

Announcement

Special Issue: Systems Education for a Sustainable Planet

Ockie Bosch ^{1,*} and Robert Y. Cavana ^{2,*}

¹ Systems Design and Complexity Management, Business School, The University of Adelaide, 10 Pulteney Street, 5005, Adelaide, Australia

² Victoria Business School, Victoria University of Wellington, P.O. Box 600, Wellington, New Zealand

* Authors to whom correspondence should be addressed;

E-Mails: ockie.bosch@adelaide.edu.au (O.B.); bob.cavana@vuw.ac.nz (R.Y.C.);

Tel.: +61-8-8313-6460 (O.B.).

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We live in a world in which complexity characterizes all human endeavors today, such as healthcare, economic development, environmental protection, gender relationships, poverty, mental health, business management and social responsibility (just to name a few). The issues facing our world have become increasingly complex due to the fact that they are embedded in a global web of ecological, economic, social, cultural and political processes and dynamic interactions. These complex problems and challenges cannot anymore be addressed and solved in isolation and with the single dimensional mindsets and tools of the past.

One of the most challenging conceptual and practical issues today is that our society and economy have to craft innovative approaches to building capacity to rapidly redesign for the new world we are living in. It is this capacity to redesign, in systems and sustainability terms, that will increasingly be what society will require.

This “requirement” has globally become one of the biggest challenges for education. Educators have to ensure they meet the growing need for graduates, from all areas of interest, to have not only an understanding of the disciplines they study, but also a realization of how they fit into societal and global systems in a century when humanity will meet ever more limits.

Systems thinking and dynamic approaches offer a holistic and integrative way of appreciating all the major dimensions of a complex problem and are essential mechanisms to help achieve the attributes that industry wants from future graduates. This demand for a systems-based focus in the education of all disciplinary areas is very rapidly increasing in global society. However, it creates a significant pedagogical challenge in that current university education tends to be focused on discipline specific teaching which has no room for a wider systems approach. Didactic autonomous discipline

based courses fail to foster a social networking culture that has been proven to enhance the process of deep learning, nor do they promote interactions with other students in other disciplines. To address this problem we need innovative curriculum designs and learning environments that address academic paradigms as well as industry requirements.

This special issue will highlight several of the key developments in the area of systems education and how the many challenges are being addressed.

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