

SUSTAINABILITY CRITERIA FOR HIGHER EDUCATION INSTITUTIONS

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ABSTRACT: All over the world starting to discuss on sustainable development or sustainability as per general. This also been supported by the United Nation on Sustainable Development Goal 2025. However, the concept and practicality must start from the ground, which is Higher Education Institutions (HEIs). The declaration and understanding start 10 years back at Rio. The members or country who supporting the sustainability ideas has signed the declaration to shown their support. Therefore, this paper aims to explore the criteria highlighted worldwide about sustainability in Higher Education Institutions and also to find out the declaration name been signed which spoke about sustainability in Higher Education Institutions. The research methodology has been using its thematic analysis within 10 years of the referred index journal to support the analysis. Perhaps, from this study, a new contribution to the bodies of knowledge's especially on understanding the sustainability criteria in Higher Education Institutions across the globe.

Keywords: sustainability criteria, Higher Education Institutions, sustainability declaration

1. INTRODUCTION

Defining sustainability for Higher Education Institutions (HEIs) through the aspects of environmental, economic, and societal which these may give an opportunities' in emerging for different parties involve in HEIs in advancing sustainable practices [1,2]. Sustainability in Higher Education Institutions globally debated which this topic expecting to be beneficial and can be nurtured in a long period of time [3,4]. The Higher Education Institutions it's the place where to disseminate knowledge especially relating to the sustainability and also Higher Education Institutions it's a path to shaping and as a forefront for social and cultural changes through research, intellectuals, leaders, and future and future makers [5,6]. Thus, the sustainability issue can be tackled via education provided at the Higher Education Institution by deeply exploring the topics encased in the concept of sustainability.

Holding a unique position in society, HEIs having the potential to promote and encourage the public to respond to sustainability challenges facing by the communities around the globe through interactions and communication of community on campus and external campus [7,8]. Therefore, universities who promoting sustainability in their campus by rethinking their missions and restructuring their research programs, curriculum, and lifestyle on campus, and enhancing their trans-disciplinary activities with other societal institutions.

According to [5,9,10,11], the main characteristic of sustainability in Institutions of Higher Education is to promote transformative rather than trans-missive education by preparing students to tackle complex sustainability challenges; emphasize interdisciplinary and interdisciplinary research and science; improve problem-solving skills in education related to community goals; create a network that leverages the expertise around campus to effectively and efficiently share resources, and provides leadership and vision that promotes needed change and guidance for long-term university transformation that is responsive to changing societal needs. The application of sustainable development to universities is a relatively new and very challenging phenomenon due to the complex formation of universities.

Most university leaders and faculty members around the world are unaware of the goals and principles of sustainable development, or if they realize it, they have made little effort to include it in their courses, curriculum, research, and reach.

As the university's primary objectives include not only educating students, preserving and advancing knowledge, but also finding sustainable solutions to social problems through research, decision-makers and decision-makers face challenges to integrate sustainability into their strategic planning and development and to evaluate quantitatively the impact of sustainability programs on their institutions [1,11]. A decision support tool is needed that can guide what actions should or should not be taken to achieve sustainable development. Therefore, the major problems facing the university can be summarized as finding ways and ways of incorporating effective sustainability concepts into university campus policy, education, research, outreach, and operations, and establishing systems that make sustainable development a unified part of the culture of Institutions of Higher Learning and has a profound effect on Institutions of Higher Learning and society as a whole.

HEIs around the globe are committed to providing a sustainable campus; likewise, Canadian universities are also at the forefront of sustainability initiatives. According to [6] various ranking tables for universities are available to access the quality of Institutions of Higher Learning and this position is based on different methodologies and guidelines.

2. TREND IN GLOBAL REPUTATION (RANKING AND RATING)

To promote sustainable development in society, to educate future leaders on the importance of sustainability, this is an important step. This can be achieved in part by implementing sustainable practices and theories in institutions of higher learning [10]. By exploring the impact of sustainability practices in higher education, a better understanding of the impact of these practices will be on students and on society as well as Malaysian society.

For students to fully conceptualize the importance of sustainable living, Institutions of Higher Education need to

change many aspects of practicing and managing Institutions of Higher Learning itself. Through the "top-down/bottom-up" approach of institutions of higher learning, it is possible to achieve institutions focused on the practice and implementation of sustainability [1,11]. From students, faculty and administration must proactively cooperate with one another in addressing and addressing sustainability issues in Institutions of Higher Education. The development of an office on campus that dedicates time and resources to ensure that sustainability is at the forefront of student life can help achieve the overall goals of the Institution of Higher Learning. To understand the importance of promoting sustainability in higher education, it is important to understand the concepts that have been developed in the existing literature. The literature reviewed in this research project highlights how institutional restructuring, core competency development, and curriculum development are all ways in which Institutions of Higher Learning can be more environmentally sustainable.

According to [12,13], several declarations and agreements highlight the concept of sustainability in the context of higher education institutions [14,15]. In 1992, more than 100 heads of state met in Rio de Janeiro, Brazil for the UN Conference on Environment and Development [16]. In this context, higher education institutions have signed various declarations, map makers and initiatives (DCI) to provide guidelines or frameworks for higher education institutions in demonstrating their commitment to instilling a more sustainable higher education institution concept in their system. , 15,17,18]. The declaration is essential to foster transformation, which can be used as evidence that over 1000 leaders of higher education institutions have expressed their commitment to this concept by declaring, hiring and initiatives (DCI) [5,14,15, 17,18].

The declaration, communication, and incentives (DCI), are designed to provide guidelines or frameworks for Institutions of Higher Learning for better implementation in their Institutions [14]. According to UNEP (1972), beginning with the Stockholm Conference, formal education has been recognized as a medium for playing a role in nurturing environmental concerns and concerns [14]. Since then, many declarations have been signed and this can be summarized as shown in Table 1.1 over the period 1972 to 2012.

Others [14], found that the DCI anticipated by Institutions of Higher Learning around the world has started guidelines, frameworks, and tools for Institutions of Higher Learning for the dissemination of the concept of sustainability in their institutions. This evidence is demonstrated by [9,11] and is further highlighted by [14], where approximately 1000 Institutions of Higher Learning Instituted their commitment to fostering sustainability by participating in this DCI. However, the number of Higher Learning Institutions

Table 1.1: Sustainable Declaration for Higher Education Institutions

Source: Expanded from [5,14,15,17,18]

Year	Declaration
2012	United Nation Higher Education Sustainability Initiative within Rio + 20
2012	People's Sustainability Treaty on Higher Education
2011	Copernicus Charta 2.0
2010	G8 University Summit: Statement of Action
2009	World Conference on Higher Education (UNESCO)
2009	Turin Declaration on education and Research for Sustainable and Responsible Development Italy
2009	Tokyo Declaration of HOPE (directed to all education areas, not higher education-specific)
2009	Abuja Declaration on Sustainable Development in Africa
2008	G8 University Summit Sapporo Sustainability Declaration
2006	Declaration on the Responsibility of Higher Education for a Democratic Culture- Citizenship, Human Rights ad Sustainability
2005	Graz Declaration on Committing Universities to Sustainable Development
2005-2004	The United Nation Decade Education for Sustainable Development
2002	Ubuntu Declaration
2001	Lueneburg Declaration
2000	Earth Charter (directed to all education areas, not higher education-specific)
1998	World Declaration on Higher Education for the 20th Century: Vision and Action
1997	International Conference on Environment and Society - education and Public Awareness for Sustainability: Declaration of Thessaloniki
1994	CRE Copernicus Charter
1993	Association of Commonwealth Universities' 15th Quinquennial Conference: Swansea Declaration
1993	9th International Association of Universities Round Table: The Kyoto Declaration
1992	Agenda 21 Report of the United Nations Conference on Environment and Development - Chap. 36: Promoting Education, Public Awareness and Training
1991	The Halifax Declaration
1990	University Presidents for a Sustainable Future: The Tallories Declaration
1988	The Magna Charta of European Universities
1977	Tbilisi Declaration
1972	The Stockholm Declaration on the Human Environment

involved in DCI is still low compared to the 14,000 Institutions of Higher Learning operating worldwide [14,15]. The declaration is essential to foster transformation, which can be used as evidence that over 1000 leaders of higher education institutions have expressed their commitment to

this concept by declaring, hiring, and initiatives (DCI) [5,14,15, 17,18]. Table 1.2 shows the sustainability elements of the institutions of higher learning, where these elements are proposed to evaluate the sustainability of higher education institutions. outreach and experience on campus. The review of all 15 previous studies as shown in Table 1.2 shows that the highest elements discussed or discussed in full were education (9 studies), assessment and reporting (6 studies) and followed by campus operations (5 studies). Most not discussed are institutional frameworks (2 studies) and on-campus experience (1 study).

From Table 1.2, it is clear that the coverage of the framework elements of higher education institutions is not broad enough to propose a more appropriate approach to sustainability in higher education institutions. According to [14], despite the feedback and feedback on the implementation of sustainability within the framework of higher education

(policy, vision and mission, office support), less commitment has been made (either implicitly or explicitly) to the actual institutional framework. This is an indication that the implementation of sustainability in higher education institutions in terms of financial, human, and material resources is still minimal, especially in the internal procedures of higher education itself. Low coverage of the element of experience on campus led to lower recognition by staff and researchers at institutions of higher learning and ultimately reduced student participation [10].

3. RESEARCH METHODOLOGY

Table 1.3 below shows numbers of referred journals been used referred to have Thematic analysis (TA) is one of a cluster of methods that focus on identifying the criteria of sustainability to measure in Higher Education Institutions.

Table 1.2: Criteria of Sustainability for Higher Education Institution

Criteria / Author	[3]	[16]	[10]	[19]	[18]	[18]	[14]	[15]	[17]	[20]	[22]	[21]	[2]	[12]	[6]	Times Referred
Institutional Framework							✓						✓			2
Campus Operation			✓		✓	✓	✓			✓						5
Education		✓	✓	✓			✓	✓	✓		✓		✓	✓	✓	9
Research			✓				✓						✓			3
Outreach							✓			✓						2
On-campus Experiences							✓									1
Assessment and Reporting	✓	✓					✓	✓		✓			✓			6

Table 1.3 Numbers of Referred Journal

Year	Number of Journal
2018	1
2017	1
2016	1
2015	3
2014	3
2013	2
2012	0
2011	1
2010	0
2009	0
2008	2
2007	0
2006	5
2005	0
2004	1
2003	2
Total Numbers of Journal	22

Table 1.3 shows that the highest referred journal is from 2006. Thus it's clear to show that criteria of sustainability for

Higher Education institutions been discussed from previous researchers and the issues been discussed since 10 years back.

4. CONCLUSIONS

Sustainable Higher Education Institutions have emerged in response to calls for universities to lead society towards a sustainable future and is considered a distinct but interdisciplinary specialization of study and practice within sustainability science and education for Sustainable Higher Education Institutions. Higher Education Institutions are generally seen as a major (potential) catalyst to work towards Sustainable Development. The urgent societal need and broad call for Sustainable Development allow Higher Education Institutions to assume a fundamental and moral responsibility in contributing to Sustainable Development. Through their societal mandate of advancing knowledge, educating leaders, and furthering societal progress and engagement, Higher Education Institutions should be moral visionaries and centers of sustainability innovation and excellence. As 'learning laboratories', Higher Education Institutions are to provide the lived experience of sustainable communities.

As major contributors to the values, health, and wellbeing of society, Higher Education Institutions have a fundamental responsibility to teach, train, and do research for sustainability. We believe that the success of Higher

Education Institutions in the twenty-first century will be judged by our ability to put forward a bold agenda that makes sustainability and the environment a cornerstone of academic practice.

The concepts of sustainable development and sustainability offer an alternative way to understand since this concept has still caused unfamiliarity or misunderstanding amongst people and societies worldwide, especially when it is to be narrowed down into sustainability in higher education institutions. It is observed that modern ideologies may help all the relevant parties who involve directly and indirectly in higher education institutions to clearly understand their roles in practicing sustainability in their organization.

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