Recommendations for Open Educational Textbooks for Introductory Human and Physical Geography / David Lyons / March 2021

During March 2021 I researched open source (Open Educational Resources – OER) textbooks in 1000 level / undergraduate Human and Physical geography. These are the primary courses I teach at Century College. Note: I noticed that there are also open source textbooks in World Regional geography and GIS but did not review them.

Methodology: I perused the following resources / depositories using the very helpful OER Resources site through the Century College Library and Faculty Development online sites: BC Campus Open Textbook Collection, Libre Texts, Mason OER Metafinder, Merlot, OASIS, OER Commons, Open Textbook Library, Opendora, Openstax, and Skills Commons. The sites were easy to search, navigate, and the textbooks easy to access. I only encountered one that I could not open – "site not found". The same books appeared in multiple searches. Of these, I found the Merlot, Mason OER, and Libre Texts sites to be most helpful. Only books that are geared toward the lower division undergraduate college level, and those with publication dates of 2018 to present were examined. In my comparisons, I focused on the same chapters / modules for all books. For physical geography I focused on chapters covering these topics: 1) ecosystems, energy and matter, material cycles, etc.… 2) Intro to the atmosphere – its composition, structure and functions, weather and climate, etc… 3) Sun, heating of the Earth, temperature, etc.… 4) Pressure and winds, etc.…. 5) Water's occurrence and atmospheric moisture – humidity and condensation, clouds, fronts and storms, etc.… For human geography I studied and compared chapters on population, migrations, and languages. I examined about four-five textbooks for each course.

Findings / Summary: I was surprised to find more open source textbooks in both human and physical geography than I was anticipating. Most of them were inadequate compared to the textbooks I am using now: being too short, not academic enough – not written using college level scientific language, poorly illustrated, having errors, not properly explaining concepts, written for AP Geography, not engaging, some reading like wiki type sites. None of them were up to the overall quality of the textbooks I use now. Few were written by university professors. I found some of the books be plain in appearance and similar in content. Not surprisingly, publisher supported textbooks have many advantages over OER books– bigger budgets, a lengthier peer review process, superior appearance and graphics, greater compensation for authors, etc.… **All this being said, in both physical and human geography, I did find one book that I would rate highly and even consider adopting.**

During this process, I also looked at another option, which is exploring options regarding my current textbooks. In physical geography, I have used "Physical Geography" by Hess (Pearson) for many years. There has not been a new version released since 2017, so I am using the latest 12th edition. It is one of the 2-3 most popular books used in introductory physical geography. It is thorough, scientifically sound, well written, and has excellent graphics. It also has substantial online supplementary materials. One problem I find with this book however, is that it is heavy on content, and students, though generally remarking favorably on the book, can get overwhelmed by its detail. And it is still a bit pricey. Used copies on Amazon are priced at about $80-$100 and rentals are hard to come by. Thus, I am open to and interested in exploring other options for my textbook requirements. Moreover, nearly all of the content, graphics / illustrations, study guides, tests, and lab exercises that I use I have developed myself, and therefore I am less dependent on a textbook. In Human Geography: I have been using "The Cultural Landscape: An Introduction to Human Geography" by Rubenstein (Pearson) for several years as well. Students speak favorably of the textbook. It is well written – readable - and uses lots of examples and

has great visuals – maps, charts, etc…. And it is written using college level social science language, so it is a good fit for students striving to gain the MNTC Goal 5 competency. Though a 13th Ed. Is in use, I am still using the 12th Ed (2017). My rationale is that updated additions generally carry over all the same basic content from the previous edition and mainly feature update examples. Thus the 12th Ed. Does not cover the Trump presidency, COVID-19, etc…. I will try to stay with a textbook for about 5-6 years. In addition, a softcover 12th Ed. is available. Therefore, students can buy the book for a reasonable $30-60 (I also have 1-2 copies on library reserve for students). Some rentals are available too for about $20. In conclusion, I am more inclined to stick with this book for one more year – but see my notes below on the Graves text.

My review of textbooks:

Physical Geography

Textbook	**Notes**
Dastrup, R. Adam. "Introduction to Physical Geography" 2019	OK: heavily reliant on videos, content inadequate, light on content and depth, not engaging, reads like a website
Lenkeit-Meezan, K. Allison. "Physical Geography" (LibreTexts) 2019	OK: just covers the basics, light on content and introduction of some key concepts, poor diagrams, some sidetracking, could be more engaging
Patrich, Jeremy. "Physical Geography" (College of the Canyons) 2020	Good: well written, some key concepts and content is missing, author delves into personal interests at times at the expense of core concepts
Pidwirny, Michael. "Fundamentals of Physical Geography" (California Open Ed Resource Council) 2019	Very good! Detailed, college level writing, sound physical science, written by a university professor (UBC-Okanagan). Divided into short sections, very readable. Downsides: has ads – maybe these can be removed. Also - not in PDF form so reader has to "go back" to advance to each new section, some diagrams were not loading. Author is working on a PDF / updated version. Overall – **I would feel comfortable adopting this textbook for fall 2021.**
Swift, Cathy. "Physical Geography" (Lumen Learning) 2018	OK: light on the science, insufficient content, many key concepts not covered, some errors, decent graphics.

Human Geography

Textbook	**Notes**
Dastrup, R. Adam. "Introduction to Human Geography" 2020 (Salt Lake Community College)	OK: Relies on a lot of YouTube videos, Text inadequate – light on content and depth. E.g. coverage of human migrations is 2 pages in total!
Dorrell, David, and Henderson, Joseph. "Introduction to Human Geography" (LibreTexts) 2020	OK: Uses conversational language style, inadequate for college level social science requirements, some sidetracking while many key concepts not covered, poor diagrams, some typos. There is another similar open source human geography text by Dorrell.
Graves, Stephen "Introduction to Human Geography" (Geography Planet) 2020	Very Good! Engaging and readable, contemporary, cutting edge, good social science content. The problem with this text is that it is so different from the curriculum I have developed, and the standard format for introductory human geography, that I would have to substantially overhaul my course to incorporate this book. For example, there are chapters on gender /sexual orientation and crime / punishment, but not chapters on population or migration (though these concepts are introduced into other chapters). If an instructor is just starting out

	or is interested in overhauling / reinventing their human geography course, **I would recommend an examination of this OER textbook.** The author is a U Cal Northridge professor.
Puyallup School District, "Human Geography" 2018	OK: readable and worthy book but targeting AP Human Geography. Poor graphics and inadequate coverage of some topics.