

## Demands and Challenges in Higher Education Today

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### Abstract

*The changing situation of society has brought many challenges and demands to Higher Education (HE), which considers many aspects such as: the impact of the Covid-19 pandemic, the SDGs, the 2030 agenda, the use of AI, among others, therefore this article aims to analyze the demands and challenges of higher education today and to know which aspects are unknown or controversial, thus a literature review was conducted on higher education considering research from different countries around the world, within the main results of the analysis of 30 scientific articles, it was found that HE, is multidimensional since it encompasses different aspects such as social, environmental and economic aspects, and hence it presents different demands and challenges for which the implementation of different strategies is proposed.*

**Keywords:** Higher Education, Demands, Current Challenges.

### Introduction

Through ages, Higher Education (HE) has been the fundamental basis for social, cultural and economic progress of nations, UNESCO (2022) mentions that HE plays an important role in society as long as it focuses on the commitment to the implementation of the SDGs through teaching, research and the economy, also HE is linked to the 2030 Agenda where there are commitments on climate change and other threats. Similarly, in recent decades, the development of access to HE has generated a significant increase in the number of institutions and students enrolled globally, this growth has also brought various challenges that threaten the quality, equity and relevance of HE.

Nicolò et al. (2022) state that the global pandemic has boosted universities to adopt innovative models to ensure the continuity of their services affecting the social dimension of universities, forcing them to implement pro-social actions, especially for the benefit of students, reducing inequalities. Likewise, Tedesco et al. (2015), in their analysis of the role of the university, argue that the university should be a space for inclusion and critical reflection, seeking ways to improve pedagogical practices and reducing access barriers, emphasizing public policies, student participation and professor training, contributing to create a more equitable university.

On the other hand, it is unknown to what extent higher education in the future will be different from today, but it can be anticipated, based on the present difficulties and challenges, making gradual changes at global, regional and local scales, Sabzalieva et al. (2021) argue that HE in the future will assume four dimensions such as active responsibility for our common humanity, promoting well-being and sustainability, providing intercultural and epistemic diversity, even defending and creating interconnections at multiple levels.

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Among the most common challenges are the growing demand for specialized training in a constantly changing world of work, the need to adapt the curriculum to new technological and social realities, as well as the economic difficulties that do not allow to keep up with technological changes, and the demand to maintain academic standards of excellence in an increasingly competitive context, where research and innovation are fundamental.

On the other side, HE faces the challenge of globalization, the promotion of lifelong learning and the development of innovative pedagogical approaches that develop competencies in students, this critical aspect also requires urgent attention by the entities that provide higher education (Mansoor et al., 2019). According to UNESCO (2022), higher education has three major social missions; to produce knowledge, to educate people and to know how to be responsible to society, which is why it is essential to know the demands and challenges of higher education today, for a more promising future.

This systematic review article aims to analyze the main demands and challenges facing higher education today, exploring both emerging issues and possible strategies to overcome them. Through a multidimensional approach, it focuses on offering a comprehensive vision that contributes to the development of policies and practices that efficiently face the challenges and demands of current and future society.

## Methodology

This review article is of the exploratory descriptive type because it responds to the questions: What is known about the subject? For this purpose, a descriptive review of the selected documents was carried out, first by performing a thorough and exhaustive search of documents, and then organizing, systematizing and analyzing them.

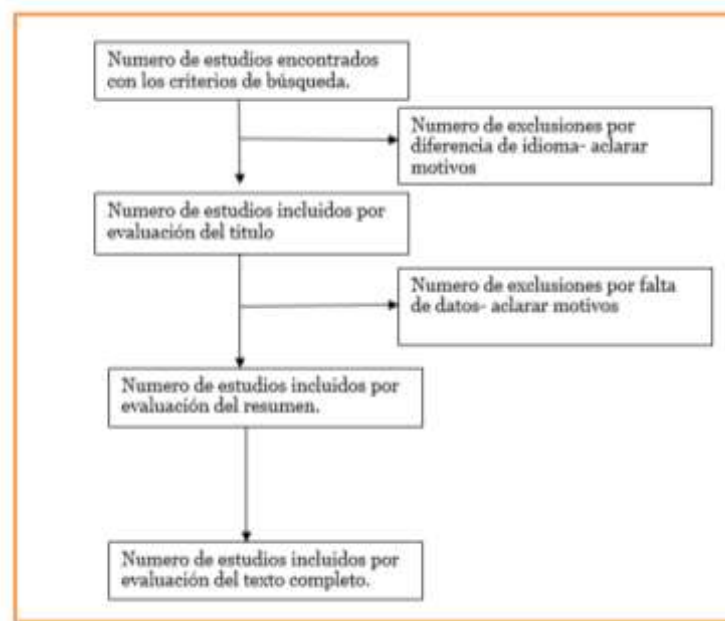
Bibliographic documents were found using several primary, secondary and some tertiary sources. The exhaustive bibliographic search started on August 1, 2024, using online research platforms such as EBSCO and SCOPUS and the keywords: higher education, university education, issues and challenges in both English and Spanish, as well as the Boolean operators AND, NOT and OR, obtaining from 200 to 300 search; in order to obtain greater results, combinations were made between the above mentioned keywords, which allowed finding more precise information.

Likewise, studies researching on higher education were chosen, this selection considered the different studies carried out in different countries of the world, the researches with the largest sample were also considered, keywords like higher education, issues, challenges and demands and some combinations between these terms were used, from the search that was carried out, 80 researches were chosen from which 30 were selected, whom the exclusion and inclusion criteria were taken into account according to the descriptors used, excluding documents that did not focus precisely on the descriptors used, another exclusion criterion used was the time of the research excluding the oldest ones, and choosing only the most current documents considering research conducted between the years 2013 to 2024.

The information collected was organized in an Excel database considering the author, title of the article, objectives, results and conclusions, also the Mendeley system was also used. After the information was organized, the documents were distributed by thematic fields that presented components that related them and were directly linked to the descriptors and the objective being searched.

Thereupon, a reflective critical analysis of the main topic was carried out to determine agreements and disagreement views, using the comparison strategy for this purpose. Finally, the authors who coincided with their arguments, results and conclusions were classified, as well as those who presented discordant positions, and then conclusions were reached, plus some recommendations.

The process followed in the bibliographic search and selection of documents is detailed in the following image, adapted from Sousa (2009).

**Image 1.** Sequence of the Literature Review Methodological Process

Note: Adapted from Sousa (2009)

## Results y discussion

### Results

The results are presented according to common criteria found in the 30 scientific articles analyzed regarding the topic of higher education and its main issues and demands, which are presented in a table where the grouping categories are shown, as well as the number of articles found according to each category.

**Table 1.** Categorization of Scientific Articles by Topics of Interest

No.	Grouping categories	Number of items
01	Current and future demands of HE	18
02	Sustainable development objectives	02
03	University social responsibility	02
04	AI in higher education	08
	<b>Total</b>	<b>30</b>

Note. Self-elaboration

### *Main Research Topics on Higher Education and Its Challenges and Problems in Society Today*

Different categories related to the topic were obtained from the selected articles, which were grouped into 4 categories. The analysis of each category was carried out by the closest approximation to the research topic.

*Current and Future Demands of Higher Education*

Table 1 shows that 18 research studies were found according to the grouping criteria, the curricular demands and the problems facing higher education in these times. For a better understanding and analysis, a table is presented in which the common and different aspects presented by the selected studies can be seen.

**Table 2.** Results of the Current and Future Demands of HE Category

<b>Authors and year</b>	<b>Research findings</b>
<b>Sahudin et al. (2023)</b>	Developing research executing in higher education worldwide will increase economic competitiveness in each country. By improving leadership and management support, universities and research organizations can develop a collaborative and supportive research culture that attracts brilliant researchers.
<b>Baylan (2023)</b>	It is vital to justify university research with local, national and international agendas to improve educational quality and the global competitiveness of universities. There is also a need for policy reforms and reorientation of the research agenda to strengthen investigation productivity and innovation.
<b>Gaete (2021)</b>	Higher education in Latin America has experienced a massification of student access, insufficient state funding, and an increase in the participation of private institutions. These changes have generated a debate on HE as a public good guaranteed by the state.
<b>Mishra et al. (2024)</b>	The HE problems highlighted by these authors are the climate crisis and sustainability, it is also fundamental to propose innovative policies and curriculum that include the development of skills for resilience and sustainability, inequality and levels of knowledge, the isolation of oppressed groups, the importance of including community knowledge along with academic understanding, and innovation because universities need to be more flexible and adaptable, implementing new approaches, and the need for a transformation in HE.
<b>Muftahu et al. (2023)</b>	These authors mention that unequal access to higher education is a problem in Malaysia, access remains limited for students from vulnerable groups, and diversity is insufficient as there are still challenges to truly achieve this in terms of gender, ethnicity and socioeconomic background among students. Massification in HE has created pressure on institutions to maintain educational quality.
<b>Hou &amp; Mohd (2024)</b>	The authors indicate several problems of HE within the context of Sino-Foreign Cooperative Education (CFCE), such as the quality of teaching, particularly in remote areas like the western provinces of China, due to the lack of adequate assessment and maintaining high educational standards. Inequality in resource distribution, pedagogical innovation is limited, although there are efforts to promote innovation in teaching, research suggests that current approaches may be insufficient, therefore improvements in educational quality management, equitable resource distribution and pedagogical adaption are needed.
<b>Nurul and Abdul (2023)</b>	The study analyzes current teaching and learning practices in higher education, highlighting their effectiveness and the challenges faced by students, such as academic overload and time management. The development of active learning and the use of digital technologies are proposed.
<b>Benjamin et al. (2023)</b>	Higher education faces several problems, among them the pressure for professors to participate in research and publish their findings. In addition, institutions prioritize their own needs over the interests and personal satisfaction of faculty members.
<b>Casas and Stojanovic (2013)</b>	The article highlights innovation in universities as an essential process for social and scientific transformation. It is also emphasized the importance of research; and innovation is a change to improve, reform and achieve more effective

	institutional results than the current ones, educational systems must evolve towards the knowledge society and generate the significant knowledge it needs.
<b>Baladrón and Correyero (2013)</b>	Traditional universities no longer have a monopoly on knowledge in society, they face the pressure of constant change and the need to adapt to market forces. These authors indicate that corporate universities will have a prominent role in the establishment of training and knowledge in the framework of Spanish higher education.
<b>Jareño et al. (2014)</b>	The authors highlight the problem of renewing teaching methodologies in higher education, especially in cooperative and collaborative work. They highlight the use of a Problem Based Learning (PBL) methodology and evaluate aspects such as effort, participation, organization, cohesion and communication.
<b>Nørgård and Høflod (2024).</b>	HE is influenced by the traditional method which has limited the actions of students and professors. This requires the reorientation of higher education to adopt a more holistic and optimistic approach, higher education institutions can better prepare for future challenges.
<b>Bayne and Ros (2024)</b>	HE faces the complexity of technological, environmental and political futures, presenting scenarios related to climate change, artificial intelligence and social justice. 'Radical hope' implies a solidarity action between students and staff, encouraging transdisciplinary knowledge and open learning to face global challenges and foster radical social change in HE.
<b>Gallagher et al. (2024)</b>	Higher education presents problems such as interrelated language, social, economic and administrative barriers that hinder students participation. This can be achieved by designing educational programs that prioritize the needs of the most vulnerable.
<b>Veletsianos et al. (2024)</b>	HE is facing economic, demographic and social challenges, enhanced by the COVID-19 pandemic. Therefore, it is proposed to foster and inclusive dialogue on the role of technology in education, prioritizing social justice. The most latent problems in HE is wealth inequality, and the impact of technology which increases inequalities and does not always support effective learning. Likewise, the need for critical research considering justice and equity.
<b>Fonseca et al. (2024)</b>	The most frequent problems in HE is the outdated curriculum that does not reflect the reality of the labor market, making it irrelevant. Disconnection with the labor market, not covering real needs. A limited focus on soft skills such as leadership and communication. Lack of professors and the connection with real practice. Showing the need for curricular reform and a more practical approach to education.
<b>Kim et al. (2024)</b>	The pandemic challenged traditional teaching approaches, promoting online learning as a common practice. In addition, the relationships between students, their peers and professors are critical to their learning success. Sustainability in HE must also include the emotional and social well-being of students.
<b>Fia et al. (2023)</b>	The authors mention several problems to be faced in HE, such as inequality in access, discrimination against the most vulnerable groups, the lack of education that does not meet the expectations of the labor market and the demands of world today. The absence of innovation in universities, such as the incorporation of new technologies and pedagogical approaches. The financing of public universities is limited; therefore, training professors in pedagogical innovation would help to solve the problem.

Note. Self-elaboration

Higher education, as mentioned by different authors, has presented in the past and present, problems ranging from a hidden curriculum to the conventional one, including current market demands and crises such as pandemics, institutional management and leadership, financing, and social justice, among others. HE has many difficulties to face these problems, however, some solutions that can be implemented are

mentioned, such as improving curriculum design, strengthening the research capacity of professors, providing better government economic conditions and looking to the future with hope, because HE is considered the main factor in the economic development of a country.

The psychological well-being and quality of life of students are also essential to ensure academic success in HE so institutions should consider these factors to promote a more sustainable learning environment.

#### *Higher Education and Sustainable Development Goals*

In this grouping criterion, 2 articles were found that focus on higher education and the 17 SDGs.

**Table 3.** Higher Education and Sustainable Development Goals

<b>Authors and year</b>	<b>Research findings</b>
<b>Sergey et al (2024)</b>	Regarding the SDGs in HE, there is a need to integrate sustainable development as a central goal in teaching, evaluation and curricular content. It should be guaranteed that students understand their importance, and the training of educators should not set aside by providing them with training on the SDGs so that they can be inserted into teaching.
<b>Lakhno (2024)</b>	There is a tendency to focus on the environmental aspect, ignoring other dimensions of sustainability, such as social and economic impact. Bias in the Representation of Achievements, given that reports tend to focus on positive aspects, excluding challenges and failures, which can result in a “greenwashing” of sustainability practices carried out in HE.

Note. Self-elaboration

In HE, the sustainable development goals are also of interest in this level, which is why the authors analyzed mention that students and professors are unaware of the real magnitude of what the SDGs include because they are developed superficially in university classrooms, where educators, when developing the SDGs, focus only on the environmental aspect, leaving aside the social and economic aspects, therefore, they propose different alternative solutions such as making changes in the curriculum, increasing the budget and training professors on this aspect so that they can develop it adequately in higher education, which would significantly improve the quality, equity and relevance of HE, ensuring to meet the current and future needs of society.

#### *Artificial Intelligence in Higher Education*

Concerning this grouping category, 8 research studies were found focused on analyzing the issues and challenges of AI in HE:

**Table 4.** Artificial Intelligence in Higher Education

<b>Authors and year</b>	<b>Research findings</b>
<b>Stohr and Malmström (2024)</b>	It is fundamental for the integration of AI into the curriculum to develop clear guidelines for the use of this technology in education, adapted to the local needs of students and professors. AI is a valuable tool to enhance student learning, however, there is a need to adjust to the educational context and ethical aspects.
<b>Chenhui et al. (2024)</b>	The research focuses on three key factors: university, culture, enabling conditions and professional development, and how these elements influence technology integration. Professors need more institutional



	support, in terms of resources and training, to effectively adopt technology in teaching.
<b>Plata et al. (2023)</b>	A current problem in universities around the world is the incorrect use of AI, especially in relation to cheating and plagiarism in academic papers. The author suggests a model called 3E to ensure academic integrity, improve classroom assessment practices, and use AI tools positively. Universities should modify their policies to incorporate the responsible use of AI.
<b>Lintner (2024)</b>	It is necessary to develop programs that allow the use and critical evaluation of AI, especially ethical use. Given its progress, it could become a necessary tool for HE.
<b>Wang et al. (2024)</b>	Lately, digital technology has emerged as a topic of interest in education, playing a key role in improving the academic performance of students and increasing teaching effectiveness. However, there is a demand for educational institutions to self-regulate and face this challenge.
<b>Al-Hail et al. (2024)</b>	The use of social networks in HE has grown significantly after the global pandemic, irreversibly altering learning, forcing institutions to incorporate AI in their curriculum, however, the lack of knowledge about it has limited the integration of these technologies in pedagogical practices, hinder the possibility to effectively integrate the technologies and be aligned with modern social learning.
<b>Kuleto et al (2021)</b>	Educational platforms and applications are closely linked to the needs and knowledge of students, making the educational process more efficient, thus AI has great potential in higher education by developing skills in students such as collaborative and investigative learning
<b>Bin et al (2023)</b>	A growing concern is that the use of AI would cause students to lose the ability to produce original ideas, lack of reasoning and creative thinking, ethical issues, copyright, and methodological biases, in general too many times AI can be misused.

*Note.* Self-elaboration

These authors mention that AI in HE is an innovative tool that allows the implementation of different strategies that can be carried out through this technological instrument favoring the development of autonomy in student learning.

As shown, the authors mention the multiple uses of AI in HE, its fast incorporation in education in general and in particular in HE, it has brought not only benefits but also difficulties, such as the inappropriate use of this when conducting research, causing the lack of ethics in the preparation of work omitting the rights of the author, all this also causes the loss of critical capacity, reasoning and creativity of the student, when misusing this technological tool.

#### *Social Responsibility and Higher Education*

Examining another research grouping category, we analyze the development of autonomous learning in higher education, where 2 research studies were found, which are detailed below:

**Table 5.** Social Responsibility and Higher Education

<b>Authors and year</b>	<b>Research findings</b>
<b>García et al. (2024)</b>	USR in Latin America is still in its early stages and has not been fully consolidated as part of university management. The lack of public policies that promote USR in higher education hinders its progress.

	Universities have not been able to overcome political, ideological and strategic obstacles to incorporate it effectively into their systems.
<b>Hernandez et al. (2024)</b>	USR is described as a set of university policies that seek to improve community and educational development from a sustainable and ethical perspective, promoting social, environmental and economic development.

Note. Self-elaboration

As shown, the authors agree on the importance of developing university social responsibility, mentioning several virtues in its growth in universities seeking to face the academic, social and environmental impacts arose from their activities and helping to give social projection and the extension of higher education in society.

It is also crucial that HE integrates social responsibility in their academic plans and daily activities, improving public policies regarding this issue so that implementation is more adequately supported.

## Discussion

The categories of the analyzed authors were distributed in four aspects of higher education, challenges of HE, AI, SDGs and university social responsibility.

Referring to the issues and challenges, it was currently found that in HE by increasing research production, leadership and management (Zahariah et al., 2023;) the economic development of a country will emerge, it is also important that the research conducted consider the local, national and international context (Baylan,2023; Mishra et al., 2024), thus the priority of implementing new educational policies and curriculum that include the development of skills for resilience and sustainability of HE arises.

On the other hand, HE, especially in Latin America and Malaysia (Gaete 2021; Muftahu et al.,2023; Hou & Mohd, 2024) has been experiencing a significant growth because of the increase of private and public universities, due to the insufficient state funding, being this a public good, in addition, universities are required to be more flexible and adaptable, implementing new approaches to respond to the constant changes of society, facing them with solvency.

Likewise, Hou & Mohd (2024) point out that one of the problems of HE within the context of Sino-Foreign Cooperative Education, is the quality of teaching due to the lack of evaluation to maintain high educational standards. Pedagogical innovation (Hou & Mohd, 2024; Casas and Stojanovic, 2013) that strengthen social and scientific transformation is limited, although there are efforts to promote it in learning, it has not been adequately and efficiently carried out, which makes necessary improvements in the management of educational quality as well as the equitable distribution of resources and improvement in teaching.

Pedagogical practices in HE (Nurul and Abdul; 2023 Benjamin et al., 2023) should be more active, suggesting innovative solutions such as active methodology, Jareño et al. (2014) problem-based methodology, where aspects such as effort, participation, organization, communication, and the use of ICT are evaluated, especially considering the needs of students. Also, academic overload Kim et al. (2024), time management, academic demands are challenges that can cause stress and fatigue in HE students, so the socioemotional aspect should also be considered and include practices of emotional and social well-being, to obtain academic achievements that face curricular demands.

On the other hand, according to Baladrón and Correyero (2013) HE professors find it difficult to carry out research and spread their studies, in addition institutions often neglect their personal satisfaction. It is necessary to evolve towards the knowledge society generating a constant change, apart from that, the lack of updating of the curriculum (Fonseca et al.,2024; Fia et al.,2022) does not reflect the reality of the labor



market, making it deficient, this disconnection does not cover the real needs of professionals graduating from HE.

Toft and Holflod (2024) state that HE is influenced by the traditional method, requesting a change of vision of society, by having a more global approach Bayne and Ross (2024), HE institutions can be better prepare for technological, environmental and political challenges and create a more desirable environment for both people and the planet allowing us to hope for a more just and sustainable future. Similarly, HE (Gallagher et al., 2024; Veletsianos et al., 2024) presents barriers such as discriminations for social and economic reasons that limit students participation, which can be overcome by designing educational programs that prioritize the needs of the most vulnerable, promoting inclusive dialogue and equity.

Regarding the category of sustainable development, the following information was obtained, (Sergey et al., 2024; Lakhno, 2024) mention that there is a need to integrate sustainable development as a central objective in teaching, evaluation and curricular content, but this should not only focus on the environment but also include the social and economic impact, this aspect will be overcome by promoting leadership in the classroom, self-criticism of the institutions, without setting aside the training of educators with respect to the SDGs so that they are incorporated into teaching and learning.

In respect of AI, (Stohr, 2024; Wang et al., 2024;) this technology can be incorporated into the curriculum in lesson plans to enhance student engagement and (Kuleto et al (2021; Al-Hail et al.,2024) collaborative and inquiry-based learning, for which guidelines must be clear and consider the needs of students and professors. However, Plata et al. (2023), state that there are ethical implications related to privacy and accuracy of the information provided in the conduct of academic work. (Chenhui et al., 2024; Lintner, 2024) professors need more institutional support, in terms of resources and training, to efficiently implement technology in teaching, in addition, it is necessary the creation of clear policies on its appropriate use of AI.

Bin et al (2023) state that a growing concern is that the use of AI will cause students to lose the ability to produce original ideas and will not be able to sustain adequate arguments to support their ideas, the ways in which AI can be misused are endless.

With respect to the category of social responsibility, García et al. (2024), mention that USR in Latin America is still in its early stages and has not been fully consolidated as an integral part of university management. The lack of public policies that promote USR in higher education hinders its progress. It is necessary to strengthen USR in Latin American universities and to promote public policies that facilitate its sustainable and systematic implementation. Hernandez et al. (2024) mention the growing importance of USR in Latin American universities, considering more comprehensive approaches that include ethics, sustainability and educational management.

## Conclusions

In the presentation of results, interesting findings could be observed in relation to higher education, the largest number of articles found refer to the challenges facing this level carried out in Switzerland, Latin America, China, Spain, Malaysia and the United States, the challenges refer to the growth of public and private education generating a greater gap and discrimination and at the same time lowers the academic level and educational quality of HE institutions, the authors also comment that the pedagogical practices developed by professors are traditional and there is a need to incorporate active and innovative methodologies that help students to develop all their skills such as research, collaborative work, and the development of critical and creative thinking.

On the other hand, there is a need to provide more support from institutions to educators so that they can carry out research and share their findings, since HE must develop a knowledge society that will allow facing the challenges and changes of a globalized world. In addition, a fundamental aspect that has been neglected and must be addressed is to consider the socioemotional aspect of both professors and especially students that allows them to adequately manage stress and anxiety, to face the academic overload.

We have also found several articles related to AI, since after the global pandemic the use of technology has increased dramatically, being this a benefit because it develops in the student skills such as autonomous learning, improving it a lot, however there is a need to create policies to regulate its use in education, ensuring that the quality of education is not compromised and that academic integrity is promoted, because it puts at stake the ethical aspect, respect for copyright among others, in addition to the ease that this resource provides to students in the realization of their work, they run the risk of reducing their critical, creative, argumentative ability, not being able to support their ideas in the work they do.

Similarly, studies were found that refer to the objectives of sustainable development emphasizing that although HE is developed academically, this is developed only in the environmental aspect leaving aside the social and economic area, so it is a priority to train professors in this subject, in addition to incorporate into the curriculum more specific aspects to develop and take into account the real magnitude of the SDGs for the change of society, because these will allow to train humanistic professionals and take into account the sustainability of the world.

Finally, articles were found on the social responsibility of universities with respect to this aspect, according to the authors, although it is being implemented, it still needs to be developed and consolidated, therefore the incorporation of policies would be a way to obtain the desired achievements.

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