

Sustainable development of the universities in the 21st century

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Abstract. Our paper aims at assessing the sustainable development of the universities in the 21st century that is market by globalization, high penetration of information and communication technologies as well as global environmental changes. The paper stresses that the higher education is undergoing profound changes in its role and its position in the society and should focus its attention to the environmental challenges and the fight against the global warming. Higher education is ripe for reforms that are not intended to disrupt its main goals and its very essence but that might help it to modernize its approaches to achieving the up-to-date objectives that would maximize its contribution to the development of the society. Therefore, it appears that governments and the civil society alike should put more effort into embedding the sustainable development principles as well as sustainable development goals (SDG) into the educational curricular of the universities regardless to their geographical location.

1 Introduction

In today's rapidly globalising world, our society is experiencing many global problems that transcend nations and regions [1]. In line with the United Nations Sustainable Development Goals (SDGs), global problems related to poverty, climate change, human rights, environmental degradation and economic development must be addressed by the international community [2]. It is upon the higher educational institutions (HEIs) such as universities and other educational and research institutions to develop curricula aimed at finding solutions to these new problems and overcoming them by developing a global approach to education, research and research in the field of sustainable development [3].

Many of the targets are directly relevant to universities, as learners acquire the knowledge and skills needed to promote sustainable development. The SDGs' involvement benefits universities by helping them to be effective, to measure demand for SDGs - that is, education related to SDGs - to build new partnerships, to tap new funding flows, and to define what is responsible for a globally conscious university. The importance of education for sustainable development was recognised in the United Nations Sustainable Development Goals which call for the development of a global education system that focuses on education

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as a key component of sustainable growth [4]. The universities are free to adopt the voluntary targets adopted by United Nations member states in 2015 and many universities have chosen to do so. The important calls are to ensure that governments maintain their commitment to achieving the goals and provide a system, approach and lens that will help students develop a well-coordinated understanding of the global challenges that need to be addressed and how to address them. Camps that address the challenge of climate change by reducing global warming emissions and integrating sustainability into their curriculum will better serve their students and their social mandates to contribute to the creation of a thriving ethical civil society. In addition, many HEIs signed the United States Department of Education's Climate Action Plan, which focuses on achieving "climate neutrality" in campus operations and promotes reforms in academic programs [5]. All colleges and universities are to devote at least 50 percent of their annual budgets to climate change mitigation and adaptation efforts. Camps that address the challenges of climate change, reduce global cooling and emissions, and integrate sustainability into their curricula will be better served if they fulfil their student social mission and contribute to the creation of thriving, ethical, and civil society societies. The Education Sustainability Blueprint, issued in 2011 by a leading EFS organization, reports on the progress of the United States Department of Education's Climate Action Plan and other initiatives. Most progress has been made in mitigation, adaptation to climate change and adaptation efforts at the university level, with a focus on education and sustainability. Given the increasing demands on society and the environment resulting from increasing urbanization and human migration, it is clear that global action is needed to create a more sustainable future. Given its role in the development of the global economy, the role of education in mitigating climate change and adaptation efforts, higher education can serve as a powerful means of achieving these goals [6].

This paper argues that as the world becomes more globalised and interdependent, the need to build a sustainable future becomes more important. In recent years, the concept of education and sustainable development has become a central educational initiative, helping to address many of the problems associated with human development. The many efforts that have been made to understand and promote sustainability in universities are part of a reason why it is so well developed - today. At the same time, sustainability in higher education must be perceived as a project in progress, and institutions in this area may find themselves in a difficult position as regards the degree of implementation of sustainability within the higher education system. Sustainability projects can be seen as part of a growing trend in the education system, but they are still a dynamic process with a number of challenges and challenges. Students change every three to four years and can behave in a number of different ways, such as in terms of their attitudes, behaviour and attitude towards the environment and their environment. This might be a great start, but sustainability must find its way into the consciences of teachers and students to make the biggest difference. For a university to truly achieve a sustainable development goal, the administration must make sustainability a priority of its activities and hold itself accountable.

2 Sustainable values in education

Education for Sustainable Development (ESD) promotes the knowledge, skills, understanding, values and measures needed to create a sustainable world, ensure environmental protection and protection, promote social justice and promote economic sustainability [7]. The concept of ESD was developed largely from environmental education, which aims to develop people who care about their environment [8]. The aim of ESD is to enable people to make decisions and take measures to improve their quality of life without endangering the planet. In terms of social justice, it reflects fundamental human rights in a globalised world: ending poverty and hunger; promoting human health and well-being;

providing equitable education; achieving gender equality; reducing inequality; and promoting a peaceful and inclusive human settlement and society. The 2030 Agenda is a value-driven agenda that reflects the need to leave no one behind and protect the interests of future generations [9].

One would probably agree that teaching and lecturing must provide relevant and up-to-date information on sustainable development, including the importance of environmental sustainability and the role of the environment in developing a sustainable future. This is countered by the need to exploit environmental resources for immediate benefit without jeopardising the future, and to protect human rights and social justice [10]. Moreover, the goal of teaching should be to develop an understanding of sustainability as a whole, rather than relying on individual facts. The lessons are successful if the students really understand the topic from a personal point of view and are able to analyse and interpret the information and look for possible solutions. We should also support students' efforts to understand all aspects of environmental issues and help them improve their skills so that they can deal with the complexity of the issue. With a scientific understanding of the environment, we need to motivate behavioural change, and this works at the level of ethics, values and lifestyle. Education (especially the higher education) must be seen as an opportunity to create social, economic and environmental capital. Social capital is created when people learn to consult together, make plans, take measures to implement them, think about the results achieved, decide how and what next steps to take to advance their goals [11].

Education with a strong focus on these values can help remove obstacles to implementation in areas such as action and sustainability. The tree does not tell us directly what public education has to do, but its primary use will be to design elements of organizational development that will enable it to rebuild itself as an educational and social institution. In this sense, the following sections of this chapter will examine what elements will be necessary for public educational institutions themselves to prove capable of making their education an important contribution to the long-term sustainability of their communities and societies. Many related organizations have a long history of consciously contributing to long-term sustainability in their communities or societies, and many of them have focused heavily on making education an important part of a community's social and economic development. This shows the mutual and symbiotic relationship that exists between public educational institutions and the communities and societies in which they exist, and jointly supports the sustainability of their communities or societies. Effective and transformative global learning offers students the opportunity to analyse and explore complex global challenges, to explore and cooperate with various others in a respectful manner, to apply learning to take on responsibility in a contemporary global context and to assess the goals, methods and consequences of actions [12].

Global learning is and should be promoted through the integration of global knowledge and skills and through the engagement of students and their communities in global contexts. With the help of teaching and learning about sustainability, entrepreneurs could be expected to achieve a higher degree of sustainability in their business and livelihoods. They are influenced by the growth of healthy, sustainable and ethical environments, while learning unsustainable values [13]. Teaching, learning and sustainability can change the process and course of current achievements, as the creation of unsustainable value comes from heritage. We would also need to evaluate the importance of explicitly presenting values related to a particular decision or situation in order to understand the future consequences and effects of our behaviour. We also strive to integrate the values inherent in sustainable development into all aspects and levels of learning. It is generally recognised that certain characteristics are important for the successful implementation of ESD, as they reflect the need to adapt to environmental needs and to social, economic, political and cultural contexts. For example, the curriculum must be embedded in a holistic approach to policy-making - institutions - that

allows for a more holistic understanding of sustainability and its impact on society's development. We promote the ability to develop critical thinking, problem solving and action with the confidence to address the challenges of sustainable development.

3 Value-oriented management in HEIs

The perceived costs of higher education are an immediate obstacle for many students, especially those who want to enter private or public education. Understandably, the merit awards given by students and families increasingly focus on the special educational experience that brings the greatest value to the individual student's life [14]. To combat this socio-economic pressure, colleges have a responsibility to actively help students' families cope with it and make the best college decisions to maximize student success and maximize the benefits to their lives. As learning innovation moves beyond traditional colleges and universities, higher education is reshaping its structure and values. Defining the mission, vision and values of a college or university and discerning the educational value of the experience in the eyes of future students is key to these efforts. Currently, with all the recent changes and challenges, the post-secondary industry will be shifting away from traditional management approaches to a more holistic approach. Instead, colleges and universities are shifting to human-centred approaches to change management - a development that will affect the industry in the years ahead. These approaches reinforce formalisation, standardisation and centralisation; they impose structure and consistency. This design separates teaching from courses to achieve economies of scale and quality controls while focusing on students' learning needs, the report said. In short, the third way enables traditional universities to offer value that meets the needs of students, teachers, staff and students from all backgrounds, while at the same time reducing costs and hence tuition fees. Similarly, students and veterans can give colleges a competitive advantage. More and more students are returning to school to graduate and achieve higher academic achievement, while ensuring greater financial and economic stability.

Choosing a college or university is one of the most important life choices students and their families make. These choices offer them the opportunity to meet financial needs while selecting the right training for their specific needs and goals. With recent scandals surrounding the admission of students to universities dominating the headlines, parents are willing to do pretty much anything to get their children to the right university. Scandals like this undermine public confidence and reinforce scepticism about the quality of higher education and its impact on society as a whole [15]. Yet despite this scepticism, research shows that high education improves virtually every aspect of life in our communities. Although the initiative is still in its infancy, presidents of all kinds of colleges and universities have expressed interest in participating. Although it is an initiative at an early stage, it is an important step in the right direction for higher education. Strong leadership of education, which has developed under presidents, senior administration officials, trustees, and faculty, can be expected to lead to better educational impact of colleges and universities. This strong leadership could well lead to the development of a more robust educational vision that is more in line with the needs of students and society as a whole than just the interests of an institution. Of course, it can be difficult not only for the academic community but also for higher education institutions to define which education will be most effective for students, society or both in the decades ahead. None of us knows how the world will view COVID-19, but the crisis only underscores the need for innovative, resilient institutions that prepare students to be innovative and resilient students. The best way to ensure that higher education will be able to respond to increasingly complex global challenges is to act as a transformative force for students, faculty, staff, and leaders. As colleges and universities engage in this "transformation," they will also make their best efforts to address the many challenges ahead.

This will provide insights from leading university teachers who present their efforts to reconnect their institutions for a better future. Most higher education leaders generally know that the use of advanced analysis can change the way they work, opening up new ways to engage current and future students, increase enrolment, increase enrolment, improve student retention and graduation rates, and even increase faculty productivity and research. However, many managers at colleges and universities are not sure how to integrate analytics into their workflows and achieve the intended results and improvements. To answer these questions, we interviewed more than a dozen executives from a wide range of colleges and universities known as "transformation analytics". The path of institutional change leads from the bottom up, from the top down; faculty and staff in the middle are spurred by the best practices of their respective institutions; and universities commit to rewiring their institutions to enable change. When these values are reflected in organizational decisions - the design of structures and processes - they foster collaboration across disciplines, inviting students and community members to interact with faculty, researchers, and senior administration officials. Instead, it's about people who can change and contribute, regardless of age, title, or status, and who create a campus culture that cultivates trust - based relationships and collaboration as the key to achieving excellent results. Leaders in leadership positions not only need to embody values, but they also need to institutionalize them within the organization, as leaders strive for innovation.

4 Relevant objectives of HEI management

Although there is often a difference between the definitions of "management" and "governance" in higher education is the means by which institutions such as universities, colleges, and other public institutions are formally organized and managed [16]. Internationally, higher education includes public institutions governed by differentiated management structures, but these different models nonetheless share a common heritage. The structure of higher education is determined not only by national, regional and local authorities, but also by international institutions such as the European Union and the United Nations. In line with the mission to create a seamless education system, its functions should include a wide range of functions. With the definition of its mission and clear setting of its goals, it should become more diverse in terms of our responsibility and responsibility to the students, faculty and staff. It appears that its mission is also to facilitate access to higher education and services by providing high quality education to all students, faculty, staff and students without any limitations. Career and adult education are tailored to the needs of our customers, which include students and companies from industry. It is difficult to develop a diverse academic environment in which individual subjects are typically covered by a single teacher. It also should be responsible for achieving the goal of providing high quality education for all students, faculty, staff and students. In order to achieve the institutional and political goals of the higher education, a variety of research and development activities in the areas of curriculum, curriculum development, curricula and curriculum design, as well as the creation and implementation of curricula should be conducted. The best strategy is to identify the competing objectives, to choose the right balance for each institution, and to manage resources appropriately. The institutional portfolio management framework facilitates this strategy by taking immediate expectations into account and breaking down barriers between individual institutions and their institutional portfolios [17]. The primary rules should be to maintain local options even when institutions merge into larger organizational units. Setting goals in the context of public expectations and demonstrating effective management to achieve them illustrates the constraints on institutions and their performance limitations. Higher education and technology leaders who understand the challenges facing institutions, the merging of portfolio management and program priorities, and how best practices are

applied can help institutions demonstrate continuous performance improvements. This paper examines these and other questions relating to the management of institutional portfolios and the role of information management in university management. We can state that the framework should be developed for how systematic information management can be used to improve and simplify these tasks. Higher institutions are unique in their existence and require proper investigation to develop an understanding of the information strategy of these institutions. More generally, higher education institutions and their institutional portfolios are at the core of a university's core activities and play a role that supports its integral functions. Yet it is described as "chaotic" and lacking in clarity and understanding, and its findings encapsulate the challenges facing the actors of this process under pressure from the current economic climate. The preliminary results include data from administrative structures and faculties, as well as data on joint governance.

5 Conclusions

All in all, one can anticipate some of the challenges facing higher education today in terms of its role in society and, in particular, the role of government policy in this sector. These changes appear to reflect the current climate changes and the fight against global warming.

Responsible higher education is a good sustainable education which includes both government policies and complementary roles led by both sectors, would do well to put these important values at their heart and to take them into account when exercising their responsibilities. It provides an important opportunity to assess how high education fulfils its uniquely important role as an essential part of supporting a dynamic democratic society. In considering the challenges facing this venture, it is useful to remember that higher education is not a monolith, but a complex mix of different sectors with different objectives, objectives and responsibilities. With regard to the above, sustainable development principles as well as SDG should be included into the educational curricular and become a part of the mundane agenda of the HEIs and their global strategies for the 21st century.

References

1. R. Horner, *Progress in Human Geography*, **44(3)**, 415-436 (2020)
2. R. Nureev, V. Volchik, W. Strielkowski, *Social Sciences*, **9(5)**, 79 (2020)
3. W. Leal Filho, Y. Wu, L. Brandli, L. Avila, U. Azeiteiro, S. Caeiro, L. Madruga, *Journal of Integrative Environmental Sciences*, **14(1)**, 93-108 (2017)
4. F. Annan-Diab, C. Molinari, *The International Journal of Management Education*, **15(2)**, 73-83 (2017)
5. G. Dyer, M. Dyer, *Journal of Cleaner Production*, **140**, 111-116 (2017)
6. F. Librizzi, C. Parkes, *The Principles for Responsible Management Education (PRME)* (2020)
7. A. Agbedahin, *Sustainable Development*, **27(4)**, 669-68 (2019)
8. H. Kopnina, *The Journal of Environmental Education*, **51(4)**, 280-291 (2020)
9. A. Van Niekerk, *Sustainability*, **12(13)**, 5427 (2020)
10. N. Redvers, C. Schultz, M. Vera Prince, M. Cunningham, R. Jones, B. Blondin, *Medical Teacher*, **42(10)**, 1085-1090 (2020)
11. M. Schelkunov, V. Mironov, N. Kirabaev, V. Grebennikova, N. Nikitina, *Voprosy Filosofii*, **6**, 19-33 (2018)
12. M. Fuertes-Camacho, M. Graell-Martín, M. Fuentes-Loss, M. Balaguer-Fàbregas, *Sustainability*, **11(3)**, 767 (2019)

13. L. Morley, N. Alexiadou, S. Garaz, J. González-Monteagudo, M. Taba, *Higher Education*, **76(3)**, 537-554 (2018)
14. C. Callender, K. Dougherty, *Social Sciences*, **7(10)**, 189 (2018)
15. V. Grebennikova, T. Bonkalo, N. Nikitina, Z. Gardanova, O. Grebennikov, *Espacios*, **40(44)**, 25 (2019)
16. B. Williamson, *International Journal of Educational Technology in Higher Education*, **15(1)**, 1-26 (2018)
17. L. Risner, X. Morin, E. Erenrich, P. Clifford, J. Franke, I. Hurley, N. Schwartz, *PLoS ONE*, **15(9)**, e0238518 (2020)