

BOOK REVIEW

THE FUTURE OF SUSTAINABILITY EDUCATION AT NORTH AMERICAN UNIVERSITIES

REVIEWED BY

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Krogman, N. (Ed.), and Bergstrom, A. (2022). *The Future of Sustainability Education at North American Universities*. University of Alberta Press. Pages: 231. Price: USD 34.99 (paper-

As one of the world's top fossil-fuel production countries, Canada has a large oil and gas industry. In 2021 extraction represented "18.6% of Canada's total energy used...and...23.2% of Canada's total GHG emissions" (Statistics Canada, 2023). Naomi Krogman and Apryl Bergstrom's book discusses sustainability initiatives. It is well timed, carefully nuanced, and realistic in its goals. It is a call to action. The transformative agenda is targeted to a wide audience, primarily aimed at aspirational change agents. It spotlights various roles that universities can play to foster urgency.

Conceptualizing sustainability education as a means to inform a better world, the introductory chapter by Naomi Krogman states that differing human values add to messiness but asserts that with a commonality of voice, diverse approaches and pathways can support and promote sustainable practices. In the first chapter, entitled "Charting the Landscape," Apryl Bergstrom provides a mini scoping review of the literature and offers six recommendations for change in learning approaches (p. 11). This is a real gem, as fostering active and participatory learning, especially if linked with universal design for learning principles or learning outcomes, can lead to positive change.

In the first themed section, the administra-

tor's point of view, Roger Epp's chapter "A View from the 'Dark Side,'" is worth the investment in reading time. Epp adds the importance of *place* into the conversation, and while not specifically referencing the United Nations Brundtland Commission's 1987 definition of sustainability, "meeting the needs of the present without compromising the ability of future generations to meet their own needs" (United Nations, n.d.) he enlightens readers about the difficult juggling act that senior administration often has to play to balance competing interests. Epp uses Aristotle's concept of *phronesis*, "a practical wisdom shaped by experience and marked by a capacity for judgment, the virtue of knowing how to apply sound principles in complex situations toward some good end" and posits that it is possible to champion a cause, and "conven[e] conversations across...solitudes" (p. 41). Christopher G. Boone's guiding philosophy (chapter 3) is based on core concerns and grounded on environmental justice, human well-being, and social equity. Acknowledging that describing a desirable future is a normative challenge, Boone argues for changes to tenure and promotion practices and an integrated systems approach for advancing goals through education and competency frameworks. An example of place-based practice can be found

in Robert H. Jones's chapter 4, "How trends in public higher education can support sustainability education and research." Students and faculty in the school's natural resource programs, with the support of the administration, restored acreage to native prairie.

Skill sets and research capabilities are the themes in the second section. Robert E. Megginson (chapter 5) helps us to appreciate and understand tribal colleges and the unique role of Indigenous peoples as the "Keepers of the Earth" (p. 77). Vicky J. Sharpe's chapter 6, while a little more complicated to read, is extremely interesting. Crusading for "clean capitalism" (p. 102), Sharpe offers a private sector perspective, discusses innovation and risk, and offers valuable suggestions for small dollar, privately invested start-up ventures including incubator hubs and accelerators. These pre-commercialized initiatives are not antiliberal. They offer a means to progress toward green goals by shifting emphasis from capital returns as drivers to technology development and demonstration. Thomas Dietz (chapter 7) bookends the section and provides the audience with an excellent resource paper that could be used as a foundational reading for a course on sustainability, as it moves the discussion beyond a zero-sum discourse argument.

Problem-based learning (PBL) is the theme of the third section. Ann Dale (chapter 8) and Shirley M. Malcolm (chapter 9) share experiences and offer solutions. "Big sticky questions" (p. 136) derived from "super wicked problems" (p. 135) are addressed by Dale who argues that traditional disciplinary silos need to change. Learner-centred, action-oriented learning is offered as the way forward, using case studies and a PBL approach. Malcolm provides an African American perspective and draws attention to the environmental damages of past industrial practices in Birmingham, AL. Readers looking for ways to incorporate sustainability issues into a broader curriculum will find that this chapter could be used to support other materials to frame a discussion of environmental racism, corporate environmental violence, and inequitable past practices.

Two papers themed around cultivating civic mindedness, deliberative dialogue, and public good are included in the fourth section. Toddi A. Steelman (chapter 10) argues that academia has an opportunity to promote respectful discourse and deliberation, and posits that the mission of the university should be extended to include the security of common interests. An extended role for faculty and administration would include identifying and articulating goals and addressing credibility gaps in social media sources that downplay, spin evidence, or present fake news. Patricia E. Perkins's (chapter 11) "Education for Regeneration" brings an Indigenous and anti-colonial perspective and calls for globalized capitalism to be replaced. It will challenge most readers to engage, and others to take issue with the call to end government subsidies to the fossil fuel industry.

The last section provides the perspectives of the professor and students. Alison F. W. Geobel (chapter 12) seeks to move the conversation beyond "doom and gloom" and features an ecological citizenship approach where humans and natural systems are defined and conceptualized in terms of "thriving" (p. 190). Kourosh Houshmand (chapter 13) provides the student's standpoint and suggests that a new generation of thinkers and consumers are looking for technologies, brands, and services that incorporate sustainability principles. In the concluding chapter, Krogman continues the call to action and reiterates the role that higher education institutions can play in aiding the next generation of decision makers, practitioners, citizens, and consumers to develop a new worldview.

This book is packed full of ideas and practical examples. The authors recognize that change takes time. Concerning the Canadian context, one must note that while the editors and contributing authors recognize the interdisciplinary and transdisciplinary aspects of sustainability, it would have been very interesting to extend the discussion to include contributions that: (a) describe any examples of existing technological fixes that reduce the environmental footprint, (b) provincial differ-

ences in economies and industry sectors that may underpin divergent viewpoints and contribute to the “juggling act,” and (c) scientific and technical initiatives in the research and development stage that may assist in mitigating further environmental damage, or aid in cleanup or remediation efforts. These would add another dimension to the deliberative dialogue and foster a broader conversation. While this may seem to be a controversial call for additions to a book with a green transformative agenda, the silent elephant in the room deserves a voice. Higher education in Canada is not a novice to hosting difficult conversations, and universities can provide a space for unfettered discussion. Our students need to hear divergent and controversial positions. They are the change agents of the future.

References

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