

Slimmer, Brighter, and Nearly Perfect: The New Big History Textbook Is Here

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Rarely has the appearance of a new textbook been the cause of such delight as broke out amongst the First Year Experience faculty at Dominican University of California in August 2013. The book that triggered such reaction is a seemingly unassuming volume, *Big History: Between Nothing and Everything* (2013), written by historians David Christian, Cynthia Stokes Brown, and Craig Benjamin, and published by McGraw-Hill. Why was the book greeted with such enthusiasm, you might ask? Was it that the world needed another textbook on history? That the Dominican faculty felt a special bond with one of the authors, Dominican professor *emerita* Cynthia Brown? That a First Year Experience is more appealing when it uses an actual textbook with color and attractive images? The answer to all of those questions is “yes,” and yet, there was more to it than that.

It is true that we were thrilled with the aesthetics of the textbook. The looks of the volume are deceiving in that it seems slim because McGraw-Hill took the bold step of publishing a 352-page textbook as a paperback while keeping to the dimensions of a hard-cover textbook. This unusual choice keeps the cost down and the weight low, both of which are laudable in an age where textbook prices have skyrocketed and students’ willingness to lug heavy books has plummeted. The layout and the font are exceptionally clear, the chapters—or rather the “thresholds”—are color-coded, and the book contains over 85 vibrant images that range in size from full-page to quarter-page. Every chapter begins and ends with questions, and contains a threshold(s) summary, key terms and a glossary, and a list of works for further reading.

It is also true that we were excited finally to have a real textbook on this unusual content. Big history is definitely *not* mere history. The name of this emerging discipline, coined by historian David Christian, is slightly misleading to the uninitiated learner in that history generally refers to human history, especially the ages that offer extant records of one kind or other. Big history brings together the whole of natural and human history, all 13.8 billion years of it. It is history in that it is a recounting of past events in chronological order, but it is more than history as it draws on numerous other disciplines such as cosmology, astronomy, chemistry, geology, biology, archeology anthropology, art history, sociology, political science, literature, and much more to create and convey this transdisciplinary narrative that ends by looking to the future. And the narrative, recounted in a manner that draws on all disciplines, becomes more than the sum of its parts and is powerful and perspective-altering.

One might ask why the publication of this new textbook was such a momentous event specifically for the Dominican faculty, and in answering that question we move from the story of the book to the story of a faculty, the Dominican Big History faculty. In 2008–2010, our

University undertook a reform of the general education curriculum and the greatest change resulting from that process was an innovative first-year program, a six-unit first-year sequence. Our new program was quite ambitious in design and implementation: we had opted for a triple high-impact practice that was a first-year seminar, a common intellectual experience, and a writing-intensive sequence. In choosing big history we had selected a truly foundational content and in delivering it as a first-year experience, we had selected to use it to teach competencies such as writing and information literacy.

The faculty gathered to formulate the goals of the program and saw them as promoting: (1) recognition of the personal, communal, and political implications of the big history story, including insight into the interdependence of humans and their environment; (2) critical and creative thinking in a manner that awakens curiosity, enhances openness to multiple perspectives, and increases willingness to challenge one's own assumptions; (3) development of reading, thinking, and research skills to enhance one's ability to evaluate and articulate understanding of one's place in the unfolding universe. We had also searched for a way to counteract the increasing specialization and fragmentation of knowledge at educational institutions and in the workplace, and the narrative arc of big history promised to provide learners with a vast framework for the scaffolding of knowledge. Thus the concept of big history seemed uniquely suited to meet the challenges of the twenty-first century.

Admittedly, this curricular revision was ambitious, even radical; and, the key to the ultimate success of this adoption of big history was the inclusive and collaborative nature of the process. It is also noteworthy that big history need not replace other disciplines, but rather can be viewed as an exploration of a vast range of ideas and disciplines which complement in-depth courses in the sciences, world history, and the arts and humanities. In our case, incorporating big history into the Dominican curriculum was relatively easy as there is a place within general education that is not traditionally *owned* by a department: the first year programming.

In creating our First Year Experience, we increasingly employed the principles of backward design. A faculty collective articulated the desired learning outcomes, determined the appropriate evidence to demonstrate achievement of the outcomes, and set out to design instruction and activities to produce the outcomes. Unbeknownst to us, the last step, the design of instruction, which included the choice of classroom texts, would occupy us for years to come. Big History can be taught in a rotational lecture format where the main lecturer invites expert guests to give talks in their area of expertise; or, it can be taught in a seminar format with one faculty member leading students through the course. We opted of the latter but knew that independent of the format, faculty needed to be trained in big history as no single faculty member is an expert in all the thematic areas the course covers. Building a learning community became our primary objective in the summer of 2010 prior to the fall launch of the program.

What principles guided the creation of our Big History faculty learning community? The makeup of the faculty was as diverse as possible since big history is in no way limited to being taught by scientists or historians; rather, instructors of all disciplines with an avid interest in this content were welcomed. Those included faculty in Art, Art History, Biology, Business, Creative

Writing, English, History, Humanities, Literature, Mathematics, Music, Occupational Therapy, Philosophy, Political Science, Psychology, Religion, Social and Cultural Studies, and Women and Gender Studies. Members of the learning community were not required to teach in the program; rather, the multidisciplinary group provided rich input. The ensuing learning community, our annual “Big History Summer Institute,” has become a living example of collective learning, a central concept in big history, as the faculty formulated course descriptions and learning outcomes, taught each other big history content, and shared pedagogical best practices. Ultimately, the cultural gain of this approach was immense: it built rapport among colleagues, enhanced big history’s reputation across the institution, and created widespread support for the program.

During our first Big History Summer Institute, we drew most heavily on two texts, David Christian’s *magnum opus*, *Maps of Time: An Introduction to Big History* (from 2005) and Cynthia Brown’s *Big History: From the Big Bang to the Present* (from 2008). Both were books on big history, yet they were so vastly different from each other—the first heavily scientific and analytical and the latter written in a somewhat general manner for lay persons—that by the end of the summer institute, the faculty could not settle on using only one or the other for class. Rather, we assigned both, hoping that our students would find the books to complement one another. That proved to be a miscalculation as our young students did not warm to the idea of reading the same material presented in two different ways in two different books.

The first year of the Big History program at Dominican made two things clear to us: First, that one must distinguish between big history content and big history pedagogy. The faculty needs to be proficient in big history, but beyond that they must master means of successfully conveying that content. Second, that in order for the course to succeed, we needed a textbook. The former issue proved easier to resolve. We knew that big history was at times too abstract to be tangible for a young student. Our 2011 summer institute focused on the sharing of pedagogies and activities that had proven successful the prior year. We collaboratively refined them and embedded them into the course. This approach, continued over the course of the following years, has propelled us forward remarkably fast, putting us in the unique position of having notable pedagogical insight in big history. The issue of the textbook proved to be a more difficult matter.

We reexamined the books we had used and considered new ones such as Fred Spier’s *Big History and the Future of Humanity* from 2011 and Brian Thomas Swimme and Mary Evelyn Tucker’s *Journey of the Universe* from the same year. These books proved quite valuable in shaping our thinking but not necessarily suited to our intended audience of students. In the meantime, we had learned that Christian, Brown and Benjamin had signed on with McGraw-Hill to write a big history textbook and, after some negotiation, the publisher declared its willingness to provide us with a preliminary edition. Our problem seemed to have been resolved. That is until the books actually arrived at our bookstore. Imagine almost 400 pages of unedited, unproofed text devoid of images, thorough threads, and glossaries. We still felt that this book was the best solution but spent the next two years counter balancing its deficiencies.

Where the text lacked images, we assembled dozens of PowerPoint files of images linked to specific chapters and paragraphs that we could make available to students; where the text lacked reflection questions, we compiled our own series of threshold-specific questions and prompts that students could answer at home or free-write to in class; and where the narrative got buried in the copious details of some of the chapters we brought in short and long videos like *Journey of the Universe* (2011) and *History of the World in Two Hours* (2011) to emphasize the larger picture through visual texts. In the meantime, we realized that the success of the program was directly tied to our big history pedagogy and redoubled our efforts in that area. This, in turn, endowed us with a renewed drive and commitment and resulted in our signing a contract with University of California Press for a 2014 publication of our forthcoming book *Teaching Big History* (forthcoming).

Simultaneously, as we were refining our pedagogy and attempting to resolve our textbook issue—hoping that McGraw-Hill would set a publication date for the Christian, Brown, and Benjamin textbook—we began reflecting on the assessment of our First Year Experience. Consistent quality improvement had been a characteristic of our collaboration, but were we meeting our ambitious goals? Our assessment soon became multi-instrumental and divided into two types: 1) assessment using student-generated work; and 2) assessment soliciting students' opinions and perceptions. The assessment of exams and essays demonstrated that students were understanding big history and its major concepts and applying them. In addition, they were learning skills such as writing and information literacy. Big history specific surveys and student focus groups helped us measure motivation and engagement and specifically the value of big history as a transformative experience (as defined by Kevin Pugh [2011, 107] based on Dewey).¹ In 2012, with 89 respondents we had a 37% participation rate and learned the following:

- 80% of students thought or talked about the content of the course outside of class;
- 72% of the students indicated that their big history experience had changed the way they saw or understood aspects of the world;
- 48% expressed that big history had changed the way they saw their role in the world.²

In analyzing survey and focus group data, we learned that the Big History program was successful where students saw their own self reflected in the course through content that was interconnected, prompted them to examine values and beliefs, and foregrounded links to the future. We also learned that the preliminary textbook still presented a problem and was a pet peeve of the students.

Imagine our joy as we learned in the spring of 2013 that McGraw-Hill planned to move at full speed and have the textbook available to students by August 2013. And that was indeed the case: a week before semester begin hundreds of copies arrived in our bookstore ready to be purchased by our incoming freshmen. Is the textbook perfect? Not quite. It still shows some inconsistency in its discussion of the features of complexity, but let us face it: complexity is indeed complex and worthy of larger discussion. The interested readers were perhaps better served perusing the

works of Eric Chaisson and Fred Spier. Another weakness is the Seventh Threshold's retention of a world history approach (a traditional history approach that focuses primarily on the achievement of civilizations instead of applying a big history lens via focusing on collective learning or the human impact on biosphere) instead of applying a big history lens which renders it unduly long and allows it to take up five chapters.³ As big history gains momentum in education, it is perhaps best served by consistently holding to its own distinct historiographical approach rather combining two approaches in one textbook. However, the current length is indeed a notable improvement from the preliminary edition and clearly signals movement in the right direction.

So ask me again: Is the book perfect? Well, it's near perfect. It's a science-based global history, a big history narrative greater than the sum of its parts, presented in an appealing package. Through big history we have a unique platform for the integration of disciplines and collaboration across campus. And in doing so, we embrace a twenty-first century model of liberal education that acknowledges and incorporates the complexities of this century. So, let us rejoice! The new big history textbook is here.

Endnotes

1. Our thanks are due to Richard Blundell, PhD candidate with David Christian at Macquarie University, Australia, for sharing his big history-specific survey with us and allowing us to modify it according to our needs.
2. Mojgan Behmand and Jennifer Lucko, *Big History Survey*, Dec. 2012. Presented at Dominican University, January 31, 2013.
3. For a more expansive discussion see: Anderson 2013.

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