

Making the Universe Personal

A Call for Reflective Writing in the Big History Classroom

by Jaime Castner

“Reflection is an attitude which makes the difference between twenty years of experience or only one year of experience repeated twenty times.”

Gillie Bolton¹

To the teacher of Big History, the lasting benefits of student engagement with a universal narrative are numerous and self-evident.² Such a foundation offers comprehensive understanding of our collective past, an interdisciplinary approach to undergraduate, graduate, and professional life, and a broader canvas on which to overlay future learning. Big History fosters critical thinking and inquiry, nuance, and open-mindedness. Still, despite educators’ confidence that students’ experience with

¹ Bolton, Gillie. “Write to Learn: Reflective Practice Writing.” *InnovAiT*, Oxford University Press. 2.12 (2009) : 752-4. *Academic Search Complete*. Web. 30 Mar. 2012.

² This paper was first delivered as a presentation titled “Reflective Writing in the Big History Classroom” at the inaugural conference of the International Big History Association (IBHA) at Grand Valley State University in Grand Rapids, Michigan, August 2-5, 2012.

Big History will prove its worth in ongoing and increasing ways as they mature, the earlier young scholars understand its merit, the earlier they may be able to process and apply its content. This paper will argue that the thoughtful integration of reflective writing in the Big History classroom has the potential to support this process and application through:

1. Improved content retention and facilitated achievement of Student Learning Outcomes;
2. Application of “why factor” and “big picture” frameworks to content;
3. Enrichment of active and experiential learning components and connection between content and the “real world”; and,
4. Stimulation of discussion and connection between content and students’ individual human experience.

In what follows, I will provide pedagogical models for effective inquiry and offer examples for the application of these models in the Big History classroom.

The effectiveness of reflective writing in the classroom is widely recognized and warrants little time here. Still, it is worth noting that the Association of American Colleges and Universities (AAC&U)'s "Principles of Excellence" encourage the practice of consistent, reflective inquiry thus:

- Principle Two: Teach the Arts of Inquiry and Innovation
Teach through the Curriculum to Far-Reaching Issues—Contemporary and Enduring—in Science and Society, Cultures and Values, Global Interdependence, the Changing Economy, and Human Dignity and Freedom
- Principle Three: Engage with Big Questions
Immerse All Students in Analysis, Discovery, Problem Solving, and Communication, Beginning in School and Advancing in College³

First, note how exquisitely the Big History narrative is aligned with the ideals of higher education in America, addressing "far-reaching issues [of] Science and Society...Global Interdependence...and Human Dignity," among others. Secondly,

³ "Principles of Excellence." *Association of American Colleges & Universities*. AAC&U, 2012. Web. 20 Dec. 2012.

note that the points at which Big History is most aligned with these principles are the pursuit of “inquiry” and the tackling of “big questions.” Then it comes as no surprise that the effectiveness of reflective, inquiry-based writing has been documented extensively across the disciplines in higher education. The practice of reflective writing in the classroom has collateral benefits such as internalization of the writing process and enhanced ability to organize thoughts on paper, among others. And because writing is a solitary practice, it enables reserved students to express their thoughts safely and at their own pace. In graduate programs of law and medicine it has demonstrated particular effectiveness (see relevant sources below.⁴)

The first three inquiry-based models below are drawn from established higher education programs with documented success to help educators derive the most value from reflective writing in the Big History classroom. Each model speaks to one of the four central benefits of reflective writing in Big History introduced above. It is

⁴ Grose, Carolyn. “Storytelling Across the Curriculum: From Margin to Center, from Clinic to Classroom.” *Journal of the Association of Legal Writing Directors*. 7 (2010): 37-61. *Academic Search Complete*. Web. 30 Mar. 2012.

Shapiro, Johanna, Deborah Kasman and Audrey Shafer. “Words and Wards: A Model of Reflective Writing and Its Uses in Medical Education.” *Journal of Medical Humanities*. 27 (2006): 231-44. *Academic Search Complete*. Web. 30 Mar. 2012.

Wald, Hedy S. and Shmuel P. Reis. “Beyond the Margins: Reflective Writing and Development of Reflective Capacity in Medical Education.” *Journal of General Internal Medicine*. 25.7 (2010): 746-9. *Academic Search Complete*. Web. 30 Mar. 2012.

recommended that instructors of Big History mindfully determine the objective of their reflective writing practice for the day's lesson and then implement the appropriate model.

MODEL ONE: Bloom's Taxonomy

Benefit: Improved content retention and facilitated achievement of Student Learning

Outcomes

The classification of learning objectives developed by Benjamin Bloom in the 1950s provides a useful framework for the development of reflective inquiry in the Big History classroom.⁵ (And when there is an axis devoted to increasing levels of complexity, can there be any question?) In the following chart, content of the far right column (*italicized*) has been substituted with Big History-specific questions.

⁵ The Teaching Center. "Asking Questions Based on Bloom's Taxonomy." *The Teaching Center*. Washington University in St. Louis. 2009. Web. 3 Jun. 2012.



MODEL ONE: Bloom's Taxonomy

Improve retention and achieve student learning outcomes

Level of Complexity	Category	Definition	Question Words	For Big History
	Evaluation	Judgment, making value decisions about issues	Judge, appraise, evaluate, assess	<i>Is the growth of our human community no longer sustainable?</i>
	Synthesis	Combining ideas, creating an original product	Compose, construct, design, predict	<i>Make a prediction about our distant future.</i>
	Analysis	Subdividing into component parts, determining motives	Compare, contrast, examine, analyze	<i>Compare forager life ways with agrarian life ways.</i>
	Application	Problem solving, applying information	Interpret, apply, use, demonstrate	<i>Apply the theory of Natural Selection to the presence of forward-facing eyes in predators like us.</i>
	Comprehension	Interpreting, paraphrasing	Restate, discuss, describe, explain	<i>Describe how our moon was created and explain its role in sustaining life on Earth.</i>
	Knowledge	Memorizing, recalling information	Who, what, when? Define, recall list	<i>Define Doppler Effect.</i>

This blueprint assists instructors in the crafting of meaningful questions to retain learned content and achieve student learning outcomes as stated in the course syllabus. Suggestions for implementation will be presented at the end of this paper.

MODEL TWO: Columbia College's Learning Portfolio Program

Benefit: Application of “why factor” and “big picture” frameworks to content

Explore broader considerations of general Big History themes and their role in achieving students' personal and educational goals using this model. In this model lies the potential for students to appreciate the value of Big History in their formal education and personal development before their studies conclude. Alternatively, for example, if a student responds that Big History does not enrich or inform study in his or her field of interest, the reflective writing practice provides an opportunity to discuss this shortcoming, or identify evidence to the contrary. Instructors may customize their inquiry based on the provided model questions listed below. Suggestions are italicized.

1. What difference has the learning made in my intellectual, personal, and ethical development?

Ex. How does my study of Big History enrich or inform study in my field of interest?

2. In what ways is what I have learned valuable to learn at all?

Ex. What have I learned from the Big History story that might help me plan for my future?

3. How does what I have learned fit into a comprehensive, continual plan for learning?

*Ex. Has my introduction in this class to a vast array of disciplines affirmed my prior interests, or what other types of classes might I like to try in college?*⁶

MODEL THREE: Bridgewater College's Four-Year Personal Development Program

Benefit: Enrichment of active and experiential learning components and connection of content to the “real world”

While this model will likely not apply to the lecture-style Big History classroom, it remains a valuable approach, particularly as active and experiential learning practices gain popularity in higher education. For the purposes of this paper, a First Year Experience “Big History” program signature in-class activity, The Hominoid Skull Lab developed by Martin Nickels and adapted by J. Daniel May, is used as an example. Again, a suggestion is italicized below each model question.

1. EXPLORATION: Discuss your thinking prior to the experience.

Ex. Describe your understanding of hominoid evolution before this activity.

⁶ Zubizarreta, John. “The Learning Portfolio: Reflective Practice for Improving Student Learning.” (N. D.) *Columbia College*. Web. 2 Jun. 2012.

2. ANALYSIS: Consider why the experience was meaningful.

Ex. How did the activity change or enhance your understanding of where humans come from?

3. SYNTHESIS: Discuss the significance of the experience for your life.

Ex. How does understanding the lineage of Homo sapiens inform your sense of belonging in the Big History story? How can you apply this new knowledge to study in your field of interest? ⁷

MODEL FOUR: Dominican University of California's First Year Experience "Big History" Program

Benefit: Stimulate discussion and connect Big History narrative to students' individual human experience.

This final model draws on aspects of the three above, with the distinct objective to call on students' personal experience to illuminate or inform the Big History narrative. In surveys administered after the launch of our program in 2010, students revealed that they found the Big History content too abstract and

⁷ Huffstetler, Edward W., Nan R. Covert, Catherine L. Elick, and Harriett E. Hayes. "Achieving Better Horizontal and Vertical Integration in the Liberal Arts Curriculum." *AAC&U*. (N.D.) *Bridgewater College*. Web. 2 Jun. 2012.

impersonal. In the following year, I developed and refined this reflective writing model to counteract such effects. In response to students' discomfort with a non-religious story of creation, a suggestion to "process conflict" has been added.

A personal anecdote here illustrates the potential for this type of in-class reflective writing. Unexpected insights can arise from productive discussions, and productive discussions come from probing questions. A case in point is a class in which I was lucky to implement the reflective writing practice with great success: Dr. Mojgan Behmand's "Myth and Metaphor through the Lens of Big History" at Dominican University of California. At the time the students were reading *Nisa: the Life and Words of a Kung Woman* by the anthropologist Marjorie Shostak. As a member of a modern hunter-gatherer community, Nisa's stories were intended to help the class comprehend Paleolithic lifeways.

I asked the students to write quietly for ten minutes in response to this prompt: "Describe one of your earliest memories, one that has stuck with you for any reason and remains relatively clear in your mind." I asked them to note any distinctive images, smells, sounds, tastes, or feelings associated with the memory. After writing in silence, I asked the students if they cared to share and they were eager. Students remembered everything from birthday parties with scary clowns, to the birth of a younger sibling, to a favorite aunt's wedding, to the first day of school.

As a class, we began to notice a trend. There were common themes running through these stories: fear, coming-of-age milestones, and rituals. Another common thread was food and the sense of taste. When we turned to Nisa's childhood stories we detected the same themes. Food was especially central. Fear, aging milestones, and rituals were also prominent in Nisa's recollections. So, we asked ourselves, what is it about these concepts and practices that appear so central to the human experience—even within human communities that at first glance appear very different? What followed was an enlivened conversation driven primarily by the students and fueled by their own ideas. They emerged prideful from class that day, and, I believe, surprised by the relevance of Big History content to their own sense of humanness.

The following model questions and examples offer students the opportunity to share their personal thoughts on a range of topics. All may be used to prepare for a class discussion if students are comfortable sharing their work.

1. Stimulate Discussion

Ex. What do you believe to be the qualities of a successful ruler?

2. Connect to Individual Human Experience

Ex. Consider what steps you take at home or in your dormitory to minimize waste and preserve resources. Based on your knowledge of the Earth's history, do you feel that these measures are insufficient, sufficient, or unnecessary?

3. Process Conflict

Ex. Do you believe the Big Bang theory and faith-based origin stories are necessarily incompatible? How will you plan to address conflicts of personal faith, should they arise?

Modes of implementation for the models above include a range of possibilities. Of course any of these questions may be used as simple class or small-group discussion topics; they may also be used as take-home reflective assignments or even rhetorically in a lecture setting. However, when used as writing prompts, consider the following suggestions:

1. Embed the reflective writing practice, if not the specific questions, in the course syllabus;
2. Identify the learning objective or benefit and reflective question(s) to be asked in advance of class;
3. Initiate reflective writing practice before a discussion or after an active learning activity;
4. Allow students five to ten minutes to “free write” silently in response to a clearly articulated prompt;
5. Offer students two additional minutes to reread their work and underline or highlight their best ideas; and, optionally,

6. Request that students keep all their written reflections together in a dedicated folder for future reference. Free writing can produce wonderful ideas for upcoming research papers or presentations.

Big History content is immense and its implications immeasurable. While instructors in this burgeoning field are advancing a significant frontier in education, let us continue to encourage students to play a central role in their own learning. The practice of reflective writing has the unique potential to address a range of objectives in the Big History classroom, including content retention and the achievement of specific learning outcomes, understanding of “big picture” frameworks, enrichment of active and experiential learning practices and “real world” applications, and the stimulation of productive discussion and relevance to individual human experience. With the added benefits of supplementing the writing process and facilitating the organization of thoughts on paper, reflective writing practices are intelligent component of any Big History syllabus.

Jaime Castner earned her BA in English from Dominican University of California and is currently studying in the Masters in Humanities Program with an emphasis in Literature. Since the Big History program's inception in 2010, Jaime has co-orchestrated various related events, workshops, and seminars with General Education and First Year Experience Program Director Mojgan Behmand. She has served as a teaching assistant, in addition to providing faculty support, developing curricular material, and producing promotional literature for the Big History program.