Educational Administration: Theory and Practice
2024, 30(3), 2425-2431
ISSN: 2148-2403
https://kuey.net/

Research Article

Research Paper Title Sustainable Higher Education Practices to Empower Students

Dr. Triveni P[1*], Niranth Shankar[2], Dr. Sunil Kumar M N[3], Prof Jayashree Kowtal[4], Dr. Jeevitha R[5]

[1*]Professor Department of Finance and BFSI M.S. Ramaiah Institute of Management Bangalore triveni@msrim.org
[2]Student,M.S.Ramaiah Institute of Management Bangalore niranthbhyrav@gmail.com
[3]Assistant Professor Department of commerce Government First Grade College Arsikere, Hassan District, Karnataka sukucom5753@gmail.com
[4]Assistant Professor Department of Finance and BFSI M.S. Ramaiah Institute of Management Bangalore, jayashreek@msrim.org
[5]Senior Assistant Professor Department of Finance and BFSI M.S. Ramaiah Institute of Management Bangalore Jeevitha@msrim.org

Citation: Dr. Triveni P, et al ,(2024**),** Research Paper Title Sustainable Higher Education Practices to Empower Students , *Educational Administration: Theory and Practice*, *30*(3), 2425-2431,
Doi:.10.53555/kuey.v30i3.6114

ARTICLE INFO **ABSTRACT**

This study examines the implementation of sustainable higher education practices designed to empower students to achieve their aspirations. Through focused group discussions with stakeholders from Higher Education Institutions (HEIs) in Bangalore, the research employed a descriptive approach to identify key sustainable practices such as interdisciplinary approaches, problem-based learning, and service-learning that enhance critical thinking, teamwork, and social responsibility. The findings highlight the importance of integrating sustainability principles across curricula, promoting community engagement, and leveraging technology to create dynamic, student-centered learning environments. The study concludes that sustainable teaching methodologies not only foster academic and personal growth but also prepare students to address global challenges, thereby contributing to a more equitable and sustainable future by empowering them with the necessary skills and mindset.

Introduction:

The Sustainable Development Goals (SDGs) are a set of 17 global goals established by the United Nations in 2015 as part of the 2030 Agenda for Sustainable Development. They are designed to address a wide range of global challenges, including poverty, inequality, climate change, environmental degradation, peace, and justice. Here is an overview of each of the 17 SDGs:

1. **No Poverty**: End poverty in all its forms everywhere.
2. **Zero Hunger**: End hunger, achieve food security and improved nutrition, and promote sustainable agriculture.
3. **Good Health and Well-being**: Ensure healthy lives and promote well-being for all at all ages.
4. **Quality Education**: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.
5. **Gender Equality**: Achieve gender equality and empower all women and girls.
6. **Clean Water and Sanitation**: Ensure availability and sustainable management of water and sanitation for all.
7. **Affordable and Clean Energy**: Ensure access to affordable, reliable, sustainable, and modern energy for all.
8. **Decent Work and Economic Growth**: Promote sustained, inclusive, and sustainable economic growth, full and productive employment, and decent work for all.
9. **Industry, Innovation, and Infrastructure**: Build resilient infrastructure, promote inclusive and sustainable industrialization, and foster innovation.
10. **Reduced Inequalities**: Reduce inequality within and among countries.
11. **Sustainable Cities and Communities**: Make cities and human settlements inclusive, safe, resilient, and sustainable.
12. **Responsible Consumption and Production**: Ensure sustainable consumption and production patterns.
13. **Climate Action**: Take urgent action to combat climate change and its impacts.

14. **Life Below Water**: Conserve and sustainably use the oceans, seas, and marine resources for sustainable development.
15. **Life on Land**: Protect, restore, and promote sustainable use of terrestrial ecosystems, manage forests sustainably, combat desertification, and halt and reverse land degradation and halt biodiversity loss.
16. **Peace, Justice, and Strong Institutions**: Promote peaceful and inclusive societies for sustainable development, provide access to justice for all, and build effective, accountable, and inclusive institutions at all levels.
17. **Partnerships for the Goals**: Strengthen the means of implementation and revitalize the global partnership for sustainable development.

The 4th Sustainable Development Goal (SDG 4) aims to "Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all." This goal focuses on providing access to quality education and promoting lifelong learning opportunities to help individuals develop the knowledge and skills needed for personal development, employment, and active citizenship.

Key Targets of SDG 4:

The fourth Sustainable Development Goal aims to "ensure inclusive and equitable quality education and promote lifelong learning opportunities for all."

Access to Education: The goal emphasizes ensuring that all children, regardless of their background or circumstances, have access to quality primary and secondary education. This includes providing free and compulsory primary and secondary education for all.

Equal Opportunities: The goal focuses on eliminating gender disparities in education and ensuring equal access to all levels of education and vocational training for the vulnerable, including persons with disabilities, indigenous peoples, and children in vulnerable situations.

Quality Learning: The goal emphasizes improving the quality of education by ensuring that all learners acquire the knowledge and skills needed to promote sustainable development. This includes increasing the supply of qualified teachers, providing adequate learning materials and facilities, and promoting inclusive and effective learning environments.

Lifelong Learning: The goal recognizes the importance of lifelong learning opportunities for all. This includes promoting adult literacy and numeracy, as well as providing access to affordable and quality technical, vocational, and tertiary education, including university education.

Relevant Skills: The goal aims to ensure that all learners acquire the knowledge and skills needed for decent employment, entrepreneurship, and active citizenship. This includes promoting education for sustainable development, human rights, gender equality, peace, and non-violence.

Education Facilities: The goal calls for building and upgrading inclusive and safe education facilities that are child, disability, and gender-sensitive, and provide safe, non-violent, inclusive, and effective learning environments for all.

Achieving quality education is crucial for promoting sustainable development, reducing inequalities, and fostering peace and prosperity worldwide.

In today's rapidly evolving educational landscape, higher education institutions face the dual challenge of imparting knowledge and catering to the diverse aspirations of students. Student aspirations encompass a wide spectrum, ranging from career objectives and societal impact to personal growth and learning preferences. Acknowledging the significance of these aspirations, educators and higher education institutions are increasingly adopting innovative sustainable strategies to enhance student experiences and foster holistic development.

The essence of innovation lies in its ability to transcend traditional paradigms and embrace new methodologies that align with students' desires and learning styles. These sustainable strategies span a wide array of initiatives, from revamped teaching methods to collaborations with industry and community stakeholders. At the centre of these strategies is a profound commitment to student-centricity, where students' needs, wants, and voices take precedence.

By employing sustainable pedagogical approaches, educational institutions can create dynamic learning environments that not only impart knowledge but also cultivate critical thinking, creativity, and problem-solving skills essential for success in the 21st century. Through these efforts, institutions aim to provide a comprehensive educational experience that prepares students for the diverse challenges and opportunities that lie ahead.

Review of literature

Michel-Villarreal et al. (2023) explore the challenges and opportunities presented by Generative AI in higher education through the lens of ChatGPT. Their work delves into the potential of AI technologies to enhance teaching, learning, and student engagement while also addressing concerns regarding ethical use and human-AI collaboration. By examining the insights provided by ChatGPT, the authors contribute to the ongoing discourse on the integration of AI in educational settings, highlighting both the possibilities and considerations for leveraging Generative AI effectively..

Shishakly, Almaiah, Lutfi, and Alrawad (2024) investigate the impact of employing smart technologies on sustainable development within higher education institutions. Their research delves into how the integration of smart technologies can contribute to environmental sustainability, resource efficiency, and overall institutional effectiveness. By examining this influence, the authors contribute valuable insights into the intersection of technology and sustainability in the higher education landscape, providing guidance for institutions seeking to leverage smart technologies for sustainable development initiatives.

Alarifi and Song (2024) delve into the ongoing debate surrounding online versus in-person learning in higher education and its impact on student achievement. this provide insights into the effects of these learning modalities on student outcomes. Their study contributes valuable recommendations for leadership in navigating the complexities of delivering effective education in diverse formats, highlighting the need for informed decision-making and strategic planning to optimize student learning experiences.

Purohit and Dutt (2024) present a comprehensive review of pedagogical innovations in management education for the 21st century. They delve into current trends and emerging practices that are shaping the landscape of management education, offering valuable insights into effective teaching strategies and methodologies. They also outline a research agenda, highlighting key areas for further investigation and development in the field. Their work contributes to advancing knowledge and understanding in management education, guiding educators and researchers towards impactful practices that meet the evolving needs of students and industry demands.

"Practice of Sustainability in Higher Education" by Alia Ariesanti et al.:

The literature review highlights initiatives promoting sustainability in higher education, like the Talloires Declaration and UN's Decade of Education for Sustainable Development. It discusses assessment frameworks like STARS and GASU for evaluating sustainability efforts in universities and colleges. The review covers various areas of sustainable practices in educational institutions, emphasizing their role in achieving SDG 4 on quality education.

“Integrating Sustainability into Higher Education Challenges and Opportunities for Universities Worldwide” by Ahmed G. Abo-Khalil[1]:

This research investigates the incorporation of sustainability within higher education, aligning with the United Nations’ Sustainable Development Goals (SDGs). The study explores methodologies, impacts, and best practices in sustainability education across international and local settings, with a focus on the United Arab Emirates. Key findings emphasize interdisciplinary approaches and active faculty involvement in fostering sustainability education. The paper provides strategic recommendations to enhance the efficacy and reach of sustainability education, highlighting its crucial role in preparing future generations to address global challenges effectively.

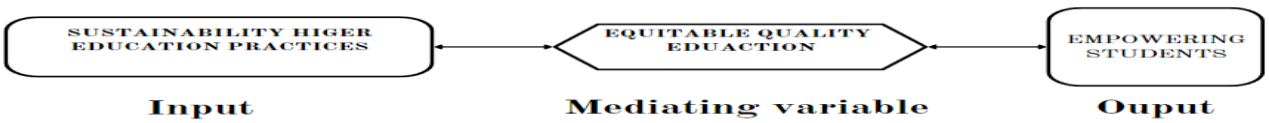
Research Gap

- Explore ways in which sustainable teaching practices can effectively align with empowering students to attain their goals.
- Promote collaboration across different disciplines, offer access to cutting-edge resources and tools, and integrate principles of sustainability

Research Objectives

- To assess the various Sustainable Higher Education Practices that can be implemented.
- To analyse the present teaching methodologies and its impact on student empowerment.
- To evaluate the efficacy of innovative sustainable teaching approaches in Empowering students.
- To analyse the outcomes of sustainable outcome practises for empower students

ResearchFramework



Research Methodology: The research methodology involves conducting a descriptive study the data is collected through a Focused Group Discussion with the major stakeholders representing the Higher Educational Institutions in Bangalore.
Type of Research: - Descriptive study

Data Collection Method

The data collection method will involve gathering secondary data from research papers, journal articles, newspaper articles, and the National Education Policy (NEP) document issued by the Ministry.

- Secondary Data: Research papers, Journal Articles, Newspaper articles, NEP Document from the Ministry

Data Collection tool: Focused Group Discussion with the major stakeholders from Higher Education Institutions

DATA ANALYSIS

The study is focused on arriving at sustainable teaching practices which empowers students to achieve their aspirations. As a part of the study an attempt is made to analyse the sustainable teaching practices at HEIs which empowers the students to achieve their goals. A Focused Group Discussion was conducted to arrive at the sustainable teaching practices that could be proposed to be adopted by HEIs. The objectives of the study are analysed as undere:

Objectives: -To study the various Sustainable Higher Education Practices that can be implemented.

A focused group discussion was conducted with the HEIs of major Institutions. Based on the discussion the group concluded with a proposed list of educational practices which shall empower the students. The proposed approach to be adopted by the Higher Educational Institutions are as follows:

- Interdisciplinary and transdisciplinary approaches: Integrating knowledge and methods from different disciplines and fostering collaboration and holistic problem-solving.
- Problem-based and project-based learning: Engaging students in real-world challenges which helps in developing critical thinking skills, problem-solving skills and facilitates teamwork.
- Service-learning and community engagement: Connecting academic learning with community service and promoting social responsibility and civic engagement.
- Experiential learning: Learning through hands-on experiences and real-world contexts.
- Sustainable campus operations: Implementing eco-friendly practices in campus facilities and operations and demonstrating institutional commitment to sustainability.
- Virtual and augmented reality simulations: Providing immersive learning experiences and enabling exploration of complex systems and scenarios.
- Online and blended learning: Combining online and face-to-face instruction and Offering flexibility and accessibility in learning.
- Open educational resources (OERs): Using freely accessible, openly licensed educational materials and reducing costs and increasing access to quality resources.
- Sustainability-focused curricula and programs: Integrating sustainability principles across disciplines and preparing students for careers in sustainability-related fields.
- Sustainable assessment and evaluation: Aligning assessment practices with sustainability goals and measuring student learning outcomes and institutional progress.

Objective: - To analyse the teaching methodologies that Empowers students at HEIs

Teaching methodologies play a crucial role in shaping the learning experience and empowering students in higher education. The present teaching landscape encompasses a range of approaches, from traditional lecture-based instruction to more innovative, student-centered methods. To effectively analyze the impact of these methodologies on student empowerment, it is essential to consider various aspects such as student engagement, critical thinking skills, problem-solving abilities, and overall academic performance.
Traditional teaching methods, such as lectures and teacher-led discussions, have long been the dominant approach in higher education. While these methods can be effective in conveying information and providing a structured learning environment, they often limit student participation and engagement. Students may feel less empowered in such settings, as they are primarily passive recipients of knowledge rather than active participants in their own learning process. This can lead to reduced motivation, lower retention of information, and a lack of opportunities for students to develop critical thinking and problem-solving skills.
In contrast, innovative teaching methodologies, such as problem-based learning, project-based learning, and flipped classrooms, have emerged as powerful tools for fostering student empowerment. These approaches shift the focus from teacher-centered instruction to student-centered learning, allowing students to take ownership of their education and actively engage with the material. By presenting students with real-world problems or projects, these methodologies encourage them to think critically, collaborate with peers, and apply

their knowledge in practical ways. This hands-on approach not only enhances student motivation and engagement but also helps develop essential skills such as communication, teamwork, and leadership.
Moreover, the integration of technology in teaching has opened up new avenues for student empowerment. Online learning platforms, educational apps, and virtual classrooms provide students with greater flexibility and access to resources, enabling them to learn at their own pace and style. Technology-enhanced learning also facilitates personalized instruction, allowing educators to tailor their teaching to individual student needs and preferences. This level of customization can significantly boost student confidence and self-esteem, as they feel supported and valued in their learning journey.

Objective: - To evaluate and compare the efficacy of innovative sustainable teaching approaches in Empowering students.

Innovative sustainable teaching approaches have gained significant attention as a means to empower students and promote long-term learning outcomes. These methods focus on creating engaging, student-centered learning environments that foster critical thinking, problem-solving, and real-world application of knowledge. One key aspect of innovative sustainable teaching is the emphasis on active learning, which involves students in hands-on activities, group discussions, and collaborative projects. This level of engagement enhances student motivation, promotes deeper understanding, and develops critical thinking skills. Moreover, these approaches often incorporate real-world problems and scenarios, allowing students to apply their knowledge in authentic contexts, bridging the gap between theory and practice. Traditional lecture-based methods, in contrast, often rely on passive learning and may not adequately equip students with the skills needed to thrive in a rapidly changing world.
Another crucial aspect of innovative sustainable teaching is the emphasis on collaborative learning, which promotes teamwork, communication, conflict resolution, and leadership skills. Collaborative learning environments foster a sense of community and support, enhancing student motivation and engagement. These approaches also have a long-term impact on student empowerment by equipping them with transferable skills, such as critical thinking, problem-solving, and adaptability, preparing them for lifelong learning and success beyond the classroom. However, the success of these methods relies on effective implementation, adequate resources, and ongoing support for educators. As higher education continues to evolve, it is crucial to prioritize and invest in innovative sustainable teaching approaches that truly empower students and prepare them for the challenges of the 21st century.

Objective: - To analyse the outcomes of sustainable teaching practises for empower students

Sustainable teaching practices have emerged as a powerful approach to empowering students in higher education. These practices focus on designing learning experiences that not only impart knowledge but also equip students with the skills, mindsets, and dispositions necessary for long-term success. By aligning educational goals with broader societal and environmental challenges, sustainable outcome practices aim to create a more holistic and meaningful learning experience. One key outcome of these practices is the development of critical thinking and problem-solving skills. By engaging students in real-world projects and case studies, sustainable outcome practices encourage them to analyze complex issues, evaluate evidence, and propose innovative solutions. This hands-on approach fosters a deeper understanding of the subject matter and helps students develop the ability to apply their knowledge in practical contexts. Moreover, sustainable outcome practices often emphasize interdisciplinary collaboration, exposing students to diverse perspectives and promoting the development of teamwork and communication skills.

Another significant outcome of sustainable outcome practices is the cultivation of a sense of social responsibility and global citizenship among students. By incorporating sustainability principles and ethical considerations into the curriculum, these practices raise awareness about pressing social and environmental issues. Students are encouraged to reflect on their role as change agents and consider the impact of their actions on the world around them. This heightened sense of purpose and responsibility can be a powerful motivator, inspiring students to engage in community projects, volunteer work, and advocacy efforts. Furthermore, sustainable outcome practices often provide opportunities for students to engage with diverse communities and stakeholders, fostering cultural competence and empathy. By empowering students to become active contributors to society, these practices lay the foundation for lifelong learning and civic engagement.

Research Findings

The major findings of the research are as given below:

- Sustainable Higher Education Practices emphasize interdisciplinary and transdisciplinary approaches, fostering collaboration and holistic problem-solving skills.
- Problem-based and project-based learning are effective methods for engaging students in real-world challenges and developing critical thinking, teamwork, and problem-solving abilities.
- Service-learning and community engagement connect academic learning with community service, promoting social responsibility and civic engagement among students.

- Experiential and place-based learning enhance understanding and connection to local environments through hands-on experiences and real-world contexts.
- Sustainable campus operations, such as implementing eco-friendly practices in facilities and operations, demonstrate an institution's commitment to sustainability.
- Virtual and augmented reality simulations provide immersive learning experiences, enabling exploration of complex systems and scenarios.
- Online and blended learning combine online and face-to-face instruction, offering flexibility and accessibility in the learning process.
- Open educational resources (OERs) are freely accessible and openly licensed educational materials that can reduce costs and increase access to quality resources.
- Sustainability-focused curricula and programs integrate sustainability principles across disciplines, preparing students for careers in sustainability-related fields.
- Sustainable assessment and evaluation align assessment practices with sustainability goals, measuring student learning outcomes and institutional progress toward sustainable objectives.

Conclusion

The research studies, the implementing of sustainable higher education practices is crucial for empowering students and equipping them with the skills and mindsets necessary for long-term success. Innovative teaching methodologies like problem-based learning, project-based learning, and experiential learning foster active engagement, critical thinking, and real-world application of knowledge. Collaborative learning environments promote teamwork, communication, and leadership abilities. Integrating sustainability principles across curricula cultivates social responsibility, ethical decision-making, and a sense of global citizenship. By aligning educational outcomes with broader societal and environmental challenges, sustainable practices create a more holistic, meaningful, and impactful learning experience.

Looking ahead, higher education institutions must prioritize and invest in sustainable outcome practices to truly empower the next generation of graduates. This requires ongoing professional development for educators, adequate resources and support systems, and a commitment to continually evolving and adapting pedagogical approaches. By embracing sustainable practices, universities can nurture well-rounded, socially conscious individuals who possess the competencies to tackle complex global issues and drive positive change. Empowering students through sustainable education is not only an investment in their personal growth but also a vital step towards building a more equitable, just, and sustainable future for all.

Suggestion

- Incorporate more problem-based and project-based learning opportunities into curricula, allowing students to work on real-world sustainability issues and develop critical thinking, teamwork, and problem-solving skills.
- Promote service-learning and community engagement opportunities that connect classroom learning with local sustainability initiatives, fostering a sense of social responsibility and civic engagement among students.
- Invest in sustainable campus operations, such as energy-efficient buildings, waste reduction programs, and sustainable transportation initiatives, to demonstrate institutional commitment to sustainability and provide practical learning opportunities for students.
- Develop new sustainability-focused curricula and programs, or integrate sustainability principles into existing programs, to prepare students for careers in sustainability-related fields and equip them with the knowledge and skills needed to address environmental and social challenges.
- Implement sustainable assessment and evaluation practices that align with sustainability goals, ensuring that student learning outcomes and institutional progress are measured and continuously improved upon.

Bibliography

1. Alarifi, B. N., & Song, S. (2024). Online vs in-person learning in higher education: Effects on student achievement and recommendations for leadership. *Humanities and Social Sciences Communications*, *11*(1). Scopus. https://doi.org/10.1057/s41599-023-02590-1
2. Fareha, K., Parul, S., Ayesha, A., Amrita, S., & Shoadashi, S. (2024). Flipped Classroom Model for Undergraduate Teaching Using Mixed-methods Approach: A Pilot Project. *Journal of South Asian Federation of Obstetrics and Gynaecology*, *16*(S1), S7–S10. Scopus. https://doi.org/10.5005/jp-journals-10006-2382
3. Filho, W. L., Trevisan, L. V., Dinis, M. A. P., Ulmer, N., Paço, A., Borsari, B., Sierra, J., & Salvia, A. (2024). Fostering students' participation in the implementation of the sustainable development goals at higher education institutions. *Discover Sustainability*, *5*(1). Scopus. https://doi.org/10.1007/s43621-024-00204-7

4. Kumar, S., Rao, P., Singhania, S., Verma, S., & Kheterpal, M. (2024). Will artificial intelligence drive the advancements in higher education? A tri-phased exploration. *Technological Forecasting and Social Change*, *201*. Scopus. https://doi.org/10.1016/j.techfore.2024.123258
5. Labadze, L., Grigolia, M., & Machaidze, L. (2024). Correction to: Role of AI chatbots in education: systematic literature review (International Journal of Educational Technology in Higher Education, (2023), 20, 1, (56), 10.1186/s41239-023-00426-1). *International Journal of Educational Technology in Higher Education*, *21*(1). Scopus. https://doi.org/10.1186/s41239-024-00461-6
6. Lundberg, A., & de Leeuw, R. R. (2024). Introducing and discussing the virtual special issue on using Q methodology in higher education. *International Journal of Educational Research Open*, *6*. Scopus. https://doi.org/10.1016/j.ijedro.2023.100301
7. Michel-Villarreal, R., Vilalta-Perdomo, E., Salinas-Navarro, D. E., Thierry-Aguilera, R., & Gerardou, F. S. (2023). Challenges and Opportunities of Generative AI for Higher Education as Explained by ChatGPT. *Education Sciences*, *13*(9). Scopus. https://doi.org/10.3390/educsci13090856
8. Purohit, S., & Dutt, A. (2024). Pedagogical innovations in management education in the 21ST century: A review and research agenda. *International Journal of Management Education*, *22*(2). Scopus. https://doi.org/10.1016/j.ijme.2024.100976
9. Shishakly, R., Almaiah, M. A., Lutfi, A., & Alrawad, M. (2024). The influence of using smart technologies for sustainable development in higher education institutions. *International Journal of Data and Network Science*, *8*(1), 77–90. Scopus. https://doi.org/10.5267/j.ijdns.2023.10.015
10. Wang, C.-C. (2024). Using design thinking for interdisciplinary curriculum design and teaching: A case study in higher education. *Humanities and Social Sciences Communications*, *11*(1). Scopus. https://doi.org/10.1057/s41599-024-02813-z
11. Abo-Khalil, Ahmed G. "Integrating Sustainability into Higher Education Challenges and Opportunities for Universities Worldwide." *Heliyon* 10, no. 9 (May 15, 2024): e29946. https://doi.org/10.1016/j.heliyon.2024.e29946.
12. Ariesanti, Alia, Eko Sukoharsono, Gugus Irianto, and Erwin Saraswati. "Practice of Sustainability in Higher Education." *International Journal of Engineering and Technology(UAE)* 7 (August 14, 2018): 84–89. https://doi.org/10.14419/ijet.v7i3.25.17473