sensory and rational, individual and age peculiarities, the principle of systematic and continuous education, the principle of thorough learning and finally reaching the principle of feedback, which regulates and self-regulates the whole instructive-educational process.

5. Conclusions

- The present study addresses the students' perception on the didactic evaluation carried out by teachers at Politehnica University of Timişoara. The target group was made of 262 subjects, boys and girls, in their years I, II, III and IV year of study, and the research was conducted by means of an online questionnaire. The research findings reveal the following:
- Most students positively perceive the way didactic evaluation is carried out, as a whole, at Politehnica University of Timişoara. This was confirmed by the calculation of the statistical means of their answers, which shows medium and above ranking. According to the students, the didactic evaluation at UPT, as a whole, follows the right path, but there is still room for improvement.
- In the first place, by an average of 3.94 answers, is the item "teachers use transparent evaluation criteria, ie. evaluation criteria and modes as well as correction scales are presented in advance".
- This indicates the concern of UPT teachers to ensure transparency in didactic evaluation but also to increase the degree of objectivity and reduce subjectivism in evaluation. Nothing in the didactic evaluation satisfies more than the lack of its objectivity, as nothing satisfies more in the evaluation than the total transparency and the permanent preoccupation of the evaluator to ensure the correctness of the examination act.
- In the second place, by an average of 3.93, is the item "teachers fairly alternate the forms of evaluation: written, oral, project-based, portfolios, hands-on assignments etc.". This fact indicates the idea of practicing, in higher education, a diverse didactic evaluation, which alternates and combines different forms, which tests multiple social and professional

skills and which is not prone to foster monotony, routine, boredom and leaves no room for predictability to students.

● In the third place, by an average of 3.87, is the item "regarding the didactic activity, the teachers show both preoccupation for the realization of the initial evaluation, as well as of the formative and summative one ...". This confirms the fact that the responding students are of the opinion that teachers at UPT are attentive both to the initial acquisitions, to those obtained along the way but also to those held by educators at the end of a large stage of didactic training. Hence, before proceeding with the teaching activity, teachers make sure that students have the previous acquisitions necessary for the respective discipline, then, during the didactic activity, they continuously care that the students acquire the necessary knowledge, correcting and regulating the educational instruction process so that, at the end of a great training stage, students can fully prove the acquired specialized competencies.

● In the 16th place, out of the 18 items analyzed, by an average of 3.20, is the item "Feedback provided to students on evaluation is always supportive". Although the result is good, it leaves room for improvement of the didactic approach to help the evaluated students to overcome some critical moments that may appear after the evaluation. It is important not only that the evaluation be objective, but also the manner in which the evaluation results are disseminated. Teachers still have to work on how to disseminate and provide feedback in the didactic evaluation, because it seems that they do not always manage to do this in a supportive, motivating and stimulating way.

● The last but one place of the ranking (17th place out of 18), by an average of 3.16, is the item "Teachers organize meetings with students to disseminate the results of the assessment and explain them where appropriate." Hence, at UPT, teachers are only to a small extent trained how to organize meetings with the students in order to disseminate the results of the evaluation. We consider that at UPT, the face-to-face meeting of the teacher with the students should be a desideratum, because it remains one of the most efficient methods of transmitting the results. This method offers the teacher the possibility to justify the marks or grades given, as well as the possibility to provide a supportive and corrective feedback, through which to assess the positive results of students, to explain negative results and correct issues not understood or misunderstood by them.

● The last place of the ranking (18th place), by an average of 3.07 is occupied by the item "teachers alternate, in a balanced way, the synthesis type of tests with the grid type ones". It seems that, at UPT, there are

unmindful teachers or they simply show lack of creativity and inventiveness in evaluation, as they constantly practice the same type of assessment or testing, thus becoming tiring, routine, predictable for students. Routine in education leads to monotony, boredom and culminates with disinterest and non-involvement in the educational process, which is why we recommend teachers to avoid getting into this situation and focus on didactic evaluation to alternate and even combine strategies, forms, types and evaluation methods.

The following ranking tackles the students' proposals concerning the change of the evaluator as mentioned in question no. 19:

- evaluation to be performed by students based on grading scales developed by teachers – 3.36;
- evaluation to be performed only by computer tests - 2.99;
- evaluation to be performed by a teacher other than the one from the course / seminar / laboratory / project - 2.60;
- evaluation to be performed by a robot or any other artificial intelligence device - 2.33.
- The conclusion would be that student expect less stressful evaluators who could be classmates or collegues, maybe even the computer, but less teachers (whatever they are) or intelligence devices
- Regarding improvements to be made in evalutation by university professors at UPT, as mentioned by the open question no. 20, we conclude that the respondents' suggestions are reflected not only on the evaluation, but on the whole educational process as a whole, seen as a teaching-learning-evaluation activity, namely: constant concern of teachers for structuring and logical presentation of information; more interesting, eye-catching courses; a more moderate rhythm of the contents; a better teacher-student relationship; emphasis on the practical part, on application exercises; relaxing working environment; teachers available to provide advice on specialized disciplines; emphasis on thinking, originality, creativity in evaluation and not on the ability to memorize; empathetic, understanding, calm teachers; teachers to make an evaluation as objective as possible, which also involves concern for reducing the degree of subjectivism; less pressure on students; the need for psycho-pedagogical training of teachers; observance of pedagogical principles in the educational process, etc. The conclusion would be that the didactic evaluation is only a natural extension of the teaching and learning activities, and if these two are not performed efficiently, neither the evaluation activity nor its results will be effective.

The limits of the study refer to the following aspects:

- An item related to the previous grades obtained by students should have been addressed;
- The questionnaire should have had a component related to the emotion triggered by the exams, in general, and to the presence / absence of the teacher in the exam room;
- A comparative study on 2 or more technical universities in the country would increase the importance of the paper and its relevance.

Consequently, we consider that the results of the study not only provide a real diagnosis of the state of affairs regarding the didactic evaluation within UPT, but also offer us a series of trends and perspectives to follow in the future, in the field of evaluation, in order to constantly improve it. The suggestions made by the students to the open-ended questions show, from a pedagogical perspective the student's ability, considered agent of the educational act and a fine observer, with a sharp critical and intuitive spirit. Although they do not have knowledge in the psycho-pedagogical field, students know how to make pertinent suggestions regarding the direction that teachers should follow in order to achieve an effective didactic evaluation. Interpreted from a pedagogical perspective, the students' suggestions claim that:

- psycho-pedagogical training is absolutely indispensable for teachers;
- the educational process should be approached as a whole; teaching-learning-evaluation are closely related to each other, and if one fails, the consequences affect the other two;
- Empathy and understanding have an important role in building the teacher-student relationship, which is extremely important so as to create the working atmosphere and optimal development of teaching-learning-assessment activities;
- ensuring objectivity in evaluation should be a constant concern of the teacher, and objectivity should be ensured in all possible ways;
- the evaluating teacher must also assume the role of evaluation therapist, helping students where they encounter problems, capitalizing on the positive values of evaluation and providing objective, corrective and supportive feedback;
- in order to ensure the efficiency of evaluation, teachers should resort to student-centered assessment and needs, differentiated and formative evaluation, which also involves the development of self-assessment skills of learners, who become aware of the objectives to be

achieved, thus self-regulating learning based on the results of the evaluative approach.

References

Baykul, Y. (1992). Eğitim Sisteminde Değerlendirme [Evaluation in the Education System.]. *H.Ü. Eğitim Fakültesi Dergisi [Journal of the Faculty of Education]*, *7*(7), 85-94. https://dergipark.org.tr/en/pub/hunefd/issue/7829/102962

Biggs, J. (2006). Assessing learning quality: Reconciling institutional, staff and educational demands. *Assessment and evaluation in Higher Education*, *21*(1), 5-16. https://doi.org/10.1080/0260293960210101

Black, P., & Wiliam, D. (2006). Assessment and classroom learning. *Assessment in Education: principles, policy & practice*, *5*(1), 7-74. https://doi.org/10.1080/0969595980050102

Bloom, B. S. (1968). Learning for Mastery. Instruction and Curriculum. Regional Education Laboratory for the Carolinas and Virginia, Topical Papers and Reprints, Number 1. *Evaluation Comment, 1*(2), May 1968. https://eric.ed.gov/?id=ED053419

Bontaș, I. (2001). *Pedagogie. Tratat* [Pedagogy. Treaty]. BIC ALL.

Brown, G. (2001). *Assessment: A Guide for Lecturers*. LTS Generic Centre.

Cucos, C. (2002). *Pedagogie* [Pedagogy] *(*2nd ed.). Polirom.

De Landsheere, G. (1975). *Evaluarea continuă a elevilor şi examenele: manual de docimologie* [Continuous assessment of students and exams: handbook of docimology]. Didactică și Pedagogică.

Dragomir, G. M., Todorescu, L. L., Mazilescu, C. A., Popescu-Mitroi, M. M., Vrgovici, S. M., Grosseck, G. & Holotescu, C. (2013). *Repere în evaluare* [Landmarks in evaluation]. Editura de Vest.

Dragomir, G. M., Todorescu, L. L. & Greculescu, A. (2019). Teacher Dimensions in Technical Higher Education – A Student Perspective. *Revista Românească pentru Educaţie Multidimensională*, *11*(2), 73-93. https://doi.org/10.18662/rrem/118

Freeman, M. (1995). Peer assessment by groups of group work. *Assessment & Evaluation in Higher Education, 20*(3), 289-300. https://doi.org/10.1080/0260293950200305

Gibbs, G., & Simpson, C. (2005). Conditions under which assessment supports students' learning. *Learning and teaching in higher education*, 1, 3-31. https://eprints.glos.ac.uk/id/eprint/3609

Joița, E. (2006). *Instruirea constructivistă - o alternativă. Fundamente. Strategii* [Constructivist training - an alternative. Basically. Strategies]. Aramis.

Kirschner, P.A., & Hendrick, C. (2020). How Learning Happens. *Seminal Works in Educational Psychology and What They Mean in Practice*. Routledge.

McCann, L., & Saunders, G. (2009). *Exploring student perceptions of assessment feedback*. Project SWAP Report. University of Southamptom.

McMillan, J. H. (2014). *Classroom Assessment: Pearson New International Edition: Principles and Practice for Effective Standards-Based Instruction* (6th ed.). Pearson.

Nartgun, Z. (2009). Student Views on the Assessment Practices of Instructors during Instruction. *Educational Sciences: Theory and Practice*, 9(4), 1807-1818. https://files.eric.ed.gov/fulltext/EJ867370.pdf

Offerdahl, E.G. & Tomanek, D. (2011). Changes in instructors' assessment thinking related to experimentation with new strategies. *Assessment & Evaluation in Higher Education*, *36*(7), 781-795. https://doi.org/10.1080/02602938.2010.488794

Palmer, S. (2004). Authenticity in assessment: reflecting undergraduate study and professional practice. *European Journal of Engineering Education*, *29*(2), 193-202. https://doi.org/10.1080/03043790310001633179

Race, P. (2001). *The Lecturer's Toolkit. A Practical Guide to Learning. Teaching and Assessment (*2nd ed). Kogan Page.

Sambell, K., McDowell, L., & Brown, S. (1997). "But is it fair?": an exploratory study of student perceptions of the consequential validity of assessment. *Studies in Educational Evaluation*, *23*(4), 349-371. https://doi.org/10.1016/S0191-491X(97)86215-3

Tan, Ş. (2012). *Öğretimde ölçme ve değerlendirme* [Measurement and evaluation in teaching] (7th Edition). Pegem Akademi.

Torrance, H. (2007). Assessment as learning? How the use of explicit learning objectives, assessment criteria and feedback in post-secondary education and training can come to dominate learning. *Assessment in Education*, *14*(3), 281- 294. https://doi.org/10.1080/09695940701591867

Tyler, R. W., Gagne, R. M. & Scriven, M. (Eds.). (1968). Perspectives of Curriculum Evaluation. *American Educational Research Association Monograph Series on Curriculum Evaluation*, *1*(5), 120-121. Rand McNally. https://doi.org/10.3102%2F00028312005001120

Weaver, M. (2006). Do Students Value Feedback? Student Perceptions of Tutors' Written Responses. *Assessment and Evaluation in Higher Education*, *31*(3), 379-394. https://doi.org/10.1080/02602930500353061

Wiliam, D., Lee, C., Harrison, C., & Black, P. (2010). Teachers developing assessment for learning: Impact on student achievement. *Assessment in Education: Principles, Policy & Practice*, *11*(1), 49-65. https://doi.org/10.1080/0969594042000208994