

Change Management in Education. Transformation and Innovation in Higher Education

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Abstract

The educational system, like any other living organism, is subject to continuous change, determined by the evolution of society, technological advances, demographic changes, and new pedagogical paradigms. In this dynamic context, change management in education becomes not only a necessity but also an essential component for ensuring the relevance, efficiency, and equity of the system. The issue of change in university education is a complex one, requiring a holistic and multidimensional analysis, both from the perspective of the diversity of factors involved and the large number of aspects it addresses.

In the context of this paper, we aim to explore the concept of change management in the university education context, analyzing the challenges, strategies, and role of the actors involved in the process of change-innovation-transformation. Based on the specialized literature as well as the perceptions and attitudes of the main actors of educational change (students and teachers), we will cover various aspects, from identifying the needs for change to their effective implementation and impact assessment, emphasizing the importance of a strategic and participatory approach at the level of university education in Romania.

Keywords:

Change, innovation, transformation, reform, change management

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Introduction

Change in education can take many forms, from modifying educational policies, introducing new curricula and teaching methods, to institutional restructuring or implementing modern technology and artificial intelligence in the teaching process. It is important to understand that change is not an aim in itself, but a way of improving the quality of education, adapting to labor market requirements and preparing students for the challenges of the 21st century. Change can be approached from an organizational or individual perspective, in terms of its causes or consequences, as well as through the lens of psychosocial mechanisms of resistance to change or strategies to combat/reduce the resistance to change. (Enache, 2019, p.10) Also change can be of several types: planned (strategic) or unplanned (reactive), but effective change management often focuses on planned change, anticipating and guiding transformation. Sometimes change in education can be imposed by educational policy makers or by the management structures of educational institutions, without prior consultation with the members of the educational community or with formal consultation of them. However, effective change is participatory in nature, as it enjoys the involvement of the members of the organization and, implicitly, their empowerment.

Specifically, change in higher education has become essential for maintaining the quality and representativeness of universities, in a constantly evolving social, economic, and technological context. Thus, in contemporary higher education, transformation becomes particularly important through the integration of digitalisation as a driver of innovation, the promotion of inclusion as a principle of equitable access to knowledge, and the development of internationalisation as a strategic direction for connecting universities to global dynamics. Accelerated digitization, globalization of the labor market, diversification of student profiles, and pressure for pedagogical innovation are driving higher education institutions to adopt change management models that go beyond punctual, procedural, or action-oriented changes and aim at systemic transformations. Recent literature on digital transformation and

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educational innovation often emphasizes that change processes require a strategic, participatory, and evidence-based approach that leads to tailored solutions specific to each organizational context. (OECD, 2023; UNESCO, 2024).

The revision of the speciality literature.

Over the past two decades, higher education has become a space of accelerated change, influenced by digitization, globalization, and economic and social pressures, which have led to changes in university curricula and educational practices. The complex nature of universities—defined by autonomy, collegial structure, and diversity of educational actors—makes change processes difficult to implement and stabilize. (Kezar, 2018). Recent studies highlight that effective change requires a combination of distributed leadership, strategic vision, the involvement of all members of the academic community, and the development of digital skills. (OECD, 2023; Paños-Castro et al., 2024). At the same time, it is clear that change is no longer treated as a simple technological transition, but as a systemic process involving a number of aspects related to organizational culture, digital leadership, stakeholder engagement, and strategic transformation (Onan, 2024; Rieg, Gatersleben & Christie, 2021; Ehlers, 2020). In general, universities function as complex adaptive systems, in which change takes place when interactions between actors are coordinated through distributed and participatory leadership (Kezar, 2018). Thus, rigid, traditionalist models are inadequate and insufficient to capture the real dynamics of university change, being replaced by models that combine cultural and curricular analysis with structural, organizational, and individual aspects.

Among the determining factors of change at the level of higher education institutions, the most frequently mentioned in specialized studies are the following:

- The pressure of digitization, with universities undergoing a major transformation due to student expectations for flexible and personalized educational experiences (Onan, 2024; Ehlers, 2020);
- Visionary leadership: Institutional leaders who have the ability to adopt and promote modern, innovative strategies are

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essential to the success of change. (Ehlers, 2020; Gan, Voon 2023). The authors of these studies summarize good leadership practices in higher education institutions at a global level, identifying clear vision, commitment and consensus building, as fundamental elements.

- Promoting sustainability. Integrating principles of sustainable development challenges universities to rethink their organizational structures and cultural landmarks. (Rieg, Gatersleben & Christie, 2021).
- The role of teachers as agents of change. The study conducted by Case, Johnson & Golding (2025) shows the essential role of university staff involved as "change agents," who can facilitate second-order change at the institutional level by influencing departmental culture and adopting innovative practices.
- Systemic capacity. Sustainable change requires alignment between institutional strategy, digital infrastructure, and the human resources involved. (Reinholz et al., 2015).

Research methodology

The aim of this research was to: identify common needs for change in education, from the perspective of students and teachers; identify and analyze mechanisms of educational change; determining the role of actors involved in the transformation process; identify effective strategies for implementing change; evaluate the impact and consequences of change in education, from the perspective of students and university teachers.

The general hypothesis we started from was that: if respondents (university teachers and students) are aware of the implications of change in education, then there are significant positive premises for their active, planned, and responsible involvement in the effective implementation of changes at the level of the educational institutions in which they work.

The independent variables of the research are: status (undergraduate or master's student/assistant, lecturer, associate professor, university professor), year of study, field of study/specialization, length of service in university education, and the dependent variables concern the perceptions and attitudes of respondents on the aspects involved in change in the university

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environment (teaching and assessment methods, digitization process etc.), the main indicators of change, perceived obstacles to change, roles of educational actors etc..

The main research method used was a questionnaire survey, which was designed by the author and validated internally at the two universities where it was applied, the Technical University of Civil Engineering Bucharest and Valahia University in Târgoviște, both in Romania.

Each questionnaire contains 12 items, of which 5 are structured, multiple-choice items, 5 are structured, scale-type items, and 2 are open-ended items. In order to obtain as comprehensive and objective a picture as possible of the perception of change in education in the higher education institutions where the research was conducted, but also of the importance that the educational actors involved in the teaching process attach to change, many of the questions are similar. The questionnaires were administered online, using Google Forms, with anonymity and confidentiality of responses. The research sample included 108 undergraduate and master's students and 56 teachers from various specializations/study programs offered by the two universities. In accordance with the ethical principles applicable in socio-educational research, respondents will be asked for their consent regarding the collection, processing, and interpretation of the data provided. All the questions asked complied with the principles of professional ethics and were in accordance with the provisions of the European Union directives on cybersecurity and the processing of personal data, contained in Regulation (EU) 2016/679 of the European Parliament and of the Council of the European Union of April 27, 2016 on the protection of individuals with regard to the processing of personal data and on the free movement of such data (General Data Protection Regulation).

Data obtained through questionnaires were processed quantitatively, using statistical-mathematical methods and then analyzed qualitatively, in correlation with recent studies in the field, as well as by referring to the professional expertise of the authors.

Analysis and interpretation of the research data

The first item, present in both questionnaires, concerned respondents' opinions on what they understand by the term 'change' in

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the context of university education. As shown in the graph below, according to the teaching staff, the top three items are: the introduction of modern teaching methods in lectures, seminars, laboratories etc. (35.10%), changes in study programs in terms of the content taught (31.60%), and changing/modernizing the assessment system (13.70%).

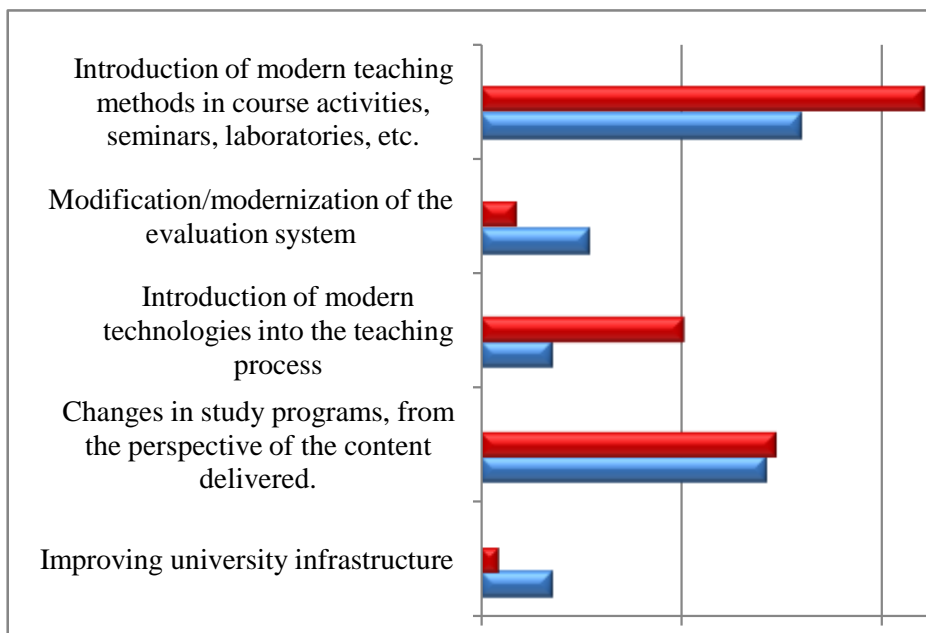


Fig. 1. Teachers' and students' perceptions of the meaning of change in a university context

The choices of student respondents are structured in a relatively similar way. Thus, they place in the first two positions, as well as teachers, the introduction of modern teaching methods in course activities, seminars, laboratories, etc. (44.40%), changes in study programs in terms of content delivered (29.60%), and in third place, the introduction of modern technologies into the teaching process (20.40%).

Clearly, this last choice of the student respondents can be justified by the increasing openness shown by the younger generation towards the modernisation of the teaching process as a result of the digitisation of education and society as a whole.

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In relation to the need for change that both groups of respondents consider to be very urgent, in the academic environment, the responses are structured as follows:

Table 1 Comparative analysis of urgent needs for change in the academic environment

Criteria	Teachers' choice weighting	Students' choice weighting
Updating the curriculum to reflect new developments in science and technology	21,40%	24,10%
Using interactive and participatory teaching methods	10,70%	18,50%
Equipping universities with modern technologies and using digital platforms/applications	7,10%	9,30%
Aligning the university curriculum with labor market demands	32,10%	48,10%

Thus, we find that the identified needs have higher weights in the perception of students than of teachers, in relation to all of them. The largest differences appear in relation to the alignment of the university curriculum with the demands of the labor market (16%) and the use of interactive and participatory teaching methods (7.80%). It should also be noted that the questionnaire addressed to teachers included two additional criteria, namely the creation of flexible and collaborative learning spaces, which was chosen by 25% of respondents, and the adaptation of the teaching approach to students' needs through individualization and differentiation, selected by 3.60% of respondents.

The next item concerned the opinions of both categories of respondents on the extent to which they believe that the changes implemented in the university environment, in recent years, reflect the real needs of students. The answers were positioned on a Likert scale, from 1 to 5, where 1 means total disagreement and 5 means total agreement. We note that, for both categories of respondents, the distribution of responses is concentrated on the median position (3), with relatively equal weights for the other steps on the scale, with the exception of position 2, which was not chosen by any of the respondents in the teaching staff category. Thus, we find that both

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categories of respondents express a moderate attitude regarding the alignment of the changes implemented in recent years in the university environment with the real needs of the direct beneficiaries (students).

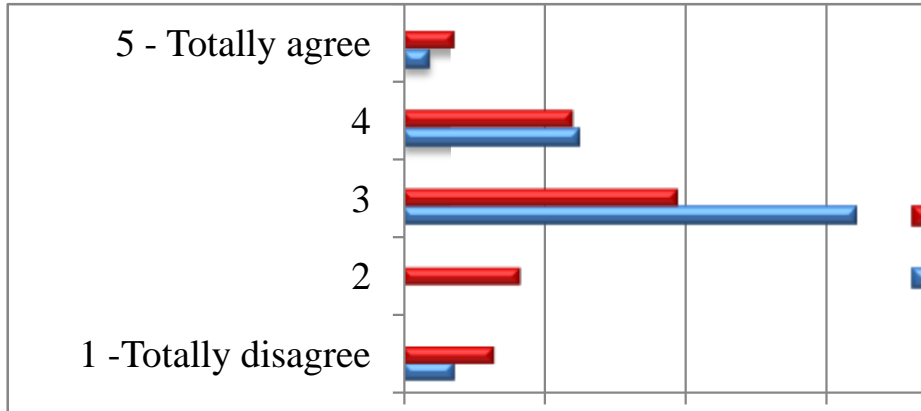


Fig. 3. Respondents' opinions on the extent to which they believe that the changes implemented in higher education in recent years reflect the real needs of students.

With regard to the main actors involved in the process of change in universities, the opinions of the two categories of respondents show some similarities and several differences. A recent study by Vettori (2022) explores the involvement of teachers in institutional change processes, examining how teachers' perceptions, attitudes, and level of participation influence the success of educational reforms and changes.

Table 2 Comparative analysis of respondents' perceptions of "agents of change" in the academic environment

Criteria	Teachers' choice weighting	Students' choice weighting
Members of university management structures	14,3	18,5
Students	3,6	11,1
Teaching staff	57,1	22,2
Representatives of the economic and social environment	3,6	5,6
Representatives of the Ministry of Education and Research	21,4	42,6
Representatives of local administration	14,3	0

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Thus, we observe that, in the perception of the teacher respondents, change in the university environment is determined primarily by themselves, then by the central level (Ministry of Education and Research) and by the management structures in universities. In their perception, the share of students as actors/factors of change is very small (only 3.6%). Teachers have a top-down view of change, combined with an internal, participatory view of change, in which they are the main driving force. In contrast, student respondents believe that change is mainly determined at the level of the Ministry of Education. Teachers are seen as important but secondary actors (22.2%) and the role of students as agents of change is small (11.1%) but significantly greater, than in the teachers' view.

In relation to the extent to which respondents consider that study programs are structured appropriately to respond to labor market challenges, the responses of the two groups of respondents are structured as shown in the figure below.

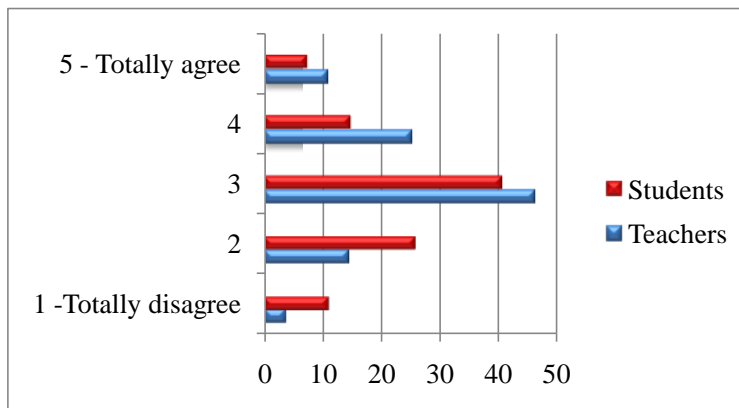


Fig. 4. Respondents' opinions on the extent to which they believe study programs are structured appropriately to meet the challenges of the labor market.

We note that both categories of respondents predominantly chose the middle position on the rating scale, but there are some differences worth mentioning. However, there is a significant gap in

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perception between students and teachers. While teachers consider that study programs are well adapted to labor market demands, probably due to their familiarity with the curriculum design and implementation process, students consider the relevance of study programs in relation to labor market challenges to be lower. In our opinion, these scores can be justified by the fact that students observe significant discrepancies between theoretical and practical training, often directly experience the needs of the labor market and consider that educational offerings evolve more slowly than professional fields and employer expectations.

The next item asked respondents to express their opinion on the extent to which they believe student participation in academic decision-making should be more significant. As can be seen in the graph below, there is a clear difference in perspective between the two categories of respondents. Students want much more participation in academic decision-making and are convinced that their voice should be stronger and more influential. Teachers accept the idea only to a moderate extent and are more cautious about the impact of a major increase in the role of students in academic decisions.

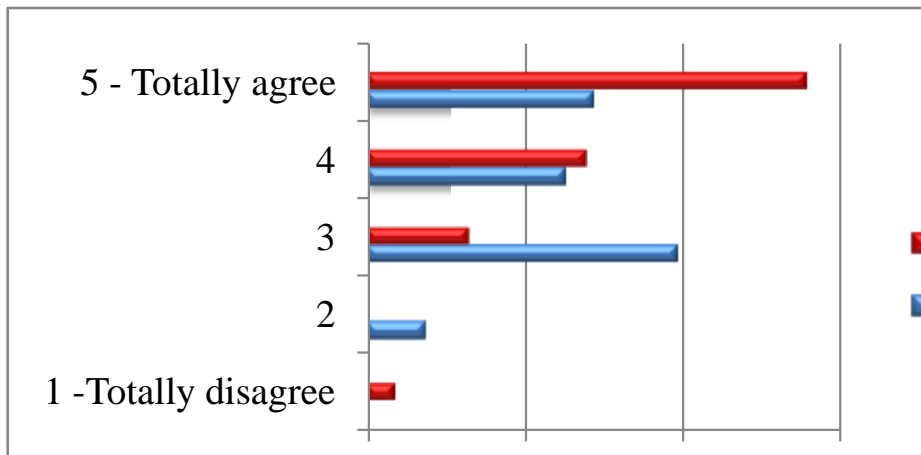


Fig. 5. Respondents' opinions on the extent to which they believe student participation in academic decision-making should be more significant

Both categories of respondents were asked to identify the mechanisms of change they consider most effective in bringing about

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real progress in university education. Based on the analysis of the data collected, we note a good correlation between the opinions of students and those of teaching staff, both of which scored highly in terms of organizing regular meetings between university management, teaching staff, and students and creating working groups made up of students and teachers, to propose solutions to the specific problems.

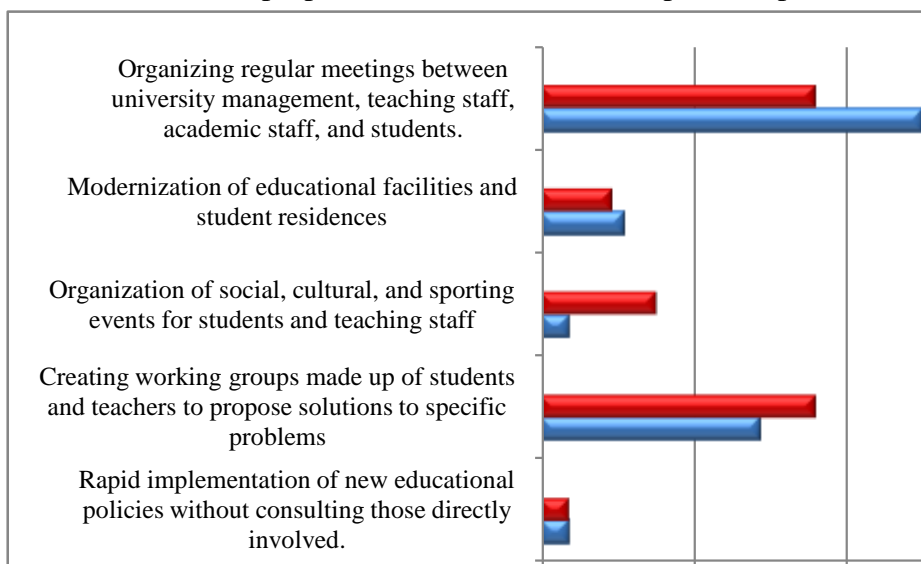


Fig. 6. Respondents' opinions on effective mechanisms for change in the academic environment

However, it can be observed that students place more emphasis on the social dimension and interaction with teachers, while teachers focus more on institutional mechanisms for change. Change without consultation is chosen by very few respondents, and their share in each category is relatively equal (3.6% - teachers and 3.8% - students). In our opinion, this type of choice can only be justified in critical situations, where quick solutions must be adopted and decision-makers do not have the time necessary to consult the academic community..

In relation to the indicators of positive change, well implemented in universities, the respondents' answers are varied, as can be seen in the graph below. Both categories of respondents attach the greatest importance to *increasing the degree of graduate insertion into the labor market*. While teaching staff place *increasing the*

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prestige and visibility of the university at national and international level in second place in their choices, for students, the indicator of *increasing student satisfaction* is in the same second position. The indicator of *developing a sense of belonging to the academic community*, although essential to organizational culture, is not perceived as a key indicator of change by any of the respondent categories. Similarly, the indicator of *digitalization administrative processes and reducing bureaucracy* has a low weighting, as this process is perceived by respondents as a natural phenomenon, an operational improvement rather than a major strategic transformation.

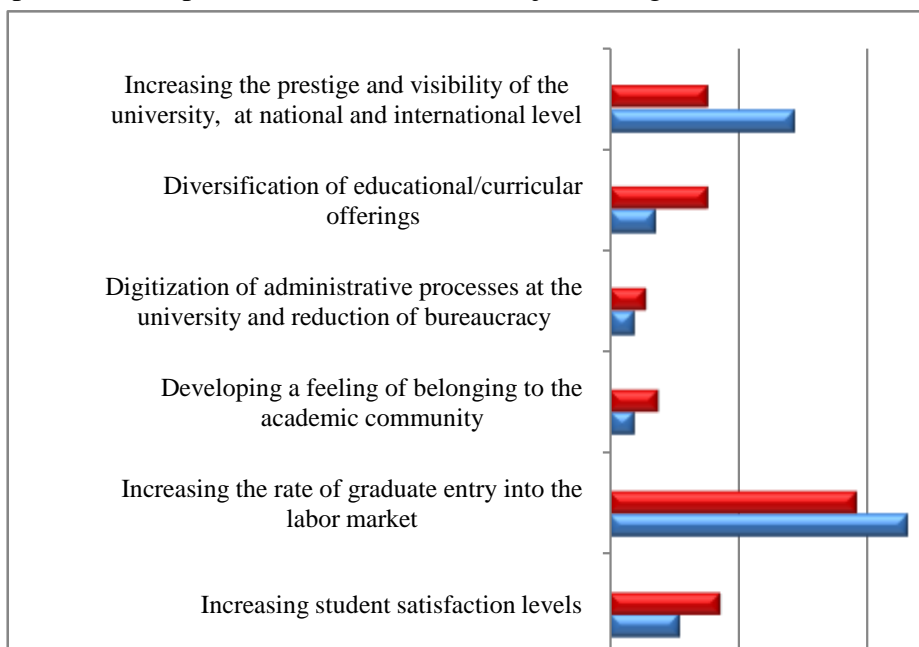


Fig. 7. Respondents' opinions on indicators of positive change, well implemented in the academic environment

In relation to the obstacles they consider important in the way of change in the academic environment, the two categories of respondents made remarks about the lack of active involvement of students in their own education and training process (respondents in the teaching staff category) and the conservatism of teaching staff (respondents in the student category). Students' perceptions of

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effective change management, as well as their level of commitment, can be a critical factor for the success of reforms (Trolan, 2023).

In our study we observe a mirror distribution of responses from the two categories of respondents, who assign average, high, and even very high values to the two obstacles, with the general tendency being to place the obstacle in the area of the other educational partner (student or teacher, as the case may be).

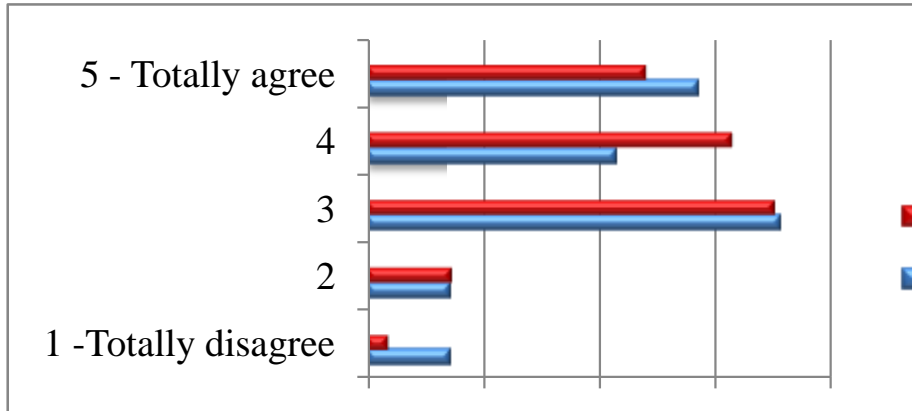


Fig. 7. Respondents' opinions on the obstacles they consider important in the way of change in the academic environment

Thus, teachers consider that the main impediment to change is the lack of active involvement of students in their own training process, suggesting that any reform initiative is limited in the absence of real commitment from the direct beneficiaries. On the other hand, students identify the conservatism of teachers, perceived as resistance to pedagogical innovation, digitization, and curriculum adaptation, as a major obstacle. This mirroring of responsibility indicates the existence of a perceptual divide between the two groups and highlights the need for effective academic dialogue that fosters cooperation and enables the implementation of sustainable changes in the university environment.

Conclusions

Change management in education is a complex process, but it is essential to ensure that the education system responds to the needs of an ever-changing society. The success of this process depends on a

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strategic approach, rigorous planning, effective communication, the active involvement of all stakeholders, and continuous evaluation.

A current trend in effective change management is that higher education institutions need to adopt a strategic, people-centered approach, based on open communication, visionary leadership, and a culture of adaptability and innovation, actively involving students and faculty in this ongoing process. Recent studies on this issue offer valuable insights into the different facets of change management in higher education, from general strategies to the specific role of teachers and students, as well as the impact of digital transformations (Benavides et al, 2020).

As this study reveals through the deliberate and responsible involvement of educational actors, by adopting well-defined change management strategies and cultivating a culture of adaptability and innovation, we can build a more robust, equitable, and prepared education system to train successful future generations. The transformation of university education is not a singular event, but a continuous journey, and effective change management is the compass that must guide us on this path.

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