



Contents lists available at ScienceDirect

Journal of Cleaner Production

journal homepage: www.elsevier.com/locate/jclepro

A review of commitment and implementation of sustainable development in higher education: results from a worldwide survey

Rodrigo Lozano ^{a, b, *}, Kim Ceulemans ^c, Mar Alonso-Almeida ^d, Donald Huisingsh ^e, Francisco J. Lozano ^f, Tom Waas ^g, Wim Lambrechts ^{h, i}, Rebeka Lukman ^{j, k}, Jean Hugé ^l

^a Utrecht University, Copernicus Institute of Sustainable Development, Heidelberglaan 2, PO Box 80115, 3508TC Utrecht, The Netherlands

^b Organisational Sustainability, Ltd., 40 Machen Place, Cardiff CF11 6EQ, UK

^c KU Leuven – University of Leuven, Centre for Economics and Corporate Sustainability, Warmoesberg 26, B-1000 Brussels, Belgium

^d Autonomous University of Madrid, Faculty of Economics and Business Administration, 28049 Madrid, Spain

^e The University of Tennessee, Institute for a Secure and Sustainable Environment, 311 Conference Center Building, Knoxville, TN 37996-4134, USA

^f Tecnológico De Monterrey, ITESM, Campus Monterrey, Monterrey, Mexico

^g Ghent University, Centre for Sustainable Development, Poel 16, 9000 Ghent, Belgium

^h Leuven University College (KHLeuven), Department of Business Studies, Belgium

ⁱ University of Antwerp (UA), Department of Philosophy, Belgium

^j Nigrad d.d., Zagrebška 30, SI-2000 Maribor, Slovenia

^k University of Primorska, Andrej Marušič Institute, Muzejski trg 2, SI-6000 Koper, Slovenia

^l IMDO/Institute for Environment & Sustainable Development, University of Antwerp, Belgium

ARTICLE INFO

Article history:

Received 24 March 2014

Received in revised form

12 September 2014

Accepted 14 September 2014

Available online xxx

Keywords:

Higher education for sustainable development (HESD)

The higher education institution system

Commitment

Implementation

Declarations

ABSTRACT

During the last two decades, many higher education institutions have become involved in embedding sustainable development into their academic systems. The research for this paper was built upon discussions on declarations, charters, and other initiatives designed to commit their institutions to education for sustainable development. It analyses if such commitment leads to more sustainable development implementation within the academic institution. The research was performed using a survey, based upon a literature review of 60 peer-reviewed papers. The survey was divided into eight categories: background; institutional framework; campus operations; education; research; outreach and collaboration; on-campus experiences; and assessment and reporting. The survey was answered by 84 respondents from 70 institutions, worldwide. The responses were analysed via descriptive analysis, grounded theory, and inferential statistics. The results revealed that there were many examples of sustainable development implementation throughout the system; however, generally the efforts tended to be compartmentalised. The analyses also highlighted strong linkages between the institution's commitment to sustainability, implementation, and signing a declaration, charter, or initiative. The findings suggested that academic leadership's commitment was a leading cause for signing a declaration, charter, or initiative, and implementing sustainable development. The research team provided recommendations for higher educational leaders, including acknowledge that the higher education institution system is comprised of several inter-related elements; commit to sustainability by integrating it into policies and strategies; show the commitment by signing a declaration, charter, or initiative; establish short-, medium-, and long-term plans for its institutionalisation; and ensure that sustainable development is implemented throughout the system.

© 2014 Elsevier Ltd. All rights reserved.

1. Introduction

At the Stockholm Conference in 1972 (UNEP, 1972), education was formally recognised on an international level to play an important role in fostering environmental protection and conservation. Since then, more higher education institutions (HEIs) have become engaged in embedding environmental education and education for sustainable development (ESD) into their system's

* Corresponding author. Utrecht University, Copernicus Institute of Sustainable Development, Heidelberglaan 2, PO Box 80115, 3508TC Utrecht, The Netherlands.

E-mail addresses: r.lozano@uu.nl, rodlozano@org-sustainability.com (R. Lozano), kim.ceulemans@kuleuven.be (K. Ceulemans), mar.alonso@uam.es (M. Alonso-Almeida), donaldhuisingsh@comcast.net (D. Huisingsh), fjlozano@itesm.mx (F.J. Lozano), tom.waas@uantwerpen.be (T. Waas), wim.lambrechts@khleuven.be (W. Lambrechts), rebeka.lukman@nigrad.si (R. Lukman), jean.huge@uantwerpen.be (J. Hugé).

List of acronyms

AISHE	auditing instrument for sustainability in higher education
CSAF	campus sustainability assessment framework
DCIs	declarations, charters, and initiatives
ESD	education for sustainable development
FTE	full-time equivalent
GASU	graphical assessment of sustainability in universities
GHESP	global higher education for sustainability partnership
GHGs	greenhouse gases
GT	grounded theory
GUNI	global university network for innovation
HEIs	higher education institutions
HESD	higher education for sustainable development
RCE	regional centre of expertise
SD	sustainable development
STAUNCH [®]	sustainability tool for assessing universities' curricula holistically

elements (including education, research, campus operations, community outreach, and assessment and reporting¹ (see Cortese, 2003; Lozano, 2006b)).

In this context, HEIs have developed and signed an array of declarations, charters, and initiatives (DCIs) to provide guidelines or frameworks for HEIs to demonstrate their commitment and better embed sustainability into their system (Calder and Clugston, 2003; Lozano et al., 2013; Wright, 2004). The importance of declarations, charters and partnerships in fostering transformative SD is evidenced by the more than 1000 university leaders who ratified their commitment to work to advance SD by developing and signing DCIs (Calder and Clugston, 2003; Cole and Wright, 2005). Table 1 presents ten of the most widely recognised higher education for sustainable development (HESD) DCIs, and it provides each declaration's hyperlink.

However, signing a declaration or endorsing an initiative does not ensure that the signatory institutions implement SD within their systems (Bekessy et al., 2007; Wright, 2004). It can also result in HEIs being accused of 'green wash', if they fail to implement SD throughout their system after signing a declaration or initiative (Bekessy et al., 2007; Wright, 2002). Therefore, HEIs should be held accountable for implementing DCIs, and SD, in general, should be monitored or assessed (Walton, 2000; Wright, 2002). Additionally, there are institutions, which have not signed a declaration or belong to a charter, but which are actively engaged in implementing SD throughout their campuses (Lozano et al., 2013).

Given the increase in interest in DCIs, a question that has arisen is: has commitment to SD (through signing a declaration, charter, or initiatives for sustainable development) resulted in better implementing sustainable development within higher education institutions?

¹ Some of the tools available to assess and report sustainability in universities include the Auditing Instrument for Sustainability in Higher Education (AISHE) (Roorda, 2001), the Graphical Assessment of Sustainability in Universities (GASU) tool (Lozano, 2006a), the Campus Sustainability Assessment Framework (CSAF) (Cole, 2003), and the Sustainability Tool for Assessing Universities' Curricula Holistically (STAUNCH[®]) (Lozano and Peattie, 2009; Lozano, 2010).

Table 1

The most widely recognised declarations, charters, and initiatives for higher education for sustainable development.

Year	Event/declaration	Hyperlink
1990	Talloires Declaration, Presidents Conference, France	http://www.iisd.org/educate/declarat/tallore.htm
1991	Halifax Declaration, Conference on University Action for Sustainable Development, Canada	http://www.iisd.org/educate/declarat/halifax.htm
1993	Kyoto Declaration, International Association of Universities Ninth Round Table, Japan	http://www.iisd.org/educate/declarat/kyoto.htm
1993	Swansea Declaration, Association of Commonwealth Universities' Fifteenth Quinquennial Conference, Wales	http://www.iisd.org/educate/declarat/swansea.htm
1993	COPERNICUS University Charter, Conference of European Rectors	http://www.iisd.org/educate/declarat/coper.htm
2000	Global Higher Education for Sustainable Partnership (GHESP)	http://portal.unesco.org/education/en/ev.php-URL_ID=34701&URL_DO=DO_TOPIC&URL_SECTION=201.html
2001	Lüneburg Declaration on Higher Education for Sustainable Development, Germany	http://portal.unesco.org/education/en/ev.php-URL_ID=37585&URL_DO=DO_TOPIC&URL_SECTION=201.html
2004	Declaration of Barcelona, Spain	http://www.upc.edu/eesd-observatory/who/declaration-of-barcelona
2005	Graz Declaration on Committing Universities to Sustainable Development, Austria	http://www.aic.lv/bologna/Bologna/maindoc/Graz%20Decl.pdf
2009	Abuja Declaration on Sustainable Development in Africa: The role of higher education in SD, Nigeria	http://gc.aau.org/report/declaration_12th_gc_aau9.pdf
2012	Rio+20 Higher Education Sustainability Initiative, Brazil	http://www.uncsd2012.org/index.php?page=view&type=1006&menu=153&nr=34

Source: Adapted from Lozano et al. (2013).

This research was designed to answer this question through an in-depth analysis into the implementation of SD in HEIs. This paper is structured as follows:

- Section 2 contains a literature review of the implementation of ESD;
- Section 3 clarifies the research methods used;
- Section 4 presents the results and discussion from the descriptive analysis of the close-ended questions;
- Section 5 presents the results and discussion from the constant comparative analysis of the open-ended questions;
- Section 6 presents the results of the inferential statistical analyses of the HEI's SD commitment and implementation;
- Section 7 contains the researchers' in-depth discussions of the implications of the findings; and

Download English Version:

<https://daneshyari.com/en/article/10688137>

Download Persian Version:

<https://daneshyari.com/article/10688137>

[Daneshyari.com](https://daneshyari.com)