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When Feedback Goes Digital: Student Evaluation in a Romanian Technical University

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Abstract: *This paper focuses on the effects and the consequences of using technical means in the process through which students evaluate the teaching activity of academic staff. The research was conducted on a sample of 65 students from the Faculty of Automatic Control and Computers within the National University of Science and Technology POLITEHNICA Bucharest, using as an instrument a 12-item questionnaire administered online. The aggregation and interpretation of the collected data provided a descriptive overview of how the beneficiaries of educational services (the students) wish the feedback they provide to be applied, collected, and interpreted, as well as a set of recommendations in this regard. At the same time, several positive aspects emerging from the digitalization of the student evaluation process were highlighted, such as accessibility, anonymization of responses, flexibility, and efficiency in aggregating and interpreting large volumes of data. The study also highlights the importance of involving social science experts in the design phase of the university's feedback questionnaires, to help maintain and improve student responsiveness and engagement in these activities.*

Keywords: *digitalization; questionnaire; feedback form; survey; item; institutional development.*

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Introduction

University studies carried out within the European Higher Education Area (EHEA) provide students with the opportunity to acquire advanced training, specialization, and qualifications in accordance with the European Qualifications Framework. This has prompted higher education institutions to focus the teaching and learning process on the individual needs and psycho-pedagogical characteristics of students. Consequently, students, as the direct beneficiaries of academic services, have become the most objective and relevant evaluators of the quality of the educational process within universities. In this context, most higher education institutions integrate students into the mechanisms for assessing the effectiveness of teaching activities delivered by academic staff. Furthermore, quality assurance agencies in higher education recommend this practice by including in their evaluation frameworks specific indicators that reflect the level of student satisfaction with the educational services received in the academic environment (Ciuchi et al. 2024). The validity of student evaluation of teaching (SET) is a contentious issue because the process has been critiqued for several reasons, for example (Quansah et al., 2024) students have been found to evaluate instructional quality based on the characteristics of the course (e.g., difficult/easy nature of courses), student characteristics (e.g., students being friends with the instructor or dislike for the course) and teacher (e.g., the strictness of the instructor) which are unrelated to the quality of teaching and course contents (Dobudko et al., 2019; Quansah et al., 2024). On the other hand, according to Oprănescu & Ioniță (2024) students need to personalize their educational profile and usually find disparate information from various sources.

National legal context

The Romanian education system is structured into two main levels: 1.the pre-university education system, which includes: a) early childhood education, with its two components – ante-preschool and preschool education; b) lower secondary education, consisting of primary and gymnasium education; c) upper secondary education, corresponding to high school level; and d) post-secondary education, namely post-lyceum and non-university tertiary education; 2. the higher education system, which encompasses short-cycle studies, bachelor's, master's, doctoral, postgraduate, and postdoctoral programs, providing graduates with the appropriate level of qualification in accordance with the European Qualifications Framework (Parlamentul Romaniei, 2023a; 2023b).

According to the provisions of the Higher Education Law no. 199/2023, quality assurance in higher education represents a set of actions aimed at strengthening institutional capacity, as well as designing, planning, and organizing university and postgraduate programs and adult professional training, in compliance with established standards (Parlamentul Romaniei, 2023b). Quality assurance processes enhance stakeholder confidence in the institution's ability to provide education in accordance with quality standards. Quality evaluation involves a multi-criteria examination of the extent to which a higher education institution and its programs meet these standards. It focuses fundamentally on learning, teaching, and assessment, while also considering the learning environment and relevant connections to research and innovation. Additionally, the process evaluates the facilities and services offered to students, including the measurement of student satisfaction with these services.

According to the Methodology for the External Evaluation of Quality in Higher Education, approved by Government Decision no. 962/2024, higher education institutions are required to analyze the results of the semester-based student evaluation of teaching staff performance (Guvernul Romaniei, 2024). This legitimizes the view that student evaluation of teaching is both an important and rigorously standardized process within each academic institution, grounded in the principle of university autonomy. Standardization is evident not only in the design of the instruments employed but also in the methods used for administering these tools among students.

Digitalization of the teaching staff evaluation process

Grosseck et al. (2024) provide a qualitative perspective on how Romanian faculty members adopt digital tools in their current academic practice. The use of educational platforms, real-time response systems (CRS), mobile applications, and even artificial intelligence reflects the growing tendency of higher education institutions to adapt to the expectations of today's student generations and to the dynamics of a knowledge-oriented society (Masaeed et al., 2025). The researchers Horia et al. (2023) wrote an interesting paper about a method that could serve as an evaluation study for a variety of solutions dedicated to online distance learning systems. These applications/solutions lead to many research studies for approaching the criteria of the selection process for virtual educational systems.

On the other hand, according to Scurtu et al. (2022) cross-platform applications have made substantial contributions to the digitization of educational processes over time (including the feedback process), evolving with technological progress and technological innovation, culminating in the pandemic context. There are a multitude of platforms used in the educational

process, including: Blackboard, Google Classroom, and Zoom etc. According to Gavrus et al., (2025), studies demonstrate that the efficacy of e-learning platforms is contingent upon the platform type and user attributes. A comparative study of Blackboard, Google Classroom, and Zoom determined that Google Classroom was the most successful, followed by Blackboard and Zoom.

Given the importance of student involvement in the evaluation of teaching activities (Nadrljanski et al., 2022), as well as the necessity of processing large volumes of information, in recent years this process has undergone a significant transition toward digital solutions. The study conducted by Ciuchi et al. (2024) at the National University of Science and Technology POLITEHNICA Bucharest highlights the use of digital feedback questionnaires for student evaluations of teaching staff, differentiated according to the cycles of undergraduate, master's, and doctoral studies. The digital platform employed enabled the centralization of anonymized responses from 559 students (from the total number of participants, in this analysis we selected only 65 subjects, students in Automatic Control and Computers) and the automatic generation of reports and charts, thereby streamlining the analysis of feedback and facilitating the identification of both strengths and weaknesses in teaching activities.

In this context, the term anonymization refers to the complete separation of student identity from collected responses, without the possibility of subsequently associating the responses to a specific individual. However, the system retains non-identifiable contextual information, such as academic cycle, year of study, study program, solely for the purpose of data aggregation and analysis. This approach ensures participant confidentiality while maintaining the analytical relevance of the feedback at the institutional level. Therefore, the process respects the principle of anonymization - the identity of the respondents cannot be reconstructed by any institutional actor, and the data is managed only in aggregate form, according to data protection policies applicable in the academic environment.

In the following section, we will select and analyze the responses to the items concerning the impact of institutional digitalization on the evaluation of teaching staff, focusing specifically on the answers provided by students and doctoral candidates from the Faculty of Automatic Control and Computers. As it follows, we also present some of the discussion topics from the feedback analysis meeting organized within the faculty: encouraging students to complete the feedback questionnaire in general, and especially for the courses taught within the master's programs, through actions aimed at increasing transparency regarding the results obtained by faculty members/courses and the concrete measures adopted by the departments/faculty leadership etc.

Research methodology

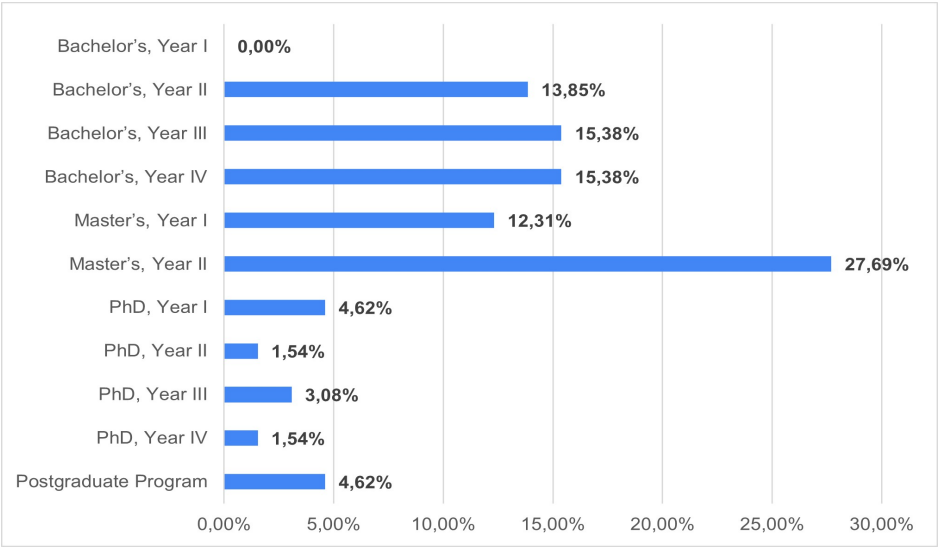
The research instrument employed for the present study/ research was the Questionnaire on identifying students' perception regarding the feedback form used by National University of Science and Technology POLITEHNICA Bucharest (UNSTPB), developed using the Microsoft Forms platform, part of Office 365, designed for creating opinion surveys and sociological questionnaires, with the possibility of exporting data in Excel format. The questionnaire was administered online during November–December 2023. The data exported from Excel underwent a stage of statistical processing in order to obtain the results necessary for the analysis and interpretation phase.

The elaborated questionnaire contained 12 items, of which 11 were closed-ended (multiple-choice and Likert scale items) and 1 was open-ended, allowing respondents to express recommendations, suggestions, and personal opinions regarding the improvement of the internal instrument used by the higher education institution. Also, the characteristics of these 12 items are: a) 3 items targeted the respondents' characteristics (cycle / year of study / age group / gender; b) 9 items focused on identifying the students' perceptions regarding the organization and implementation of the process of evaluating teaching staff by students. Although the questionnaire was distributed online to students at all study levels (bachelor's, master's, doctoral) across the university, the present paper focuses specifically on the responses collected from students of the Faculty of Automatic Control and Computers.

Description of selected sample

The evaluation questionnaire was completed by 559 students from the National University of Science and Technology POLITEHNICA Bucharest, but for this analysis, only the questionnaires completed by 65 students from the Faculty of Automatic Control and Computers were selected. Among these respondents, 44.61% were enrolled in bachelor's programs, 40% in master's programs, 6.15% in doctoral studies, and 4.62% in postgraduate programs (Figure 1).

Figure 1. Graphical representation of the number of student respondents according to the variable "cycle/year of study" in which they are enrolled



Considering the gender variable, the student respondents from the Faculty of Automatic Control and Computers were distributed as follows: 67.69% male respondents, 29.23% female respondents, and 3.03% identifying as another gender.

With respect to age, the distribution of respondents was as follows: 76.92% were between 20–24 years old, 10.77% between 25–29 years old, 1.54% between 30–34 years old, 3.08% between 35–39 years old, and 4.62% were over 45 years old.

Results and discussions

From the analysis of the responses to the item aimed at identifying the main purpose for which an organization or institution applies a feedback form, we observe that student respondents from the Faculty of Automatic Control and Computers ranked the response options as follows: 27.69% – evaluating the quality of services provided; 26.15% – identifying potential problems of beneficiaries in order to intervene promptly for remediation; 23.07% – understanding the needs of the clients; 18.46% – optimizing the services offered; 1.53% – all response options; and 3.07% – other reasons. This hierarchy highlights the strong purpose behind the use of such an instrument by any institution or organization.

When analyzing the responses to the item regarding students' perception of the importance of the stages in using the questionnaire as a socio-human investigative technique, the following distribution emerged: 38.36% – qualitative interpretation of results; 36.92% – designing the feedback form (accuracy in item formulation); 10.77% – quantitative interpretation of results; 9.23% – data collection and centralization; and 4.62% – administering the questionnaire. These results reflect a good understanding of methodological aspects among the student respondents.

Regarding the perceived usefulness of completing a feedback questionnaire in relation to the need for institutional development of the university, student respondents from the Faculty of Automatic Control and Computers assessed as follows: 50.77% considered it very useful; 26.15% – highly useful; 9.22% – useful; while only 13.85% perceived it as having low or no usefulness.

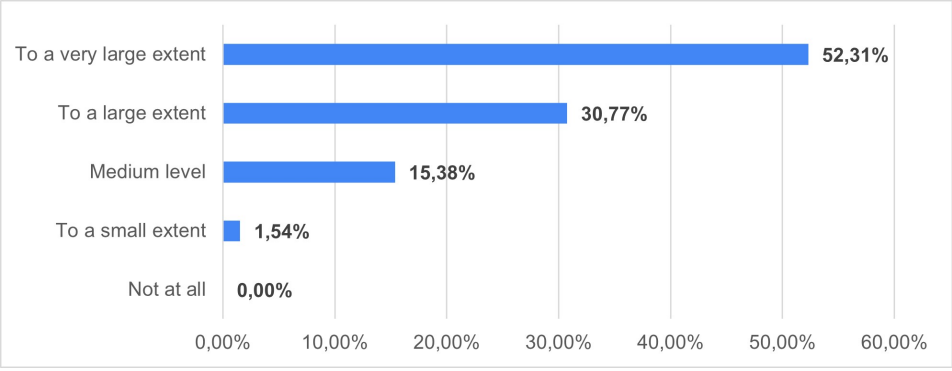
Analyzing responses to the item identifying the main reason for completing the institutional feedback form, the hierarchy of responses was as follows: a significant proportion of 67.68% indicated the desire to contribute to the improvement of university activities; 13.85% stated the possibility of expressing negative evaluations; 6.15% – the possibility of expressing positive evaluations; 6.15% – because it was requested by teaching staff; 4.62% – because it was requested by the institution; and 1.54% – because it allowed for expressing evaluations in general. These percentages clearly demonstrate that students have intrinsic, profound, and constructive motivations for engaging in academic life activities.

Finally, when centralizing responses to the item on whether students perceive a causal relationship between the quality of teaching and the level of understanding of course content, the results (Figure 2) indicate that such a causal link is recognized to a significant extent, thereby justifying students' interest in contributing to the improvement of teaching and learning activities. Some researchers (Zerihun et al., 2012) have shown that content organization, quality of feedback, and student engagement are significant factors influencing students' perceptions of teaching quality and their own learning. Figure 2 illustrates how students perceive the connection between the quality of teaching and their understanding of course content. The pattern that emerges from the data is quite clear: most students strongly believe that effective teaching directly enhances their ability to grasp course material. More than half of the respondents (52.31%) stated that this relationship exists to a *very large extent*, and another 30.77% agreed it exists to a *large extent*. Together, these responses account for over 80% of participants, which shows a strong and consistent appreciation of the role teaching

quality plays in learning. A smaller proportion of students - 15.38% - viewed the connection as moderate, while only 1.54% believed that teaching quality has little influence on understanding. This distribution indicates that students overwhelmingly associate good teaching with meaningful learning outcomes, leaving very little room for doubt about its perceived importance.

These findings are in line with a broader body of educational research that highlights the decisive influence of teaching quality on student learning and engagement. Studies have shown that clear explanations, structured course delivery, and responsive feedback all contribute to deeper understanding and academic success (Biggs & Tang, 2011; Ramsden, 2003). More recent work continues to confirm this connection, emphasizing that supportive teacher–student relationships, cognitive activation, and student-centred learning environments significantly enhance comprehension and motivation (Martin & Bolliger, 2022; Sedrakyan et al., 2023).

Figure 2. Graphical representation of students' perceptions regarding the existence of a causal relationship between the quality of teaching and the level of understanding of course content



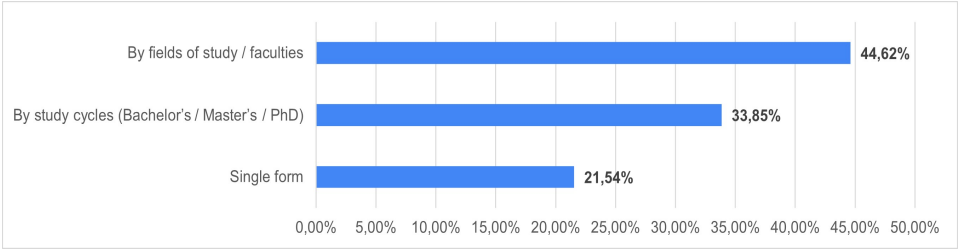
Through the item aimed at identifying students' perceptions regarding the optimal structuring and approachability of the feedback questionnaire used by the university, the responses from students of the Faculty of Automatic Control and Computers are presented in Figure 3. Student opinions on the structure and flexibility of feedback surveys, as illustrated in Figure 3, clustered around three main preferences. Roughly 45% of respondents favored surveys tailored to their specific faculty or field of study. Approximately 34% believed surveys should be different depending on their study level (undergraduate, graduate, or doctoral). The remaining 22% preferred a single, standard survey for the whole university. These results show a strong desire for customization. It appears that most

students value feedback tools that are relevant to the particular academic and teaching aspects of their disciplines. International studies support this idea, indicating that teaching evaluation surveys are more effective when they are adapted to the specific characteristics of each subject area (Richardson, 2005; Spooren et al., 2013).

For example, Richardson (2005) discovered that students in technical fields tend to focus on clarity, practical use, and course organization when evaluating teaching. Conversely, social science students prioritize interaction, critical thinking, and support for independent learning. Spooren et al. (2013) and Benton & Cashin (2014) also warn that using a single, university-wide survey can lead to shallow or inaccurate results, especially when the survey doesn't account for the unique ways teaching and learning occur across different departments. In line with this, findings from the Faculty of Automatic Control and Computers confirm a growing desire among students for a more personalized and relevant approach to teaching assessment. Students seem to want feedback methods that better reflect their academic experiences and expectations within their specific programs. Recent research on the use of digital tools in feedback processes further emphasizes the advantages of online systems for creating flexible and adaptable surveys (Crews & Curtis, 2011; Martin & Bolliger, 2022). These tools make it easier for students to participate and allow universities to generate detailed reports broken down by faculty, field, or study level. This, in turn, improves the value, clarity, and practical use of the information collected, supporting both teaching improvement and university development (Sedrakyan et al., 2023).

In conclusion, student opinions on the structure and flexibility of feedback surveys point to a clear need for updates and adaptability in how teaching quality is evaluated. Digital solutions offer the possibility to customize feedback tools and analyze data more efficiently, transforming student evaluation from a basic administrative task into a valuable tool for university learning and advancement. This shift toward digital evaluations represents not only a technological advancement but also a change in the culture of higher education, one that is increasingly focused on ongoing, adaptable, and data-driven feedback as a way to improve academic quality.

Figure 3. Graphical representation of students' assessments regarding the optimal structuring and approachability of the feedback questionnaire



Through another closed-ended item with predefined response options, students were given the opportunity to express their assessments regarding the efficiency of the feedback questionnaire's administration method. The results are illustrated in Figure 4, which clearly shows that an overwhelming majority of 92.31% of the responding students prefer this instrument to be administered using digital means. This finding suggests a high level of digital literacy among the respondents and reflects a broader trend toward the normalization of technology-mediated evaluation processes in higher education. The preference for digital administration may also indicate students' perception of greater efficiency, accessibility, and procedural transparency associated with online feedback systems. This is also confirmed by other studies **(**Edeiken-Cooperman & Berenato, 2014; Khan and Khan, 2019. Bulut et al., 2019).

Figure 4. Graphical representation of student assessments regarding the efficiency of the feedback questionnaire administration method

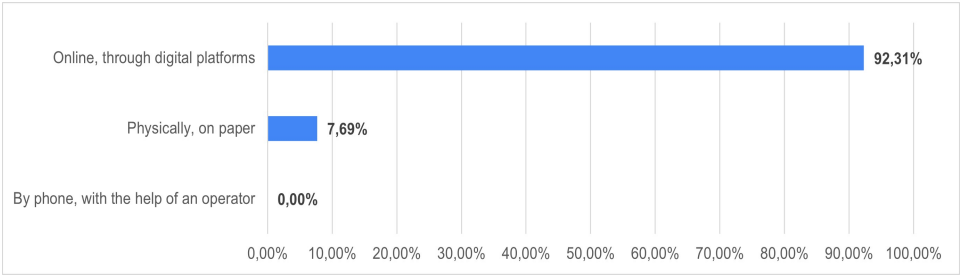
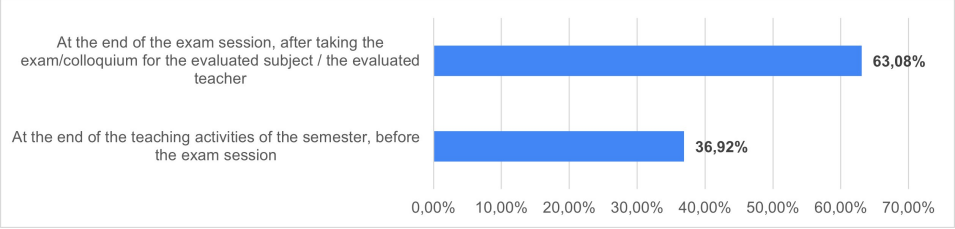


Figure 5 illustrates the responses of students regarding the period they consider most appropriate for administering the feedback questionnaire, based on a closed-ended item with pre-formulated answer options. The preference of 63.8% of students for conducting evaluations after the examination session,

compared to 36.92% who prefer them before exams, can be explained by the interplay between control and power dynamics within the academic relationship. Evaluating teachers after exams allows students to exercise a form of symbolic control and to reclaim a degree of power in assessing the coherence between teaching, assessment, and grading. In this context, feedback becomes both a summative tool of accountability and an expression of student agency. Conversely, students who favor evaluations before exams perceive the process as formative and collaborative, emphasizing improvement and shared responsibility rather than control. This contrast highlights how digitalized evaluation practices subtly reshape the balance of power and control in higher education. The traditional university setting, the evaluation and feedback process has been dominated by the teacher's power - the one who determines the criteria, timing, and interpretation of results — yet, with the digitalization of education, there emerges the possibility of redistributing this power by enhancing students' learner agency, offering them a voice in setting evaluation criteria, the opportunity to self-assess their progress, and to engage actively and reflectively in the feedback process (Casanova et al., 2021).

Figure 5. Graphical representation of student responses regarding the most appropriate period for administering the feedback questionnaire



It is worth noting that through the open-ended item, which allowed students to provide recommendations for improving the student evaluation of teaching activities, the most frequent suggestion received was that the feedback instruments used by the institution should remain active throughout the entire academic year, thereby ensuring that the evaluation process is continuous and ongoing and some respondents did not make any recommendations.

The percentages resulting from the consolidated responses invite reflection on the advantages of digitalizing the student evaluation process for teaching activities. First, accessibility and ease of use of digital tools: digitalization allows students to complete feedback forms quickly, flexibly, and conveniently, removing barriers related to physical presence or fixed schedules. This leads to higher participation rates and greater representativeness of the results. Second, efficient analysis and real-time feedback: digital systems enable automatic

aggregation and analysis of data, significantly reducing the time needed to interpret results. Modern platforms provide detailed reports, comparative graphs, and the ability to track faculty performance over time, facilitating informed decision-making by university leadership. Moreover, digital systems allow feedback to be collected throughout the study period (semester, academic year, etc.), enabling real-time monitoring of teaching activities. Third, anonymity and free expression: online evaluations guarantee respondent anonymity, promoting honest feedback free from constraints. Enhanced confidentiality encourages open expression of opinions and realistic identification of areas requiring improvement. Fourth, innovation and adaptability: technology allows the integration of innovative evaluation methods, including audio/video feedback, adaptive forms, continuous formative assessments, and even natural language analysis using artificial intelligence. Furthermore, institutions can customize questionnaire content to align with the specific characteristics of each course or study cycle.

Indeed, these factors contribute to the growing trend of digitalizing student evaluations of teaching activities in Romanian universities. Digital tools allow the integration of modern evaluation methods. Bratu et al. (2023) highlight that student feedback on teaching staff represents an interactive, bidirectional process, focused on evaluating instructors' activities with the aim of continuous improvement. The authors applied two evaluation instruments – the standard feedback form and the SKS method (Stop, Keep, Start), finding that the SKS method generates more consistent and relevant feedback for each course or instructor. This approach underscores the importance of using structured digital instruments that facilitate the clear and constructive expression of students' perceptions regarding teaching activities.

At the same time, the challenges and limitations of digitalizing the student evaluation process of teaching activities cannot be overlooked:

1. Unequal access to technological resources – While most students have relative access to the internet and digital devices, persistent socio-economic disparities create real barriers to equal participation in online evaluations of teaching activities. According to a national study on digital inclusion conducted by the Făgăraş Institute in 2022, young people and students exhibit the highest internet usage (approximately 100%); however, general digital competencies remain significantly low: only 28% of Romania's population possessed basic digital skills, far below the EU average of 54% (Făgăraş Research Institute, 2022). The Digital Decade 2025 Country Report – Romania indicates that in 2023 only 27.7% of Romanians had basic digital skills. Disparities are evident: in rural areas only around 21%,

and among individuals with lower education levels below 13%. In higher education, students from disadvantaged socio-economic backgrounds or rural areas may face difficulties completing online evaluations due to lack of dedicated devices or stable connections (European Commission, 2023).

2. Digital competencies of teaching staff – The national report from May 2025 based on DigCompEdu indicates an average digital competency level of 53.6% among university professors; digital assessment (area 4) shows the lowest score – only 50.5% report difficulties in administering digital tools and interpreting evaluations provided by students online. Data were collected from 2,672 teaching staff who completed self-assessments between January 2024 and May 2025. These gaps highlight the need for targeted training measures in digital assessment and the use of feedback analytics (Voicu, 2025).
3. Low response rate – One of the risks of online evaluations is limited student engagement, often due to lack of interest or perception that their feedback has no tangible impact. Institutions need to develop motivation strategies and demonstrate that student opinions are genuinely considered. Additionally, students tend to provide feedback primarily after negative experiences, potentially biasing results.
4. Quality of responses – There are numerous instances in which responses are superficial or incomplete, affecting the overall validity of the evaluation. Measures such as limiting completion time, implementing logical validation of answers, or including open-ended questions that require justification can help mitigate this issue.
5. Interpretation and use of data – Student feedback must be analyzed and integrated into institutional development strategies. It is crucial that results are not used solely for administrative purposes but drive real improvements in educational activities. Continuous training of teaching staff in the constructive interpretation of received evaluations is also essential.

Conclusions

Students of the Faculty of Automatic Control and Computers at the National University of Science and Technology POLITEHNICA Bucharest (UNSTPB) have a well-defined disciplinary culture that enables them to anticipate trends in the evolution of various activities, including those related to university management. At the same time, they are highly motivated, receptive,

and open to collaboration aimed at improving the specific activities of their academic community, whether by developing applications, platforms, or software that facilitate institutional processes, or by directly participating in such initiatives.

The responses indicate that student evaluation of teaching activities has evolved considerably within the university in recent years. However, the process can still be improved by structuring feedback instruments according to academic fields, applying them online at the end of examination sessions (after students have completed exams, tests, or colloquia for the course being evaluated), or implementing a continuous/permanent feedback mechanism.

The findings regarding students' preferences for the timing of teacher evaluations reveal important insights into the power and control dynamics that underpin the digitalization of academic feedback processes. The fact that a majority of students (63.8%) prefer to evaluate teaching staff after the examination session suggests that they perceive this stage as the most appropriate moment to exercise a form of retrospective control over the entire educational process. At this point, students feel empowered to assess not only teaching quality but also the consistency between instruction, assessment, and grading fairness. This indicates a shift in the traditional power balance, where evaluation becomes a symbolic means of student agency and accountability within institutional structures.

Conversely, the smaller proportion of students (36.92%) who favor evaluation before exams view the process through a formative and collaborative lens, focusing on dialogue and pedagogical improvement rather than control. Overall, the coexistence of these two orientations - summative-control-oriented and formative-collaborative - demonstrates that digitalized evaluation systems in higher education not only facilitate data collection and efficiency but also redefine the relational and symbolic dimensions of power between teachers and students, transforming feedback into a shared space of reflection, accountability, and institutional learning.

The results highlight that students clearly perceive a direct causal relationship between the quality of teaching and the level of understanding of course content, confirming the essential role of teaching quality in the learning process. The high percentage of those who recognized this link to a very large extent (52.31%) and to a large extent (30.77%) indicates a high level of awareness and responsibility among students regarding the impact of teaching methods on academic performance. This perception justifies their active interest in participating in the evaluation and improvement of teaching activities, while also emphasizing the need for a reflective and collaborative approach between teachers and students within the university context.

The institutional digitalization process has encompassed student evaluation of teaching activities, generating multiple positive effects: accessibility, anonymization of responses, increased response rates, flexibility, rapid centralization and interpretation of results, and continuous feedback for teaching staff. To further enhance student engagement and address issues related to the validity and reliability of responses, the continuous refinement of feedback instruments is necessary, through the methodological input of sociological teams and the practical application of results to improve teaching strategies.

By integrating all these practices, the National University of Science and Technology POLITEHNICA Bucharest has established and implemented a robust institutional development strategy, grounded in legal and international regulations, aligned with trends in the European higher education area, and responsive to socio-economic requirements. This strategy integrates students into the quality assurance process, digitalizes student evaluations of teaching activities, and develops coherent human resource strategies based on professional results and performance.

Limitations of research

Given the relatively short period of data collection, which coincided with a schedule full of university-specific activities, the number of student respondents is relatively small, even though they come from all three cycles of higher education. Nevertheless, considering the importance of the topic under investigation, the research could be extended to include a larger number of students, academic years, study cycles, and faculties within the university. The study does not aim to assess the actual consequences or the impact on teaching quality, teachers' professional development, or institutional policies, as these effects cannot be measured over such a short period of time. The research only identifies the perceptions/appreciations/preferences of the participating students on the way of organizing and conducting the process of evaluating the activity of university teachers, using IT means.

Statement on the Use of AI Tools | *We note that, in the writing and editing stages of the article, no artificial intelligence tools were used.*

Research ethics | *The study was conducted based on the approval of the Scientific Research Ethics Committee for the fundamental field of Social Sciences within the National University of Science and Technology POLITEHNICA Bucharest (protocol code 6769/October 23, 2023).*

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Conflicts of interest | *The authors declare no conflicts of interest*

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