

them uncover their strengths and weaknesses, and acquire solid communication, team work and facilitation skills, but he does not state whether the program 'laid the foundations for a new kind of poverty-alleviating professionalism among the Ugandan agricultural professionals' (p. 175). Thus we do not know whether such a program will be a solid step toward making African universities more developmental; that is, whether it will have any impact on how agricultural students are educated so they too possess the competences and skills for facilitating social learning. The project feels somewhat unfinished, as if some of his assumptions needed to be further tested. This may leave some readers unsatisfied and doubting Kibwika's approach. However, for my mind, Kibwika's wonderful insights into the social learning systems of farmers counterbalance this. That itself bodes well for the future of farming in the Sub-Sahara. My hope is that since the time of this book's writing some advances have been made in the university agricultural profession responding to and complementing the type of social learning Kibwika describes.

Adam Rajčan has studied in the Czech Republic, Canada and Australia. He recently completed Sociology Honours at La Trobe University, Australia considering Bourdieu's visual sociology as a methodological approach. He has a journal manuscript under review examining a series of photographs developing a concept of suburban class habitus.

A primer for teaching environmental history: ten design principles

Emily Wakild and Michelle K. Berry, Durham: Duke University Press, 2018

Reviewed by Ian Thomas, School of Global, Urban and Social Studies, RMIT University, Melbourne, Victoria, Australia

Unusually for academics, the authors consider that it is important for the reader to appreciate the context of their writing. To do so they provide a Preface, titled 'How to make use of this book', in which they outline their relationships to teaching environmental history at university level, and to the natural environment. Equally unusually, they provide considerable detail about the way they structure their course/subjects, and that this structuring is based on the development of objectives for the students' learning. While this may seem 'basic', in many descriptions of curriculum it is not common to see any clarity about the purpose of that curriculum, in terms of what students are expected to gain.

With this promising start I was disappointed to find that the writing style did not appeal — to me. The narrative style makes finding the key insight hard to identify, and return to. However, others may prefer the style. Since the book is titled a 'primer', I anticipated that critical information would be made to stand out; in this case, subheadings would greatly assist. Yet, as I persisted, I found that the authors 'won me over' with their passion and intelligent thoughts on teaching complexities of the environment. To a large degree there is not a lot in the *Primer* that is new; emphasis on the systemic nature of environment and environmental issues, and the importance of deep-learning (through involving students in group projects around current, relatable, topics) are both key elements of environment and sustainability education. But the authors have provided tangible examples of how these concepts, which can be obscure and threatening to the 'uninitiated', can be made the bedrock of undergraduate teaching.

The authors both have a strong background in the discipline of history, teaching students of history in small-to-medium sized classes, and their main aim is 'to provide strategies for designing a new course on environmental history' (p. 3). Also, they teach in the United States, so almost the entire focus of the *Primer* is on this discipline, and this geography. The role of other

disciplines in environmental matters is often raised, and an instance is provided of team-teaching with an ecologist; this was for an extended field-trip, which in the current context for Australian higher education would be pretty unlikely. Yet, the impression is that their material and insights are relevant only to history. Further, a limitation for those teaching in other continents is that the vast majority of material presented, and examples referred to, are North American.

However, despite these limitations, once the reader focuses on the ways in which the authors use local or current environmental issues (especially those associated with environmental justice) to develop student interest and active engagement, there are opportunities to see how the approaches presented in the *Primer* could be applied in other contexts. As the authors note, their secondary aim is 'to deliver ideas for infusing environmental history into other courses' (p. 3). This seems to set the scene for the first chapter, which uses food to discuss the interconnections of natural and human systems. Then, to provide structure for those courses, the second chapter outlines the need to determine course objectives, or learning outcomes, around which the course would be tailored; the authors propose identification of 'four to six clear, attainable, measurable, and specific skills your students will have practiced and hopefully mastered by the end of the course' (p. 28). Environmental history is seen to examine the relationships between human and non-human nature, so Chapter 3 starts with the example of llamas to explore the range of relationships and how these can be used to engage students with the course material and the underlying ideas. Into this mix are thrown descriptions of the assessment tasks that have been used in the authors' classes, but no indication is provided of any evaluation results related to this teaching and assessment approach. As there is little information provided about how the educational experiences are perceived by the students, many comments and claims have to be gauged against the reader's own experiences; for example, that experiencing a field-based project, for students, the 'results are life-changing' (p. 83) could do with some evidence (a very difficult assessment exercise), or 'toning down'.

The second part of the book, titled 'Pathways', contains three chapters that provide ideas for multidisciplinary teaching covering: aspects of science, especially emphasising the value of field-work; land, in the context of 'sense of place' for investigating new places, and historic preservation; and energy and water. Water, especially, is considered a 'perfect conduit for (the) learning objective (of connecting various approaches to history, as it) allows us to bring the history of labor, politics, race, gender, and technology to bear on a single place or moment in time' (p. 105). The biophysical environment seems to be ignored in this enthusiasm, but gains some mention when energy, particularly related to climate change, is discussed.

Part 3, 'Applications', also has three chapters, to 'offer suggestions for ways of incorporating the application of diversity, technology and assessment into . . . course design' (p. 114). First, environmental justice is seen to be an effective lens to develop understanding of human equity and interaction with biophysical environments, especially when undertaken through group projects involving role-play exercises. Here the authors provide detail of the way they have set up and assessed such projects, and their enthusiasm for the value of the pedagogy can be felt; similar to the experience of others who have used role-plays. 'Tools', the second last chapter, outlines a range of electronic options for use in the classroom and/or by students generally. While the authors indicate enthusiasm for the chances of getting students engaged in a range of possible pursuits, there is little discussion of whether students' learning is enhanced by the technology. Raising possibilities for combining different information delivery mechanisms (e.g. lectures, videos) provides a useful overview of possibilities, if the reader has not come across these ideas before.

As usual, at the conclusion of a course there is an assessment; so, too, does the *Primer* conclude with 'the Test'. Covering assessment methods, rubrics and writing, the chapter indicates enthusiasm for assessment tasks where students have to write, since 'words and sentences are the instruments that move students' thoughts into new patterns and ideas' (p. 148). The value of project-based learning is again outlined, especially that it enables performance-based assessment, and teachers have the chance to evaluate students' understanding of the issues, not just their knowledge of the issues; unfortunately, no specifics about performance-based assessment are provided.

More broadly though, possibilities for involving students in the development of rubrics and assessment criteria are discussed, offering the potential for increasing student engagement in the classes and learning process, since there are 'opportunities to engage with students about their learning, while they are learning' (p. 144).

Overall then, this *Primer* is of limited use for educators in the 'other than' history disciplines, or outside North America. Even for an historian wanting to revamp or develop a course about environment or sustainability, the *Primer*, by itself, does not deliver a near fleshed-out curriculum. Rather, its value lies in the ideas discussed in relation to the pedagogy that is important for the delivery of learning for environment, and broadly, sustainability.

Ian Thomas is an Honorary Associate Professor at RMIT University in Melbourne, Australia, and before his retirement taught into undergraduate and postgraduate environmental policy programs, as well as writing on environmental impact assessment, environmental policy, and environmental management systems. In his research, Ian has investigated the issues of embedding environmental education and sustainability education in the curricula of universities, examined the status of tertiary environmental programs, and investigated employment of graduates from these programs. His recent research has focused on capacity building of academics to support Education for Sustainability curriculum, and the graduate capabilities sought by employers in relation to sustainability.

The world we'll leave behind: grasping the sustainability challenge

William Scott and Paul Vare, London: Routledge, 2018

Reviewed by Suresh Ramanan, 'Suresh Subha Illam', Indira Nagar, Thirunagar, Madurai, Tamil Nadu, India

Very rarely, it seems to me, do we stumble upon books that are precise, extremely useful, and timely. This distinctive publication is one of its kind from the authors: William Scott and Paul Vare. The book has an unexpected number of 56 chapters, which may sound strange initially. However, the authors have made clear in the introduction chapter regarding the content that they intended for the readers that 'neither is it a toolkit, self-help book . . . We set out to summarize ideas in a way that will help you join in the public and political debate and help you to think about the state of the world that we shall all leave behind' (p. 2).

The authors are selective and comprehensive about the content of each chapter. As the title of the book clearly portrays, the action that all of us need to do is to 'grasp the sustainability challenge'. In Part 1, the authors list the environmental issues, followed in Part 2 by explanations of the concepts pertaining to the issues, and finally, Part 3 lists strategies to provoke our minds.

In Part 1, the authors list 20 environmental issues such as global warming and climate change, gender disparity, economic inequality, natural resource depletion, and so on. Each issue is detailed as an individual chapter. While most of these chapters are themed on familiar topics, Chapter 13 is titled 'Elephants, Rhino and Donkeys', and it is about the decline in the populations of elephants and rhinoceroses. Globally, attempts are made to protect these animals by organisations such as the International Union for Conservation of Nature, World Wide Fund for Nature and many more. But why are donkeys connected with elephants and rhinoceroses? The authors portray the horrific story of donkeys exported to China from African countries for various reasons. Similarly, the authors bring out the bleak reality of other issues, such as the increased consumption of meat, migration of humans, and many more in the rest of the chapters. Finally, Chapter 20 concludes with the concept of biocentrism, which is 'the ethical perspective which says that all life has equal