Building Resilience Strategies Towards the Futures of Higher Education Sector in Mauritius

Romeela Mohee, Mpine Makoe, Buhlebenkosi Tshili, Ourvashee Roopchun

The shifting global landscape has spurred the higher education sector in Mauritius to reassess its trajectory to meet the evolving needs of society. To guide this transformation, the Mauritian government embarked on a futures of education roadmap, towards reshaping the futures of higher education in Mauritius. Since this was a national initiative, the strategic foresight was used to formulate strategic goals that will guide the futures of higher education in Mauritius. The foresight approach began with environmental scanning through a SWOT analysis to better understand the Higher Education landscape. In a second step, insights were drawn through a series of consultative workshops with education stakeholders who were asked to visualise the Mauritian Higher Education Landscape in 2040. The data derived from these workshops was analysed through content analysis. Through this analysis, four main themes emerged as most relevant: technology enhanced, economically responsive, personalised learning and nationally and globally relevant. These key findings provided a platform for conceptualising and developing resilience strategies towards the futures of higher education in Mauritius.

Keywords: technology enhanced higher education, economically responsive higher education, personalised learning, nationally and globally relevant higher education, resilient strategies

1 Background and Context

In recent years, Higher Education globally has experienced significant integration of pervasive technology, especially in the field of teaching and research (Yusuf & Tambuwal, 2018). The future of higher education is rapidly evolving, driven by the integration of advanced technologies and a growing emphasis on lifelong learning. Emerging technologies such as artificial intelligence, virtual reality, and block chain are reshaping the educational landscape, enabling more interactive, immersive, and efficient learning experiences (Makridakis, 2017). Additionally, the rise of online and hybrid learning models is making higher education more accessible to a global audience, breaking down geographical and financial barriers that once limited educational opportunities (Habimana, 2024).

Recent developments in quantum computing also promise to expand the scope of these transformations, potentially reshaping the future of education in unprecedented ways. Hence, it was important for the Mauritian Ministry of Education, Tertiary Education, Science and Technology (MoETEST), along with the Higher Education Commission (HEC), to reassess its trajectory to meet the evolving needs of higher education landscape. The Mauritian government tasked the HEC to develop mechanisms to implement the regulatory framework of higher education institutions in the country. As the sector undergoes reform, HEC's responsibilities will increasingly involve fostering innovation, promoting international competitiveness, and ensuring that higher education institutions are aligned with national development goals. Consequently, the HEC's efforts will be instrumental in driving the modernisation and strategic growth of the country's higher education system. Through this process, goals and strategies on the futures of education were formulated with the aim of providing recommendations to the ministry as a roadmap for the Higher Education Sector of Mauritius towards 2040.

Mauritius is a small Island state in the Indian Ocean with an estimated 1.3 million people in 2021 with a literacy rate of 91 %, the highest in Africa (Knight & Motala-Timol, 2022). It has about 40 private tertiary institutions and ten publicly funded higher education institutions, with four having university status and power to confer degrees and 44 private institutions with an enrolment of 50 566 students (HEC, 2022). Over the last ten years, the participation rates have been increasing hovering around 40 and 50 % positioning this small island state as number one in higher education participation rates (Varma, 2024). This significant increase of graduates can be attributed to strategic educational initiatives such as the *"One Graduate Per Family"* as announced in the 2010 policy ensuring that every Mauritian household could have at least one graduate (Motala-Timol & Kinser, 2017). Such policies have not only increased access to higher education, but also underscored the government's commitment to transforming Mauritius into a knowledge hub by expanding tertiary education opportunities and raising the overall enrolment rates (Motala-Timol & Kinser, 2017; Varma, 2024).

Just like other countries, Mauritius was impacted by the Covid-19 pandemic leaving her exposed and susceptible to challenges and had to reengineer its higher education sector to meet the demands of the skilled and talented human capital needed for the 21st century. To address this, the education ministry catalysed a major shift in the higher education sector, empowering the HEC, a regulatory body to oversee and strengthen the higher education institutions in the country to ensure that the Mauritian higher education sector would be able to adapt to rapidly changing environments (HEC, 2022). Drawing from lessons learned in managing the aftermath of the COVID-19 pandemic, the Mauritian government was prompted to rethink and reimagine the future of education by 2040. To support this initiative the HEC developed the Strategic Plan 2022–2025 aiming to enhance student mobility, promote flexible learning pathways,

and strengthen the integration between Technical and Vocational Education and Training (TVET) and Higher Education.

The aim of this paper is to present and discuss processes and outcomes of this project that explored the possible futures of the higher education sector in Mauritius in 2040 with the ultimate aim of developing strategies that will help in building a resilient higher education system. The initiative was commissioned by the Ministry of Education, Tertiary Education, Science and Technology (MOETEST) and realised by HEC from May 3 to May 16, 2023. The strategic foresight approach through environmental scanning was used to bring higher education stakeholders together to build images of the future. Such images enable policy makers and higher education experts to formulate strategies that will assist in preparing an education system for anticipated changes. The main goal of the process was to identify emerging trends and opportunities that could significantly impact on the future of the Mauritian higher education system and the type of strategies that will remain resilient even in the times of disruptive change.

2 Methodology

Changing environments require resilient higher education strategies and systems in order to continue to flourish even during difficult situations (Nyakotyo & Goronga, 2024). Hence, strategic foresight was used to formulate strategies that would guide the futures of higher education in Mauritius and also be a tool that will assist stakeholders to actively form options for the desired higher education (Wyrwicka & Erdeli, 2018). This approach ensured that changes that higher education is going through were taken into account when developing strategies and policies (Wyrwicka & Erdeli, 2018). Furthermore, it provided a lens to detect and investigate challenges arising from multiple signals and drivers of change influencing the future (Grove et al., 2023).

The foresight approach started with environmental scanning, which is an organised means of collecting relevant information from both internal and external environment to create an understanding of the higher education (Gordon & Glenn, 2009; Naisbit, 1984). This is ideal in linking external events and trends with planned changes that may impact organisations (Bhardwaj & Kumar, 2014; Pashiardis, 1996) and essential in identifying and evaluating uncertainties (Grove et al., 2023). It helps people to be aware and pay attention of what lies ahead in order to *"anticipate the nature and importance of future development using information from the past and the present"* (Al Abri et al. 2023, p. 2089).

A rigorous approach to data collection was adopted to ensure that the study was grounded in both empirical evidence and broad stakeholder engagement, providing a

well-rounded foundation for the strategic development of higher education in Mauritius. This approach enabled a comprehensive and inclusive consultation process with key stakeholders in the higher education sector in Mauritius, including policy makers, higher education experts, heads of tertiary institutions and managers. Consultation workshops with different stakeholders were used to facilitate the collection of diverse perspectives to inform strategic planning for the future of higher education with the aim of developing resilient strategies. The process unfolded through several phases in accordance with the research aim.

2.1 Phase 1: Gathering First Insights

The starting point of environmental scanning is to gather information about the external and internal environment that impacts on higher education. This was done by gathering preliminary insights into its current state and the future possibilities of the Mauritian higher education sector. This initial phase consisted of three, two-day preparatory workshops where academic leaders, managers and policy makers shared insights on the status of higher education. The Higher Education Commission, as a custodian of this project ensured that key stakeholders were invited to attend workshops held across the country. The purpose of the workshops was to explore possibilities and opportunities in order to cope with unforeseen events with the aim of managing risks brought by changes (Nyakotyo & Goronga, 2024). The involved stakeholders highlighted critical challenges, opportunities, strengths, threats and weaknesses in the Mauritian Higher Education landscape (figure 1).

Figure 1: SWOT Analysis on Higher Education Landscape

Strengths	Weaknesses	Opportunities	Threats
■ Human capital that is capable of increasing productivity through training and development. ■ Reliable internet access and connectivity. ■ Robust government funding for higher education training.	■ Rising inflation. ■ Corruption. ■ Limited collaboration with other academics. ■ Lack of quality infrastructure. ■ Lack of career guidance. ■ Political influence on HE. ■ Outdated curriculum that is not aligned with national development needs. ■ Lack of transparency and accountability and limited institutional autonomy.	■ Economic growth based on blue economy. ■ Technology advancement. ■ Flexible student-centered education that is responsive to student needs. ■ Curricula that is aligned to national and global demands.	■ Climate change that tends to undermine efforts to create sustainable future. ■ Job redundances due to technological advancement. ■ Outdated infrastructure. ■ Insufficient skills to effectively engage with emerging technologies. ■ An aging population that creates skills gap. ■ Brain drain caused by migration of educated people from the island to other developed countries.

2.2   Phase 2: Capturing Diverse Perspectives

Once the information of the SWOT analysis was gathered, it was felt that there was a need to have a separate process to gather more insights from a broader group of stakeholders, including representatives from government ministries, faculty and students including those from high school and their teachers. The purpose of this phase was to gain insight on the identified drivers of change that may push the future in different directions. This was done through three-hour workshops that were held with faculty and students across the country. These consultations were aimed to capture diverse perspectives on critical aspects of higher education that may need to be reinforced towards the roadmap for higher education reform in Mauritius. The consultation workshops that took place in the first two weeks of May 2023 attracted 179 staff members (faculty and administrators), teachers and officials from different ministries and 228 students from different institutions. Table 1 below shows the distribution of the institutions and stakeholders.

Table 1: Institutions and Stakeholders Involved in the Workshops

Institution	Number of Staff	Number of Students
Institution A – Public University	28	9
Institution B – Public University	12	19
Institution C – Public University	19	22
Institution D – Public University	16	20
Institution E – Public Institute of Higher Education	12	23
Institution F – Public Institute in Higher Education	18	23
Institution G – Group of Private Higher Education Institutions	19	21
Institution H – Public Polytechnic	15	30
Institution I – Group of Private Higher Education Institutions	13	29
Representatives From Different Government Ministries	18	—
Secondary Schools From Across the country	9	32

During the consultations, stakeholders were asked to conjure up images of Mauritius in 2040 in terms of economic and social activities and what type of the education system is likely to support the Mauritian nation. What was critical in their discussion was to visualise the educational landscape in 2040. Cards were provided to the stakeholders to enable them to jot their ideas of images of the future. The intention was to create images of the future that they wish for in order to create polices and strategies that will enable them to function when the new and different futures emerge. During this process stakeholders were asked to respond to two questions before engaging in a discussion:

(1) *What will Mauritius look like in 2040 in terms of the social, economic and the environment factors?*

(2) *What will higher education look like in 2040?*

After this exercise, cards were collected, and stakeholders were asked to work in groups and discuss what they had written. After extensive discussion in small groups, they reconvened and had an open discussion on what will higher education look like in 2040. Finally, the data collected from cards were analysed using content analysis to identify the number of occurrences of words as well as their popularity as identified by stakeholders as images of the futures. The data was further analysed using Atlas. ti software, which assisted in extracting themes from identified words and provided basic insights into how stakeholders visualised their environment in 2040.

3   Themes and Discussion

Four main themes emanated from what was written on the cards, the group discussion and the open engagement. The data analysis highlighted the evolving priorities within the sector, emphasising the need for adaptability, and global engagement in shaping higher education landscape. Stakeholders envisioned the Mauritius higher education system of the future foremost as technology enhanced; economically responsive; strong in personalised learning; and nationally and globally relevant. Figure 2 below highlights the distribution of themes.

Figure 2: Main Themes
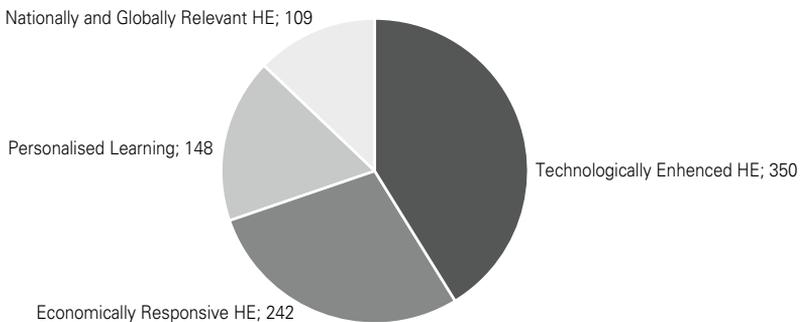
3.1   Technology Enhanced Higher Education

Technology enhanced HE emerged as a dominant theme in discussions, and this was mentioned by the stakeholders 350 times. Notably, artificial intelligence (AI) such as ChatGPT, was identified as disruptive learning tool, challenging traditional educational models by offering interactive and personalised learning experiences. Technology-

enhanced learning has become pivotal in fostering student engagements and enhancing academic performance (Costley, 2014; Duterte, 2024). Various stakeholders viewed it as an integral part of learning with varying benefits as providing, meaningful learning experiences. Agreeably, modern technologies have significantly enhanced the accessibility and practicality of education (Mdhlalose & Mlambo, 2023).

One of the most prominent applications of technology that was mentioned was the use of advanced analytics, which provides detailed insights into student learning behaviours and performance (Bienkowski et al., 2014; Mukred et al., 2024). This data-driven approach enables institutions to design and implement tailored interventions, thereby aligning support with individual student needs. Consequently, this fosters a more personalised learning environment where each learner's experience is adapted to their unique requirements. Perhaps the prominence of this theme could be attributed to the lingering impact of the COVID-19 pandemic, which reshaped teaching and learning practice, as well as the pervasive role of technology in everyday life. Currently Mauritius is embracing technology enhanced learning through various government initiatives and strategic partnerships guided by the Digital Mauritius 2030 Strategic Plan which emphasises digital literacy and the fusion of various technologies in all sectors, including the educational sector (Ministry of Technology, 2016). However, there are still challenges relating to equitable access and the sustained integration of new technologies in the learning experience, which can be mitigated by planning for the future to ensure that we build a resilient Mauritius.

3.2. Economically Responsive Higher Education

Second on the list was an economically driven higher education sector with 242 mentions. There was a general concern that higher education was not addressing the economic development needs of the country. Economically Responsive Higher Education was linked to the job market and was futuristic in nature. In order to ensure that there are highly skilled citizens in 2040, there was a need for collaboration with industry to ensure alignment. Accordingly, research has shown that higher education plays a major role in the economic development of countries in general contributing to creating highly skilled citizens (Caniëls & Van den Bosch, 2011). When planning for 2040, higher education system in Mauritius should align curricula with industry demands to support national economic growth.

Mauritius as an Island in the Indian Ocean surrounded by vast ocean territory provides opportunities for different types of economies. It is therefore essential for the country to leverage on the ocean or the blue economy[1], which African Union Agenda 2063

---

[1] The blue economy is the *"sustainable use of ocean resources for economic growth, improved livelihoods, and job creation while preserving the health of ocean ecosystems"* (The World Bank, 2021, p. 8).

describes as a major contributor to continent's development. The development of a blue economy is in accordance with the UNESCO SDG 14[2], the Africa Union Agenda 2063 and 2050 Africa's Integrated Maritime Strategy (2050 AIM Strategy) (Nagy & Nene, 2021). *"The African Union identified the blue economy as the engine of the structural transformation"* (Nagy & Nene, 2021, p.3) and prioritised it as one of the major contributors to economic growth by providing employment, boosting sustainable food production and marine resources, leveraging partnership and trade with other nations. It is in this context that higher education institutions are expected to play a pivotal role in developing capacity, generating knowledge and strengthen partnership amongst economic communities, industry and intergovernmental organisations.

Some stakeholders underscored the need to prepare students for a diverse economy, highlighting the dangers of focusing only on one type, which leads to students becoming less capable of steering the intricacies of a diverse society. Mauritius understands the importance of human capital and investing in education as critical for its economic growth as it promotes productivity in the workforce (Odit et al., 2010). The country has also positioned itself as a knowledge hub recognising the *"growth of Knowledge Processes Outsourcing (KPO) as a major economic activity and the subsequent demands this will place on skill development"* (Mariaye & Samue, 2019, p. 4).

3.3 Strengthen Personalised Learning

Personalised learning was cited 148 times. Personalised and lifelong learning were regarded as inventible, given the rapidly evolving world of work. The primary aim of personalised learning is to facilitate seamless transitions from academic education to skill-based training (Gunawardena et al., 2024). Key aspects emphasised in the discussions included self-directed learning, flexibility, multi-learning, structured programmes, formative assessments and micro-credentials. During discussions, students were more vocal about student centred learning environment. This approach accommodates students unique learning styles, actively engaging students in the learning process. This is because students are the heart of the educational process, with their cognitive and emotional experiences shaping both the direction and method of learning (Brown-Wright, 2011). These elements collectively aim to enhance student engagement and better prepare graduates for the evolving job market. Work integrated learning may also assist higher education by preparing students for a diverse economy enabling them to gain the necessary skills needed for the job market (Zegwaard & Rowe, 2019), while also affording a personalised learning experience (Ferns et al., 2024).

---

[2] The UNESCO SDG 14 seeks to *"conserve and sustainably use the oceans, seas and marine resources for sustainable development"* (United Nations, 2017, p. 18).

3.4. Nationally and Globally Relevant Higher Education

Stakeholders emphasised the importance of a higher education system that is both nationally and internationally relevant. This topic was mentioned 109 times because stakeholders were concerned that higher education was not responsive to the needs of the country. It is crucial that higher education needs to be adaptable to an evolving environment by ensuring curriculum relevance that aligns with national priorities (Human-Hendricks & Meier, 2024). Stakeholders also pointed that there was need to harness sustainable development practices based on the rich resources already available in Mauritius, such as the ocean and its resources. The call to integrate the blue economy within the curriculum is expected to develop a skilled workforce. The blue economy is considered an influential driver of local and regional development through job creation and economic growth (OECD, 2024). In addition to the blue economy, there is also a need to develop other economies, such as the green and knowledge economy.

Various stakeholders were concerned about the impact of the brain drain where students from Mauritius leave the country for better opportunities elsewhere. This was considered a major weakness in a country where there is threat of an aging population. To address the problem of brain drain, the Ministry of Tertiary Education, Science and Research viewed internationalisation as a key strategic goal with the aim of increasing mobility of students by attracting more students from other parts of the world. In the 2025 report on Internationalisation of Higher Education in Mauritius, the ministry aims to position Mauritius as a "*preferred destination for quality education and research in the region*" (Ministry of Tertiary Education Science and Research 2025, p.12).

3.5 Other Themes

Although research is fundamental in Higher Education institutions, it was surprising that it was mentioned by only a few participants. When discussed, it was primarily in relation to research project funding, with only two participants referencing postgraduate studies. The lack of interest in research was attributed to insufficient funding for postgraduate studies and research. Concerns were also raised about the need to promote local language, culture and arts. Higher education institutions were seen as responsible for offering programmes that instil strong value systems, preparing students to apply ethical principles in both the workplace and society. Some of the themes that were highlighted but did not have significant numbers was mental health with concerns that it may become more prevalent in the future. Participants emphasised that higher education must also prioritise mental well-being as this is directly linked to academic performance (Chu et al., 2023). Addressing this issue requires policymakers to acknowledge its impact and integrate mental health support into educational

frameworks. In envisaging the futures of the Higher Education system in Mauritius, stakeholders imagined a higher education that is technologically driven; economically responsive; flexible and student-centred high education system. They also considered critical thinking and problem solving, skills that allow students to apply their knowledge in real-life situations, as critical skills.

4 The Roadmap to Resilient Strategies

The foresight tools of environmental scanning and images of the Mauritian higher education as shared by stakeholders from all walks of life provided a holistic thinking that policy makers used to develop resilient strategies needed for a future they aspire. The discussions and engagements were instrumental in shaping a collective vision and identifying actionable strategies that will provide a roadmap to the advancement of higher education. Resilient strategies are essential in assisting the higher education system of a country to meet the demands of an evolving educational, social and economic environment (Nyakotyo & Goronga, 2024). The purpose of national resilient strategies is to construct a strong educational system that will provide an enabling and supportive environment to promote an agile culture. This flexibility not only enhances access but also ensures that the education system can accommodate the evolving nature of skills required in the 21st century workforce. The implementation of resilient strategies will provide a roadmap that is an essential step toward creating a system that is responsive to the diverse needs of citizens that are linked to the visions of the futures of the Mauritian Higher Education.

Despite this massive investment on education, as forementioned, the brain drain is a major challenge. To counter this challenge, the Mauritian government needs to invest more in research and postgraduate programmes so that students have research knowledge and skills. Focusing on innovative research will also help reduce the brain drain and improve economic growth. The migration of young people remains a concern, even those that are left behind are either unemployed or underemployed. This is further exacerbated by a curriculum that is focused on outdated content and not aligned to the national needs, such as tourism, fishing, aquaculture and marine life. Varma (2024) contends that the shortage of skilled workers across various sectors places additional burden on higher education to support the nation's economic agenda. Therefore, the government needs to invest in strategies that will keep young people in the country. This could be done by increasing research and postgraduate studies funding.

Another challenge raised by stakeholders is that Mauritius has too many universities that are competing for a small number of students. All these higher education institutions offer similar programmes, thereby creating an unhealthy competition amongst

themselves and faculty members who are thinly spread across universities. Despite these challenges, stakeholders acknowledged that higher education has provided opportunities towards building resilient strategies, to support academic transformation, institutional endurance, while also enhancing students learning experiences. The resilient strategies were conceptualised in response to the challenges within the Mauritian landscape in relation to how stakeholders envision the future of Higher Education.

4.1 Skills Development and Capabilities

One of the resilient strategies that could catapult the higher education sector is skills development and capacities for the economic growth of Mauritius. The dire need for skills that may be required in future expects higher education to look at ways of continuing to provide on-demand qualifications that are more specialised. Short learning programmes, work-integrated learning or voluntary work will equip people with skills to work in specific fields. To achieve this, there is need to adopt micro-credentials as the answer to many of these pressures and trends. The success of this requires quality regulatory frameworks that are flexible to accommodate micro-credentialing of qualifications. To address this need, the Higher Education Commission is developing policies for micro-credentialing to facilitate flexible pathways and personalised learning with the option of articulating to formal qualification (Varma, 2024). Micro-credentialing will be used in certifying these learning experiences, allowing for recognition of credits obtained through formal education as well as acknowledging informal training and work-integrated learning. Recognised for their flexible structure, micro-credentials are particularly valued for reskilling and skills development within a shorter time frame (Orman et al., 2023). Personalised learning and micro-credentials are gaining traction globally, including in Mauritius driven by life learning and workforce flexibility which are shaped by various policy initiatives in partnership with UNESCO towards the development of a national micro-credential framework (Martin et al., 2025).

4.2 Economically Responsive Higher Education

As the world of work is changing rapidly, the mismatch between the skills that higher education graduates possess and what employees need is expanding. The need for future skills is also challenging higher education institutions to equip people with skills that they may be needed in the future. This requires investment in research researching different types of economies to ensure sustainability. Higher education institutions need to ensure that curriculum is aligned with economic and social needs of the nation. It is therefore, recommended the country develops a nationwide development plan that will be used as a template to guide the government in developing strategies aligned to the national priorities towards the desired future. Although the blue

economy will put Mauritius in good stead, there is also a big need to use diverse ways of growing the economy for the sustainability of Mauritius as a small island. It is therefore, incumbent on higher education institutions to develop curricula that are aligned to the national and global needs, such as climate change, digital skills, and knowledge production in a variety of economies, in order to create much-needed skills for the future.

4.3   Technology Driven Higher Education

The advancement of technology around artificial intelligence, automation and big data has made it possible for communities to form connections which assist collaboration across groups of students, lecturers, researchers and learning communities. These technologies opened up access to students with special needs through built-in accessibility features that make learning accessible. By so doing, they provided learning techniques that suit individual learning traits or styles, thereby enabling the education system that is highly individualised. These technologies require stable Information and communications technology (ICT) infrastructure and connectivity. Hence, the clarion call to the government is to build ICT infrastructure, and to play a role in ensuring that curriculum design and implementation enhance the various learning strategies that will produce a sustainable educational system. To achieve this goal, the Ministry should ensure that strategies and policy frameworks that guide technology driven practices are developed to enhance quality.

5   Conclusion

The initiatives led by the HEC reflected a deep understanding of the importance of futures thinking in shaping responsive, adaptive, and resilient higher education systems. In an era marked by rapid technological advancements, shifting labour markets, and increasing global interconnectedness, the ability to anticipate and prepare for future challenges is critical. The Higher Education comprehensive approach to reform is not only addressing current demands but also laying the foundation for a higher education system that can evolve in tandem with these changes. By focusing on strategic areas such as flexible learning pathways, technology integration, economic driven higher education and financially sustainable sector, Mauritius is positioning itself at the forefront of educational innovation in the region.

While engaging with the stakeholders proved to be effective for this study, future research should consider segregating stakeholders into distinct groups to gain insights into their unique perspectives and facilitate comparative analysis. The success of envisioning the future of higher education lies in the ability to critically access current practices, identifying both strengths and areas of improvement. Additionally, future

studies may incorporate quantitative environmental scanning techniques, such as surveys to reach a broader range of stakeholders who may not be able to participate in consultative workshops. This approach would enhance the comprehensiveness of the findings.

Acknowledgments

References

Al Abri, Y. B. S. B. H., Adnan, M. A. M. B.A., Alesayi, A. K. S. A., Bin, H., Al-Qari, S. B. H., & Al Eisaei, M. S. A (2023). The Role of Future Foresight in Achieving Strategic Leadership for Educational Institutions in the Sultanate of Oman, *International Journal of Academic Research in Business and Social Sciences, 13*(10), 2084–2103. https://doi.org/10.6007/IJARBSS/v13-i10/19134

Bhardwaj, S. S., & Kumar, D. (2014). Environmental Scanning of FMCG Companies in India: a comparative study. *International Journal of Management and International Business Studies*, *4*(1), 39–50. http://www.ripublication.com/ijmibs-spl/ijmibsv4n1spl_06.pdf

Bienkowski, M., Feng, M., & Means, B. (2014). *Enhancing teaching and learning through educational data mining and learning analytics: An issue brief*. U.S. Department of Education. https://files.eric.ed.gov/fulltext/ED611199.pdf

Brown-Wright, G. (2011). Student-Centered Learning in Higher Education. *International Journal of Teaching and Learning in Higher Education*, *23*(3), 92–97. https://doi.org/10.4324/9781315559605

Caniëls, M. C. J., & Van den Bosch, H. (2011). The role of Higher Education Institutions in building regional innovation systems. *Papers in Regional Science*, *90*(2), 271-286. https://doi.org/10.1111/j.1435-5957.2010.00344.x

Costley, K. C. (2014). *The Positive Effects of Technology on Teaching and Student Learning*. Arkansas Tech University. https://files.eric.ed.gov/fulltext/ED554557.pdf

Chu, T., Liu, X., Takayanagi, S., Matsushita, T., & Kishimoto, H. (2023). Association between mental health and academic performance among university undergraduates: The interacting role of lifestyle behaviors. *International Journal of Methods in Psychiatric Research*, *32*(1), 1–8. https://doi.org/10.1002/mpr.1938

Duterte, J. (2024). Technology-Enhanced Learning Environments: Improving Engagement and Learning Article. *International Journal of Research and Innovation in Social Science*, *8*(10), 1305–1314. https://doi.org/10.47772/IJRISS.2024.8100111

Ferns, S. J., Zegwaard, K. E., Pretti, T. J., & Rowe, A. D. (2024). Defining and designing work-integrated learning curriculum. *Higher Education Research and Development*, *44*(6), 1–15. https://doi.org/10.1080/07294360.2024.2399072

Gordon, T. J., & Glenn, J. C. (2009). Environmental scanning. In Glenn, J. C., & Gordon, T. J. (Eds.), *Futures research methodology (Version 3.0)* (pp. 51–69). Millennium Project.

Grove, H., Clouse, M., & Xu, T. (2023). Strategic foresight for companies. *Corporate Board Role Duties and Composition*, *19*(2), 8–14. https://doi.org/10.22495/cbv19i2art1

Gunawardena, M., Bishop, P., & Aviruppola, K. (2024). Personalized learning: The simple, the complicated, the complex and the chaotic. *Teaching and Teacher Education*, *139*(3), 104429. https://doi.org/10.1016/j.tate.2023.104429

Habimana, I. R. (2024). Hybrid Learning Models : Combining In-Person and Online Education Effectively Hybrid Learning Models : Combining In-Person and Online Education Effectively. *Research Output Journal of Education*, *3*(3), 16–19. https://rojournals.org/roj-education/

Higher Education Commission Mauritius (HEC). (2022). *A Snapshot of Participation in Higher Education in Mauritius 2022*. https://www.hec.mu/pdf_downloads/recent_posts/snapshot030124.pdf

Human-Hendricks, N., & Meier, C. (2024). Three Key drivers in Devising a Responsive Curriculum in South African Higher Education Institutions. *South African Journal of Higher Education*, *38*(6), 79–95. https://doi.org/https://dx.doi.org/10.20853/38-6-5082

Knight, J., & Motala-Timol, S. (2022). Mauritius as a developing education hub. *International Journal of Educational Development*, *93*, 102646. https://doi.org/10.1016/j.ijedudev.2022.102646

Makridakis, S. (2017). The forthcoming Artificial Intelligence (AI) revolution: Its impact on society and firms. *Futures*, *90*, 46–60. https://doi.org/10.1016/j.futures.2017.03.006

Mariaye, H., & Samue, M. (2019). Erratum to: Education hubs and private higher education expansion in small island developing states contexts: The case of Mauritius. *Transformation in Higher Education*, *4*(0), a62. https://doi.org/10.4102/the.v4i0.62

Martin, M.,& Mhichíl, M. N. G. (2025). *Micro-credentials in Mauritius Towards a national framework for TVET and higher education*. UNESCO. https://unesdoc.unesco.org/ark:/48223/pf0000392521

Mdhlalose, D., & Mlambo, G. (2023). Integration of Technology in Education and its Impact on Learning and Teaching. *Asian Journal of Education and Social Studies*, *47*(2), 54–63. https://doi.org/10.9734/ajess/2023/v47i21021

Ministry of Technology, Commuication and Innovation. (2016). *Digital Mauritius 2030 Strategic Plan.* https://mdpa.govmu.org/mdpa/wp-content/uploads/2024/04/Digital-Mauritius2030.pdf

Ministry of Tertiary Education, Science and Research (2025). *Report of National Committee on Internationalisation of Higher Education in Mauritius.* https://tertiaryeducation.govmu.org/te/wp-content/uploads/2025/07/National-Committee-on-Internationalisation-of-Higher-Education-in-Mauritius-FINAL.pdf

Motala-Timol, S., & Kinser, K. (2017). Higher Education in Mauritius: Challenges and Perspectives of Internationalization. *International Higher Education*, *91*, 8–10. https://doi.org/10.6017/ihe.2017.91.10040

Mukred, M., Mokhtar, U. A., Hawash, B., AlSalman, H., & Zohaib, M. (2024). The adoption and use of learning analytics tools to improve decision making in higher learning institutions: An extension of technology acceptance model. *Heliyon*, *10*(4), e26315. https://doi.org/10.1016/j.heliyon.2024.e26315

Nagy, H., & Nene, S. (2021). Blue gold: Advancing blue economy governance in Africa. *Sustainability*, 13(13), 7153. https://doi.org/10.3390/su13137153

Naisbitt, J. (1984). *Megatrends: Ten new directions transforming our lives.* Warner Books.

Nyakotyo, C., & Goronga, P. (2024). Resilience strategies for higher education institutions. In M. Kayyali, (Ed.), *Rebuilding Higher Education Systems Impacted by Crises: Navigating Traumatic Events, Disasters, and More* (pp.1–19). IGI Global Scientific Publishing. https://doi.org/10.4018/979-8-3693-1926-0.ch001

Odit, M. P., Dookhan, K., & Fauzel, S. (2010). The impact of education on economic growth: The case of India. *International Business & Economics Research Journal*, *9*(8), 141–152. https://doi.org/10.11118/actaun201866010253

OECD. (2024). *The Blue Economy in Cities and Regions A Territorial Approach.* OECD Urban Studies. OECD Publishing. https://doi.org/10.1787/bd929b7d-en

Orman, R., Şimşek, E., & Kozak Çakır, M. A. (2023). Micro-credentials and reflections on higher education. *Higher Education Evaluation and Development*, *17*(2), 96–112. https://doi.org/10.1108/heed-08-2022-0028

Pashiardis, P. (1996). Environmental scanning in educational organizations: Uses, approaches, sources and methodologies. *International Journal of Educational Management*, *10*(3), 5–9. https://doi.org/10.1108/09513549610115055

The World Bank. (2021). *Riding the Blue Wave: Applying the Blue Economy Approach to World Bank Operations.* https://doi.org/10.1596/37212

United Nations (UN). (2017). *Resolution adopted by the General Assembly on 6 July 2017.* 71/313. Work of the Statistical Commission pertaining to the 2030 Agenda for Sustainable Development. https://docs.un.org/en/A/RES/71/313

Varma, O.N. (2024). Small but Smart: The Futures of Higher Education in Mauritius. In V. A. Oojorah & W. Udhin (Eds.), *Imagining the Futures of Higher Education in Southern Africa*. Future Education and Learning Spaces (pp.67–70). Springer. https://doi.org/10.1007/978-981-97-6473-0_5

Wyrwicka, M. K., & Erdeli, O. (2018). Strategic foresight as the methodology of preparing innovation activities. *Marketing and Management of Innovations*, *2*, 339-350. https://doi.org/10.21272/mmi.2018.2-26

Yusuf, A., & Tambuwal, I. N. (2018). Integrating educational technology in teaching: Current perceptions and practices in Sokoto State Nigeria. *Arab Journal of Quality in Education*, *5*(2), 7–16.

Zegwaard, K. E., & Rowe, A. D. (2019). Research-informed curriculum and advancing innovative practices in work-integrated learning. *International Journal of Work-Integrated Learning*, *20*(4), 323–334.

Author Note:

Prof. Romeela Mohee
Higher Education Commission
La Reduit, Face MCA South Wing, Rose Hill, Moka
E-Mail: commissioneroffice@hec.mu

Prof. Mpine Makoe
University of South Africa
Preller Street, Muckleneuk Ridge, Pretoria, 0002
South Africa
E-Mail: Qakisme@unisa.ac.za

Buhlebenkosi B. Tshili
University of South Africa
Preller Street, Muckleneuk Ridge, Pretoria, 0002
South Africa
E-Mail: biancatshili@gmail.com

Dr. Ourvashee Roopchun
Economic Development Board Mauritius
7 Exchange Square, Wall Street, Ebene Cybercity, 72201
E-Mail: aroopchund@gmail.com

Prof. Romeela Mohee is the Commissioner of the Higher Education Commission in Mauritius, where she leads national efforts in the development, regulation, and quality enhancement of the higher education sector. She served as Vice-Chancellor of the University of Mauritius and Professor of Chemical and Environmental Engineering before joining Education Specialist at Commonwealth of Learning as an education specialist. Prof. Mohee is an internationally recognised scholar with an extensive publication record, successful postgraduate supervision, and leadership of major environmental consultancy projects. Her contributions to science and higher education have been widely acknowledged, earning her honours as the African Union Award for Best Woman Scientist in Science, Technology and Innovation (2009).

Prof. Mpine Makoe is the Executive Dean of the College of Education and a Research Professor in Open Distance eLearning (ODeL) at the University of South Africa (UNISA). She is a National Research Foundation (NRF)-rated scholar, was a Commonwealth of Learning Chair in Open Education Resources/Practices (2019–2024) and an OER Ambassador for the International Council for Distance Education (ICDE). She has contributed extensively to global higher education initiatives, including UNESCO's Futures of Higher Education project. Prof. Makoe has published widely in technology-enhanced learning within ODL she remains highly active in regional and international distance education networks.

Buhlebenkosi Tshili is a PhD candidate in Psychology at the University of South Africa (UNISA), where she also obtained her Master's degree in Research Consultation Psychology. Her strong research background has enabled her to develop a diverse professional portfolio in both academia and market research. She is also a dedicated social justice advocate, passionate about education and lifelong learning.

Dr. Ourvashee Roopchund is a researcher specializing in policy-oriented and multidisciplinary research within the public and development sectors in Mauritius. She holds a PhD in Development Studies, a Master's in Social Research, and a BSc in Sociology. She currently serves as a researcher at the Economic Development Board Mauritius, supporting national strategic initiatives under the Ministry of Financial Services and Economic Planning. She has led evidence-based policy and institutional development efforts and contributed to poverty alleviation initiatives.