

ICED 2020 proceedings:

Sustainability mindset framework for educational developers supporting future-ready curricula and student learning

Gesa Ruge¹

*University of Canberra
11 Kirinari Street, Bruce, 2617
Australian Capital Territory
Australia*

Abstract

Sustainable development and climate change have been recognised as among the most important global challenges of our time. Yet, to date, only a small number of universities have made sustainability a central focus for institutional activities, curricula and student learning. This paper investigates the current context for the integration of a sustainability mindset as a value-based framework in higher education. Educational developers are potentially well positioned and institutionally skilled to support the implementation of a sustainability mindset enhancing diverse disciplinary cultures, future-ready curricula and student learning. Initial findings highlight the need for an institutionally connected vision, skills support for educational developers and academic staff and linkage to a critically reflective paradigm for continued improvement and engagement.

1 Introduction

Despite the increasing recognition of sustainable development and climate change as key global challenges, only a small number of universities to date have made sustainability a central focus across their institutional activities, curricula and student learning (Leal Filho et al., 2017). The research discourse on how to achieve this transition revealed that a “systemic and connected view of sustainability across institutions is required to transform the educational experience of students... a realignment of all activities with a critically reflective paradigm which also supports the construction of more sustainable futures” (Tilbury, 2011, p.2). The notion of the “reflective institution” was successfully demonstrated by Biggs (2001, 2014) in his research and implementation in Australia and Asia of constructive alignment of learning experiences via curricula to institutional values. Since then, the discourse has recognised the complexity of addressing epistemology, methodology and pedagogy in education for sustainability (O’Flaherty & Liddy, 2018).

Educational developers and curriculum managers are well positioned within the institutional structure and have the expertise across the diverse disciplinary cultures and critical conversations to be actively involved in transitions to more sustainable futures (Fraser, 2006; Debowski, 2014). How can educational developers support a shift towards a sustainability mindset in higher education for future-ready curricula and discipline learning?

The Sustainable Development Goals (SDGs) adopted by the United Nations represent the most recent and extensive framework for international implementation across member countries (Owens, 2017). Setting measurable goals and targets, the SDGs actively engage industry sectors, including higher education, across biophysical, social and economic systems

¹ ruge.gesa@gmail.com, +61 422 134 373

(Le Blanc, 2015). SDG No.4 focuses on “Quality Education” and includes targets and indicators which cover access and participation, early childhood, school, VET, higher education, skills, gender equality, education infrastructure and teacher training (Parkes, Buono & Howaidy, 2017). The aim is to advance global sustainable development whilst enhancing local and national long-term performance across its wide range of indicators (Sneddon et al., 2006; Sachs, 2012; Costanza, Fioramonti, & Kubiszewski, 2016). It can therefore be expected that the impact of sustainable development on decision-making in government, private and community sectors will continue to increase.

2 Education for a sustainability mindset

The increasing awareness of the limits of our planet and the slow pace of adaptation towards longer term sustainable development has resulted in increased discussion on the importance and role of education and sustainability. Current practice includes education about sustainability with a subject- and discipline-specific focus; education for sustainability, which is shifting towards a cross-disciplinary approach of addressing complex contexts; and education for a sustainability mindset. The latter aims for capacity building as a value-based approach able to reach across educational courses, disciplinary contexts and develop students’ capacity to contribute in their chosen careers and communities (Molthan-Hill, 2017; Cajiao & Burke, 2016). This has led to the introduction of the concept of the sustainability mindset advocating for a more holistic and dynamic approach to learning and teaching for sustainability (Kassel, Rimanoczy & Mitchell, 2016; Hermes & Rimanoczy, 2018). Many of these initiatives involve university educational developers’ expertise for implementation in institutional, faculty, individual course and unit level contexts (McDonald and Stockley, 2008; Baughan, 2015; Debowski, 2014).

The evolving definitions of sustainability perceptions and values focus on a broadened and multi-dimensional frame of reference across disciplinary boundaries with a focus on underlying beliefs and values for sustainable outcomes (Ruge, 2019). The three key sustainable mindset dimensions identified by Kassel et al (2016) include “being” or values, “thinking” or knowledge and “doing” or competency (Kassel, Rimanoczy & Mitchell, 2016). Recognising and making explicit the connection between values, knowledge and competency allows analysis of a complex context with an awareness of personal and institutional values and the development of more sustainable and innovative practice and outcomes.

3 Acknowledging educational developers’ skills and importance for sustainability mindset strategies

The current role and responsibility of educational developers in higher education has been recognised as increasingly diverse and complex (Clegg 2009; Shay, 2012). It includes educational policy and process, learning design and skills development, faculty engagement and training, supporting individual academics’ learning and teaching implementation, and institutional quality assurance and standardisation metrics, to name but a few of areas of responsibility (Harvey & Kamvounias, 2008; O’Neill, 2010; Fransson & Friberg, 2015). In addition, educational developers’ roles are well positioned within the organisational structure of universities to translate the strategic policy directions of institutional boards and leadership into educational procedure and guidance for practice implementation at faculty, discipline and unit learning levels.

The drivers for change are predominantly implemented as “top-down” or “whole of university” strategic plans, or as “bottom-up” discipline and faculty specific initiatives with internal and external stakeholder support for implementation (Ruge, Tokede and Tivendale, 2019). The literature identifies a number of constraints and barriers that educational development initiatives face. These include limited support and funding to engage academics and casual staff in educational training for teaching and learning (De La Harpe et al., 2000; Watty, 2003; Sumsion & Goodfellow, 2004). On the other hand, a key strength for educational development

strategies can be the motivation of discipline teams and individual academics, who are supported in their skills development to lead change in close connection with students, institutional stakeholders and employers (Entwistle, 2005; Blumberg, 2009; Mak, et al., 2013).

At the front lines of educational transitions towards sustainability, educational developers are rarely acknowledged as critical agents for change and adaptation. Yet that is what the shift towards a sustainability mindset implies, especially if there is to be a clear progression from strategic plan and operational goals to engaging academics in developing future-ready curricula and student skills and attributes.

In higher education, the three key attributes for a sustainability mindset defined by Kassel et al (2016) as “value, knowledge and competency” could take on a distinct meaning in terms of educational developers’ impact on institutional development. First, with awareness of “values” across institutional strategy, faculty culture and individual academics’ capabilities, educational developers are able to encourage academic colleagues to reflect, articulate and connect their values, beliefs and practices to future-ready curricula and student learning experiences. Second, they are able to connect “knowledge” and thinking from disciplinary fields to institutional policies, procedures and processes. This is important for long term integration of a sustainability mindset throughout university operations and course design, learning and teaching (Doppelt, 2012; Naeem & Neal, 2012; Parkes, Buono, & Howaidy, 2017). Third, “building competency” is at the centre of educational development’s day to day activities. As part of the sustainable mindset framework, it connects future-ready graduate skills and attributes for graduate employability with contributions to community and society at large. The literature calls for educational developers and educators to foster and promote sustainability attributes to influence students’ worldviews and their future potential towards more profound sustainability leadership and social change (Dobson, 2007; Young & Nagpal, 2013; Setó-Pamies & Papaoikonomou, 2016).

4 Conclusions

This paper has investigated the current context for the development of a sustainability mindset as a value-based framework in higher education. The key sustainable mindset elements of “value, knowledge and competency” suggested by Kassel et al (2016) were explored in the context of educational developers’ roles. This research opens up further conversations and future research opportunities on the process of and capacity for development of a sustainability mindset in higher education. It was proposed here that educational developers are potentially well positioned and institutionally skilled enough to support the implementation of sustainability mindset in diverse disciplinary learning cultures. Initial findings highlight the need for an institutionally connected vision and skills support for educational developers and academic staff in order to enable development and implementation of a sustainability mindset for future-ready curricula and student learning.

Acknowledgements

This research has benefitted from the feedback of IJAD reviewers and reflective conversations with participants at the ICED 2020 conference writing retreat.

References

- Baughan, P. (2015). Sustainability policy and sustainability in higher education curricula: the educational developer perspective. *International Journal for Academic Development*, 20(4), 319-332.
- Biggs, J. (2001). The reflective institution: Assuring and enhancing the quality of teaching and learning. *Higher Education*, 41(3), 221-238.

- Biggs, J. (2014). Constructive alignment in university teaching. *HERDSA Review of Higher Education*, 1(5), 5-22.
- Blumberg, P. (2009). Maximizing learning through course alignment and experience with different types of knowledge. *Innovative Higher Education*, 34(2), 93-103.
- Cajiao, J., & Burke, M. J. (2016). How instructional methods influence skill development in management education. *Academy of Management Learning & Education*, 15(3), 508-524.
- Clegg, S. (2009). Forms of knowing and academic development practice. *Studies in Higher Education*, 34, 403-416.
- Costanza, R., Fioramonti, L., & Kubiszewski, I. (2016). The UN sustainable development goals and the dynamics of well-being. *Frontiers in Ecology and the Environment*, 14(2), 59-59.
- Debowski, S. (2014). From agents of change to partners in arms: the emerging academic developer role. *International Journal for Academic Development*, 19, 50-56.
- De La Harpe, B., Radloff, A., & Wyber, J. (2000). Quality and generic (professional) skills. *Quality in Higher Education*, 6(3), 231-243.
- Dobson, A. (2007). Environmental citizenship: towards sustainable development. *Sustainable Development*, 15(5), 276-285.
- Doppelt, B. (2012). *The power of sustainable thinking: How to create a positive future for the climate, the planet, your organization and your life*. Routledge, New York, USA.
- Entwistle, N. (2005). Learning outcomes and ways of thinking across contrasting disciplines and settings in higher education. *Curriculum Journal*, 16(1), 67-82.
- Fransson, O., & Friberg, T. (2015). Constructive alignment: from professional teaching technique to governance of profession. *European Journal of Higher Education*, 5(2), 141-156.
- Fraser, S. (2006). Shaping the University Curriculum through Partnerships and Critical Conversations. *International Journal for Academic Development*, 11, 5-17.
- Harvey, A., & Kamvounias, P. (2008). Bridging the implementation gap: a teacher-as-learner approach to teaching and learning policy. *Higher Education Research & Development*, 27(1), 31-41.
- Hermes, J., & Rimanoczy, I. (2018). Deep learning for a Sustainability Mindset. *International Journal of Management*, 16, 460-467.
- Kassel, K., Rimanoczy, I., & Mitchell, S. F. (2016). *The sustainable mindset: Connecting being, thinking, and doing in management education*. In Academy of management proceedings (Vol. 2016, No. 1, p. 16659). Briarcliff Manor, NY 10510: Academy of Management.
- Le Blanc, D. (2015). Towards integration at last? The sustainable development goals as a network of targets. *Sustainable Development*, 23(3), 176-187.
- Leal Filho, W., Wu, Y.-C. J., Brandli, L. L., Avila, L. V., Azeiteiro, U. M., Caeiro, S., & Madruga, L. R. d. R. G. (2017). Identifying and overcoming obstacles to the implementation of sustainable development at universities. *Journal of Integrative Environmental Sciences*, 14(1), 93-108.
- Mak, A. S., Barker, M., Woods, P., & Daly, A. (2013). Developing intercultural capability in Business faculty members and their students. *International Journal of Organisational Drivers*, 12(1), 49-59.

- McDonald, J., & Stockley, D. (2008). Pathways to the profession of educational development: An international perspective. *International Journal for Academic Development*, 13(3), 213-218.
- Molthan-Hill, P. (2017). *The business student's guide to sustainable management: Principles and practice*. Routledge, New York, USA.
- Naeem, M., & Neal, M. (2012). Sustainability in business education in the Asia Pacific region: a snapshot of the situation. *International Journal of Sustainability in Higher Education*, 13(1), 60-71.
- O'Flaherty, J., & Liddy, M. (2018). The impact of development education and education for sustainable development interventions: a synthesis of the research. *Environmental Education Research*, 24(7), 1031-1049.
- O'Neill, G. (2010). Initiating curriculum revision: exploring the practices of educational developers. *International Journal for Academic Development*, 15, 61-71.
- Owens, T. L. (2017). Higher education in the sustainable development goals framework. *European Journal of Education*, 52(4), 414-420.
- Parkes, C., Buono, A. F., & Howaidy, G. (2017). The principles for responsible management education (PRME). the first decade—what has been achieved? The next decade—responsible management education's challenge for the sustainable development goals (SDGs). *The International Journal of Management Education*, 15(2), 61-65.
- Ruge, G., Tokede, O., & Tivendale, L. (2019). Implementing constructive alignment in higher education—cross-institutional perspectives from Australia. *Higher Education Research & Development*, 38(4), 833-848.
- Ruge, G. (2019). Managers' sustainable development perceptions and practices: An investigation in the Australian building and construction sector (PhD thesis). Retrieved from https://www.researchgate.net/profile/Gesa_Ruge/publication/338187402_Managers'_sustainable_development_perceptions_and_practices_An_investigation_in_the_Australian_building_and_construction_sector/links/5e05a5384585159aa49d47d9/Managers-sustainable-development-perceptions-and-practices-An-investigation-in-the-Australian-building-and-construction-sector.pdf
- Sachs, J. D. (2012). From millennium development goals to sustainable development goals. *The Lancet*, 379(9832), 2206-2211.
- Setó-Pamies, D., & Papaoikonomou, E. (2016). A multi-level perspective for the integration of ethics, corporate social responsibility and sustainability (ECSRS) in management education. *Journal of Business Ethics*, 136(3), 523-538.
- Shay, S. (2012). Educational development as a field: are we there yet? *Higher Education Research and Development*, 31 (3), 311-323.
- Sneddon, C., Howarth, R. B., & Norgaard, R. B. (2006). Sustainable development in a post-Brundtland world. *Ecological Economics*, 57(2), 253-268.
- Sumsion, J., & Goodfellow, J. (2004). Identifying generic skills through curriculum mapping: a critical evaluation. *Higher Education Research & Development*, 23(3), 329-346. doi:10.1080/0729436042000235436
- Tilbury, D. (2011). Higher education for sustainability: a global overview of commitment and progress. *Higher Education in the World*, 4(1), 18-28.
- Watty, K. (2003). When will academics learn about quality? *Quality in Higher Education*, 9(3), 213-221.
- Young, S., & Nagpal, S. (2013). Meeting the growing demand for sustainability-focused management education: a case study of a PRME academic institution. *Higher Education Research & Development*, 32(3), 493-506.