

THE FUTURE OF HIGHER EDUCATION, DIGITALISATION AND TECHNOLOGICAL DECISIONS THROUGH THE EYES OF STUDENTS

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Abstract: The present of higher education is highly dynamic, and its future is contingent upon numerous factors. It is crucial to recognize that today's students with their perspectives, expectations, and demands, are significantly shaping the future of higher education. They are the future educators and creators of new scientific knowledge. This article aims to identify the essential components for constructing a vision for the future of universities through an analysis of current students attitudes and behaviors. A literature review was conducted on the evolving dynamics of higher education. Based on these dynamics a tailored questionnaire was prepared to study student's opinions, expectations, and recommendations for technological development and their decisions. Over one hundred students, nearly all of them undergraduates, were surveyed. This empirical study assesses students' satisfaction with the educational process, the university environment, interactions with business, and their future aspirations. The survey data was utilized to construct a vision for the future of higher education. The results confirm students' positive attitudes towards technological advancements, but also highlight concerns regarding their impact on the labor market structure. Notably, students envision a future where universities maintain in-person education, emphasizing the need for enhanced social interactions. Despite improved student-university interactions, there remains a strong desire for greater attention to be paid to their opinions and for closer collaboration with business and industry experts and practitioners.

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Introduction

The purpose of this report is to contribute to building a vision for the future of higher education through the perspectives of current students. The subject of the study is the continuous and rapid development of education in response to the dynamics of the present time. The aim is to identify the key factors of the current time that will prove decisive for the future, with a particular emphasis on digitalization and technological development. Two hypotheses are developed and proposed:

Changes in the overall concept of the university align with student preferences and opinions.

Students hold a positive view of technological advancements but are increasingly aware of associated risks.

To achieve the aim of the article, the following research tasks are formulated:

- (1) conduct a literature review on the dynamics the higher education development;
- (2) develop a questionnaire based on factors related to these dynamics;
- (3) present and analyze the results of the empirical study;
- (4) construct a vision for the future of higher education based on empirical findings.

Higher education with the advent of the 2000 has undergone significant changes in both student and academic profiles. The trend of lifelong learning has necessitated a change in the age profile, with more students balancing work and study, and an increasing presence of industry experts in academia. The impact of the global pandemic on reshaping higher education cannot be overlooked, as we currently navigate an era of transformational change in university structures. To meet the needs of this evolving landscape, there is an urgent need to adapt to new technologies and digital infrastructures. Additionally, student expectations are also change with the dynamic trends students and they enter the university environment with pre-existing expectations. Numerous studies have projected the future of higher education, emphasizing the need for institutions to adapt curricula and infrastructure to meet changing student expectations, as well as fostering partnerships between academia and industry (Ramsden, 2008, Barnett, 2012). Also important are challenges that are emerging to increase the quality of higher education. Recent research highlights the increasing role of Artificial Intelligence (AI), and technological tools such as ChatGPT in education (Rasul et al., 2023, Crompton and Burke, 2023).

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The European Commission's strategy for universities underscores the importance of bolstering institutions to uphold the European way of life while contributing to the green and digital transitions, and proposes various initiatives in relation to these objectives (EC, 2022). The European Students' Union emphasizes student representation and integration across all levels of higher education (ESU, 2021). In a UNESCO-initiated study on the future of education among focus groups including a majority of students (Andrasheva et al., 2022) several conclusions were outlined. The need for connection and coordination between students and faculty, also between global processes and local needs, comes to the forefront. The conclusions of the study reveal a clear appeal from students concerning the educational programs. Their desire is to have more involvement in the creation of new programs and learning environments, also including current issues such as climate change and ways to address them. While students generally view technology in terms of education as a means to enhance access and quality, concerns remain about potential societal stratification. There is a growing hope for an increased virtual mobility options. The university of the future, as described by the focus groups, maintains its role in preparing students for the labor market, but also recognizes that achieving prosperity requires actions beyond the university walls.

In previous studies, the authors proposed an experimental model investigating the degree of cooperation between business organizations and higher education institutions in Bulgaria's South Central region (Ruseva et al., 2022), and emphasized the need for trust-building, active cooperation, information sharing and motivation in linking education and business (Dakova and Erturk-Mincheva, 2023). The present research is aimed both to check the attitude of the students of University of Plovdiv "Paisii Hilendarski" in the same direction from previous studies in order to assess their expectations and hopes for the future of higher education, and to complement specific issues such as satisfaction with the educational process and contacts with business. Our aim is to contribute to highlight the elements that should be considered in shaping the future of higher education.

Data and Methodology

An anonymous survey was conducted among the students from the Faculty of Economics and Social Studies at the University of Plovdiv "Paisii Hilendarski". A link to the questionnaire was sent to the email address of each course. The questionnaire comprises 11 questions. The initial three pertain to general information regarding educational level, course of study and gender using a closed-type format. The remaining questions employ a scale of 1 to 10 and open-ended responses, thereby affording students the opportunity to express their views freely. The subsequent questions pertain to students' present perceptions of higher education. The final question solicits opinions regarding the future of technology and higher education.

An analysis of the the 102 responses revealed that 98% were undergraduate students, with a balanced distribution across the course years: 31.37% in the first year, 32.25% in the second year, 16.17% in the third year and 19.61% in the fourth year. The age range of the participants corresponds to their educational level, with 89.22% aged 20-24 years. Notably, a significant portion of the respondents were female - 81.37%.

Results and discussion

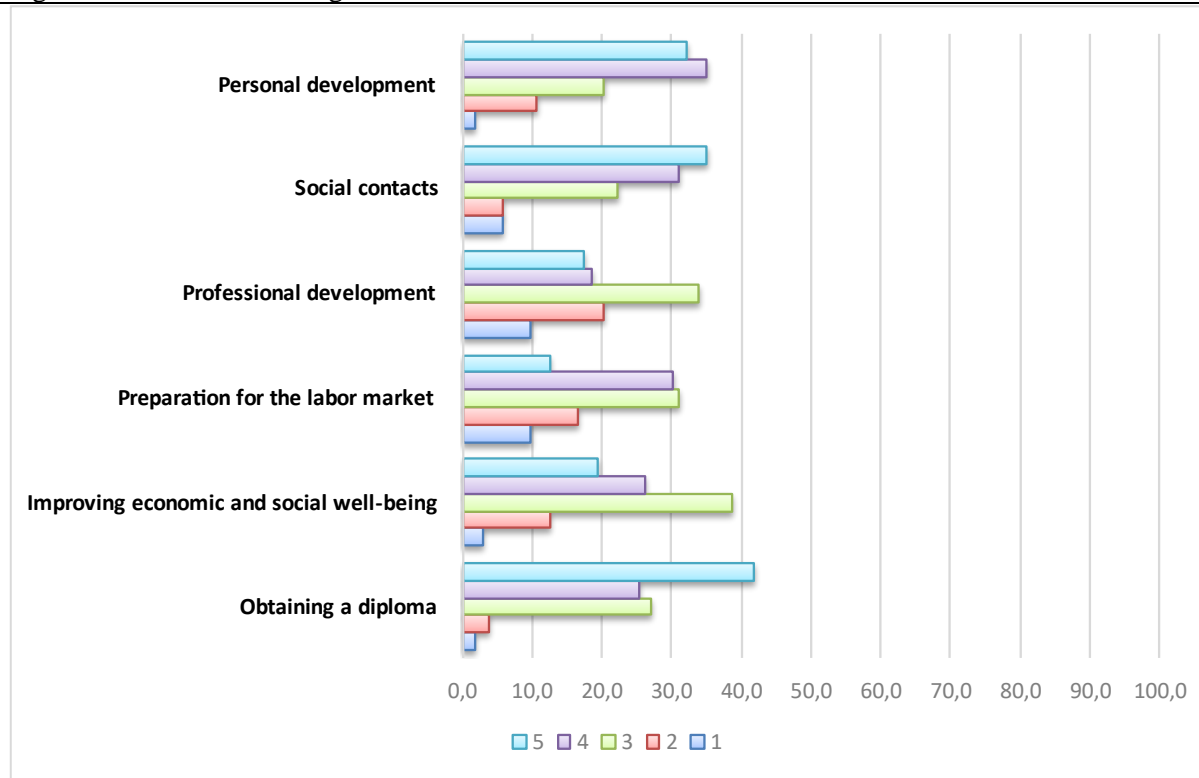
One of the finding of the survey relates to the perceived benefits of higher education according to students. Understandably focused on achieving the initial goal, 67.65% rated obtaining a diploma as the highest benefit. However, personal development and social contacts were rated similarly high. These results reflect the dual focus of students on achieving clear objectives while also valuing personal growth and social interaction, which are characteristic of younger age groups. Noteworthy are the students' views on the benefits for improving economic and social well-being (46.08%), preparation for the labor market (43.14%) and professional realization (36.27%). Fig. 1 displays the varying responses regarding the perceived benefits of higher education, illustrating that students view the university environment as influential to their social interaction.

An important finding of the study shows the alignment between students' expectations and their actual experience. About 42.16% of students indicated that their expectations closely matched their experience, reflecting students' awareness and preparedness before entering university.

A question about the students' initiative to take advantage of the opportunities offered by the university revealed interesting results, as illustrated in Fig. 2. The respondents reported varying levels of

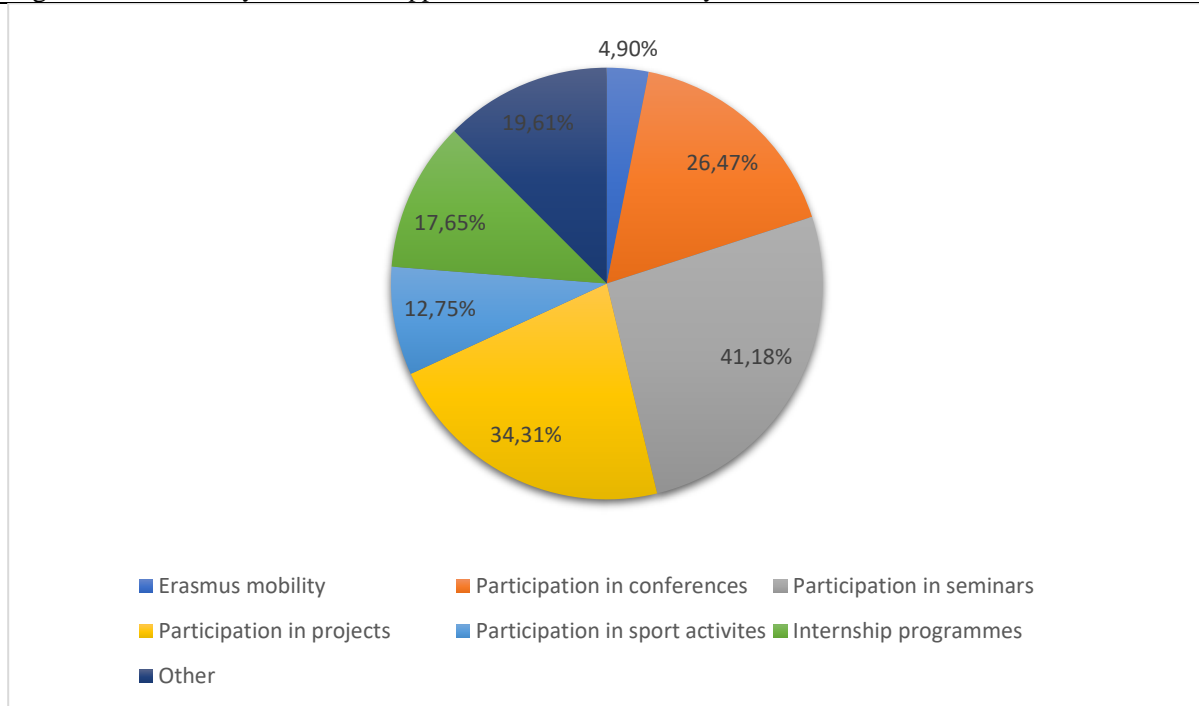
participation, with the highest engagement in seminars (41.18%), followed by projects (34.31%), conferences (26.47%), internship programs (17.65%), and sports activities (12.75%). Participation in Erasmus mobility program was the lowest, with nearly 20% indicated participation in other activities.

Figure 1. The benefits of higher education



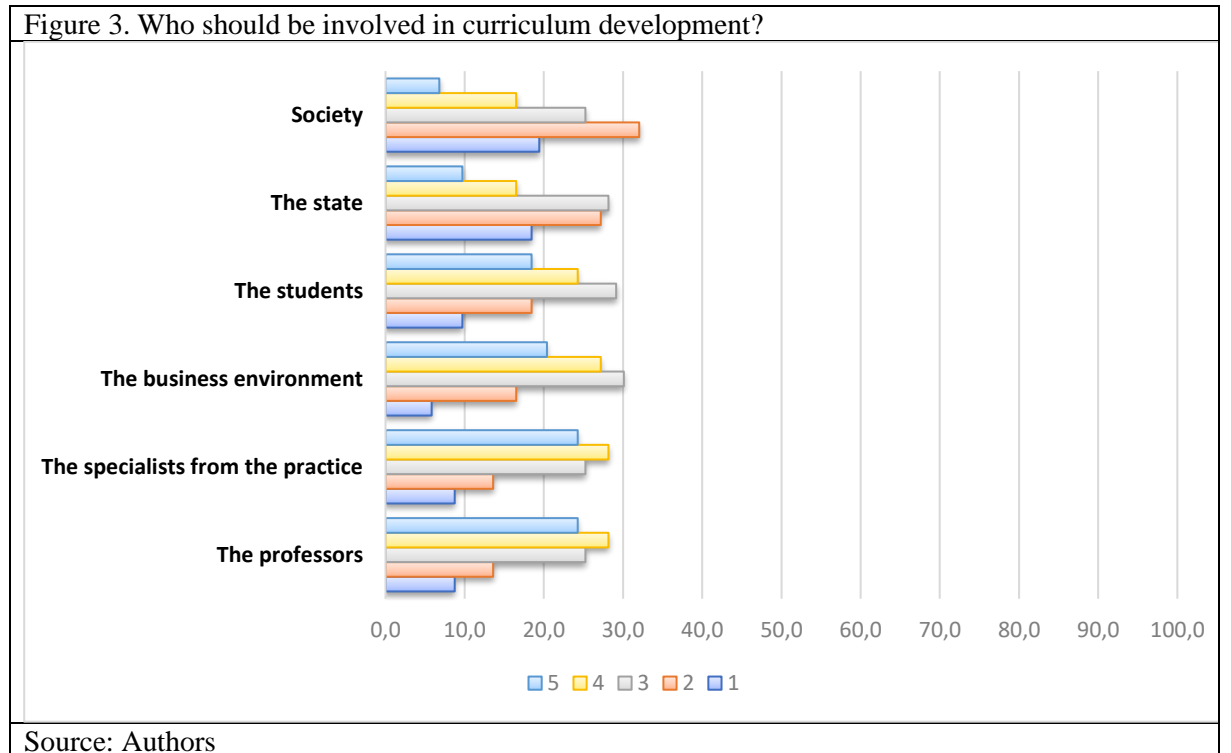
Source: Authors

Figure 2. Preferred by the students opportunities of the university

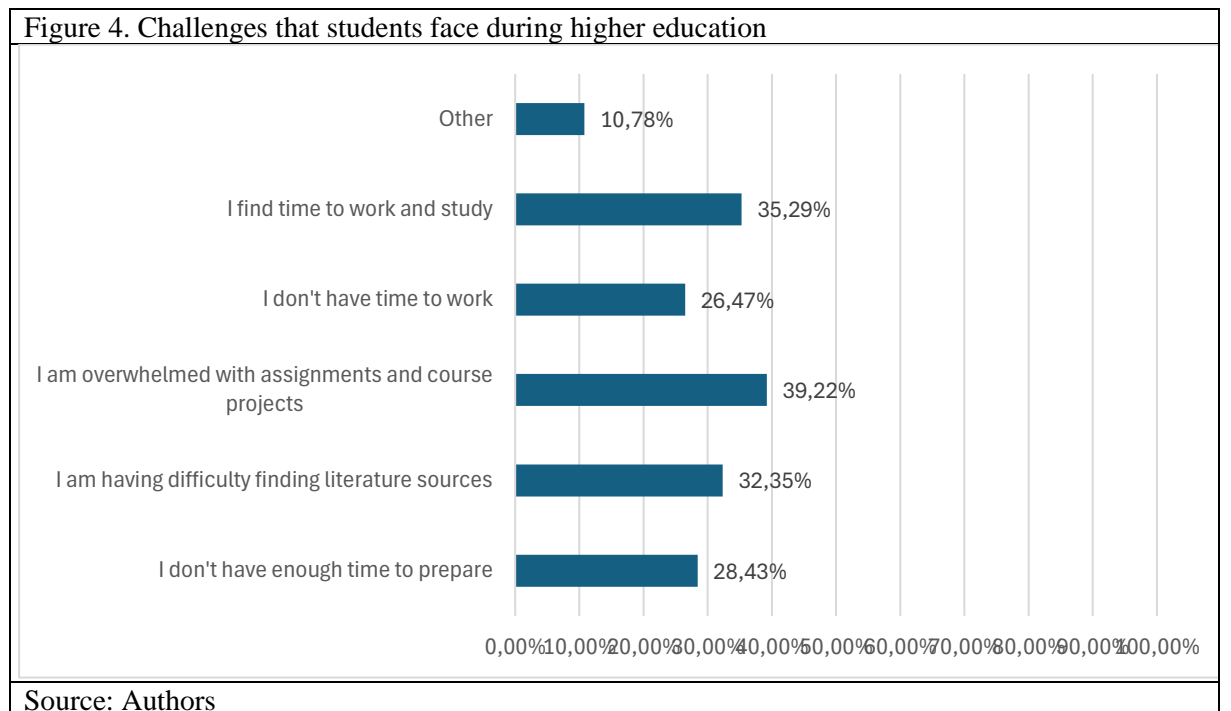


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Fig. 3 highlights a remarkable result : students' preference to have specialist from the practice to play a primary role in curriculum development, followed by input from the business environment, professors and students themselves. The least emphasis was placed on state and society.



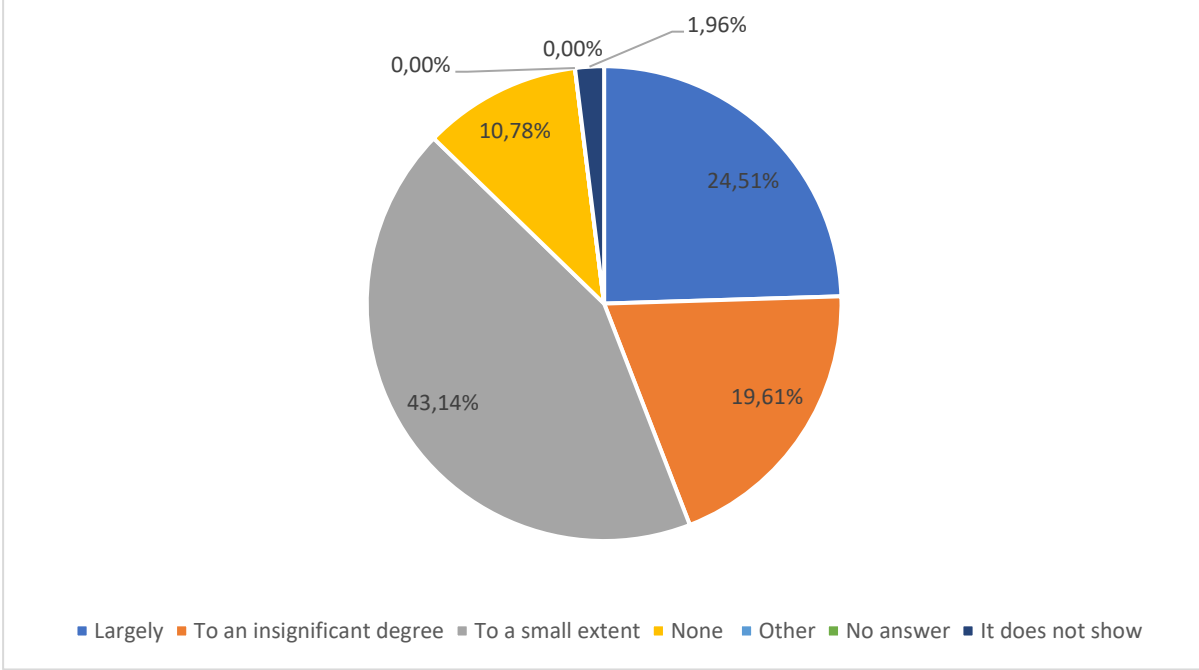
Regarding the challenges encountered during higher education, the highest percentage of students reported being overwhelmed by assignments and course projects (39.22%). Conversely, 35.29% indicated they managed to balance work and study. Other challenges included difficulties in accessing literature resources (32.35%), insufficient preparation time (28.43%), and limited time for work (26.47%).



One of the negative results of the survey is related to the students' opinions about their opportunity to contribute to the development of higher education as direct participants. Only 24.51% believe that they can contribute to a large extent. A significant portion, 43.14%, believe they can make a small

contribution. Nearly 20% feel that their contribution is insignificant, while 10.78% believe they do not contribute at all.

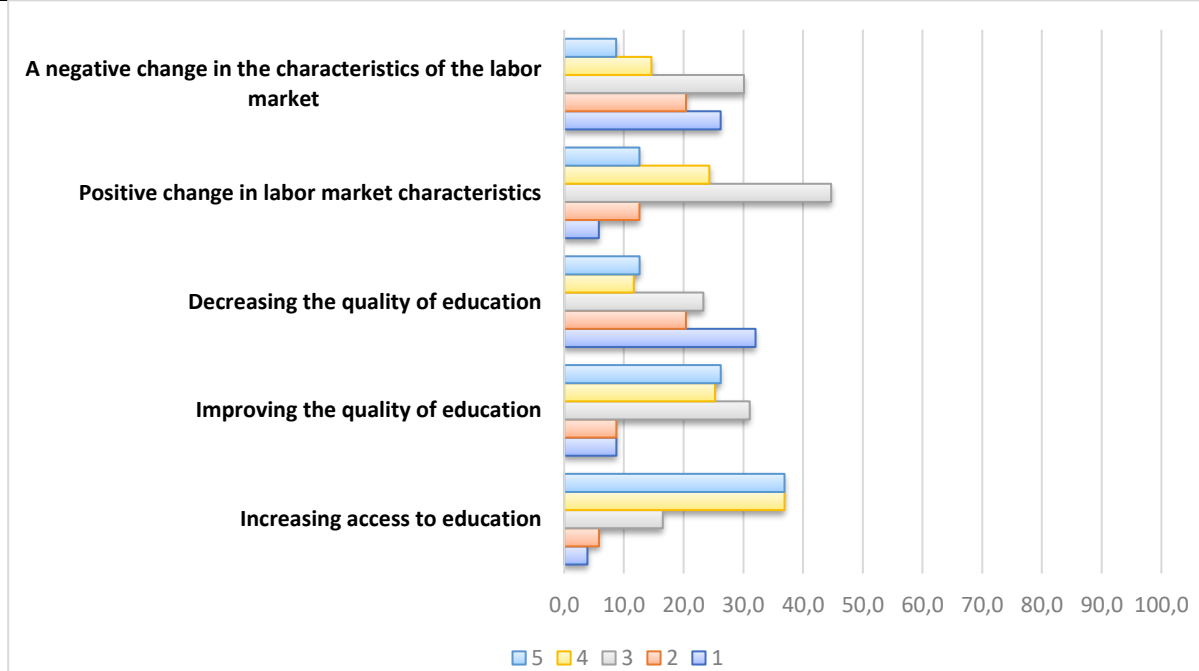
Figure 5. To what extent can you contribute to the development of higher education as a direct participant?



Source: Authors

For the future of higher education, the majority of students support the continuation of face-to-face education (61.67%), with mixed support for hybrid models (38.24%) and fully online models (20.59%). Students fully endorse the development of technology in education, expecting technological advancements to increase accessibility (74.51%) and quality (51.96%). However, opinions diverge regarding technology’s impact on the labor market, with 45.10% predicting positive change and a significant portion expressing uncertainty rather than negativity.

Figure 6. The impact of technology development



Source: Authors

The expectation is clearly focused on the future of higher education to work towards increasing the scope of international cooperation, with the highest approval from 79.41% of participants, and to connect global processes with local communities by 73.53%. Additionally, the expectation for more active student participation in shaping the educational process received the highest approval rating of 78.43%.

Conclusion

The survey findings confirms the first hypothesis of the study. The transformation in the overall concept of the university aligns with the preferences and opinions of the students. The analysis of opinions regarding international cooperation and the desire for greater involvement in the educational process provides strong evidence that the students of this particular faculty support the international trends, as demonstrated by similar research. It remains the researchers' hope that the the working hypothesis and the trend analysis will be reflected in the students' self-assessment of their contribution to the development of higher education.

Students are aware of the benefits they gain from higher education and are committed to personal development, followed by preparation for the labor market, valuing the input of industry practitioners in the development of curricula. The reciprocal relationship between students and university is maintained and enhanced, but students expect even better engagement, responsiveness, and consideration of their opinions.

Students hold a positive attitude toward the impact of the technological development in education, but there is also uncertainty regarding its implications for the labor market characteristics. Student opinion strongly supports the continuation of face-to-face education, with an added expectation of even greater social interaction.

Thus, the vision for the future of higher education includes in-person learning and training, with greater student involvement, an international and social focus, and increased opportunities for remote mobility. Additionally, there is a clear emphasis on integrating practical business experience into the curriculum, primarily through the involvement of industry specialists. The positive attitude towards technological advancement, specifically concerning higher education, will undoubtedly shape the future vision, with an increased active role for business practitioners, steering it in a positive direction.

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