

Education for sustainability in higher education: the Asia-Pacific region

The construct of the Asia-Pacific region is relatively well referenced and defined, reflecting decades of studies on the immense diversity of the region's social and geographical composition. The region involves countries in the Pacific basin: the East Asian countries of Japan, China, Taiwan, Hong Kong and the Koreas; South-East Asia; Australia; New Zealand; Russia; the USA; Canada; Mexico; Peru; Chile; Colombia; Ecuador; Central American countries; and the states of the Pacific islands of Fiji, Papua New Guinea, Melanesia, Polynesia and Micronesia. The region includes one of the world's largest countries – China with its population of 1.3 billion, as well as one of the smallest countries – The Republic of Nauru with less than 10,000. The region is characterized by an immense diversity of languages, religions and cultures, as well as the high degree of inequality, with the most developed and poorest countries sharing the social, economic and environmental uniqueness of the Pacific Rim.

Discussion about sustainable development (SD) of the Asia-Pacific region gained its focus in the 1980s (UNESCO and UNEP, 1977, 1987; United Nations, 1987, 1992) and evolved in two stages. In its first stage from the 1980s to the early 1990s, the discussions mainly focused on the issues related to economic sustainability of the region. In response to the fast economic advances of the area, scholars (Elliott, 2012; Watters and McGee, 1997, to name a few) celebrated, criticized, condemned, investigated and analyzed the phenomenon and myth (Berger, 2004; Terry, 2015) of the Asian economic miracle led by Japan and the East Asian “Tiger” countries of Taiwan, the Republic of Korea, Hong Kong and Singapore.

However, the region paid for its rapid economic advancement with an environmental toll, which has quickly become a concern. This outcome then merged the economy-focused SD discussion, primarily within the environmental arena of studies (Elliott, 2012; Kawai and Lee, 2015). The link between the economy and the environment of the region was established to fit the early framework of sustainability discourse (Dryzek, 2005, p. 16), characterized with:

[...] imaginative attempts to dissolve the conflicts between environment and economic values [...] [when] the concept of growth and development are redefined in ways which render obsolete the simple projection of the limits discourse.

labeling states of both economic and environmental affairs in the Asia-Pacific with a “crisis” tag. Elliott (2012) described an addition of the “green growth” (UNESCAP, 2010; World Bank, 2005) theme to the SD discussion as a “global green new deal” for the region, where greening local infrastructure on behalf of the governmental stimulus packages would not necessarily establish a safe link between the environment and the economy.

Yet, what role does higher education play in the context of these evolving discussions of SD in the Asia-Pacific region? This supplementary issue addresses this question by emphasizing contextualization, which involves the construction of a specific worldview, and which accepts the SD of Asia-Pacific based on two ideas. The first idea in this worldview is that the sustainability of the region was largely affected by Western colonization and that the existing Western-generated sustainability discourse,



including its manifestations in the region's higher education arena, might be viewed as part of the post-colonial negotiation. The second element in this mindset derives from the deep connection of the region's SD with authentic traditions and philosophies, based on the ancient views on the relationships between humans and nature (Meinert, 2013; Savelyeva, 2016).

The mainstream sustainability-related research is based on the assumption that sustainability is universal, hence, globally applicable (Savelyeva and Park, 2012). However, it is undeniable that sustainability is also specific to diverse contexts and, therefore, its meaning in higher education research varies across cultures, places and time. How do internationally accepted SD views and policies play out in the diverse and vast region of the Asia-Pacific? Conversely, how could higher education institutions in the Asia-Pacific countries illuminate our understanding of the mainstream sustainability discourses? Approaching Education for Sustainability (EfS) with a mindset of East-West negotiation and acknowledging culturally specific ecological traditions within this vast and diverse region, this special issue emphasizes contextualization; appraises emerging ideas and practices surrounding the notion of sustainability in the context of Asia-Pacific higher education; and examines the increasing integration of the Asia-Pacific region's higher education in the globalized sustainability discourse in its contextual complexity.

Consistent with these aims, the authors from Australia, South Korea, Hong Kong, Thailand and Japan built their discussions on a range of empirical and conceptual topics to expand scholarship in relatively under-explored curricula, theoretical and policy related areas of sustainability in Asia-Pacific higher education.

In their paper, *Wheels of change in higher education: A collaborative, multi-stakeholder project as a vehicle for sustainability education*, Kristin Warr Pedersen, Emma Pharo, Corey Peterson and Geoffrey Clark from The University of Tasmania in Australia discuss how the Academic Operations Sustainability Integration Program promotes the collaboration of operations staff with Learning and Teaching – embedding on campus living laboratory activities into the curriculum. Using an end of trip bicycle facility as a case study, the authors highlight a challenge of generating a cultural shift toward re-conceptualizing Australian EfS as a holistic, whole-of-institution approach.

Young Ha Cho in the paper *Towards an Engaged Campus: Measuring and Comparing Definitive Stakeholders' Perceptions of University Social Engagement in South Korea* explores an idea of social engagement as the way to revert the unsustainable institutional drive for creating world-class and research-driven university structures which might lead South Korean universities to lose their identities. Reporting social engagement, as being viewed negatively by university staff, the study then suggests several ways to encourage increased faculty engagement with the public, developing an idea of authentic leadership as a starting point for decision makers.

Greening of a campus through waste management initiatives: Experience from a higher education institution in Thailand by Visvanathan Chettiyappan, Tangwanichagapong Siwaporn, Nitivattananon Vilas and Mohanty Brahmanand addresses challenges of volunteer-led projects on one of the Thailand's university campuses through an investigation of the three-dimensional waste segregation and recycling projects. Their findings suggest that there is no relationship between

students' sustainability knowledge, attitude, awareness and their recycling behaviors in the context of Thailand. The authors suggest a holistic, fiscal-based policy approach to support insufficient voluntary recycling initiatives held by universities in the country.

Tamara Savelyeva and Will Douglas in the *Global consciousness and pillars of sustainable development: A study on self-perceptions of the first year university students* provide insights into the challenge of implementation of the United Nations-based sustainable development model in the Hong Kong education system through the formal liberal studies curriculum. Along with the theme of this volume, the study findings highlight the importance of culturally sensitive sustainability views and values, which might not be detectable by linear quantitative measures. It was discovered that authentic sustainability beliefs are evident in students' reflective notes and manifest in the city's social movements.

Education for sustainability using a campus eco-garden as a learning environment by Chi Chiu Cheang, Winnie Wing Mui So, Ying Zhan and Kwok Ho Tsoi explores a process of creating a Chinese ecogarden as a powerful learning environment, built through challenging and culturally determined interactions between garden designers and university officials. The ecogarden structure fosters a participatory process in designing relevant sustainability teaching-learning activities.

In *Education and capacity building with research a possible case for Future Earth*, Yasuhiro Fukushima, Andrew Komasinski, Reiko Omoto Gakushi Ishimura and Shunsuke Managi map out an education and capacity-building framework for implementing a regional framework *Future Earth* in the Asia-Pacific Region. A long-term strategy to improve communication and decision-making systems is suggested. The authors view this framework as a specific way to build capacity, responding to the risks and opportunities raised by global environmental changes in Japan.

The collection of papers in this volume suggests that it is not enough to simply embed sustainability content into local curricula. Universities in the region themselves must "walk the talk" with respect to sustainability with respect to their own traditions, concerning human-nature relationships (Rickards *et al.*, 2015). Whereby they co-create sustainability pilots and projects on and off the campuses, in a way that allows universities to embed sustainability ideas into local curriculum and provides students with genuine experiences (Savelyeva and McKenna, 2011; Savelyeva, 2012, 2013; Scott *et al.*, 2012; Ryan *et al.*, 2010).

Another suggestion from the volume is that higher education institutions in the region are responsible for not only providing students with a skillset but also a mindset (Denby and Rickards, 2016), awakening students to the richness of millions of years of culture and history which intrinsically linked self and nature as one – before we got side tracked by unsustainable ideologies of capitalism and consumerism.

A shift to becoming a sustainable and purpose driven society will put a demand on universities to generate mindful, sensible and purpose-driven graduates, as well as for universities to operate as purpose-driven institutions. This might then set a momentum for establishing connected conscious communities (Walsh, 2016) at the

regional and international levels, which would ignite a move toward not only a sustainable society but also a restorative and regenerative one.

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