

## Metacognition for Sustainability

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A major task that our students will have to undertake is to create a sustainable way of life. To do so, they need to be able to understand how to analyze themselves, especially how their behaviors and worldviews are connected with social and environmental effects. To our misfortune, this is also the living generation with perhaps the least ability to self-analyze, to patiently plot out long-term goals, and to withstand the psychological pains of self-transformation. To meet the demands on this generation for sustainability, I made metacognitive tasks central to an introductory course on world religions, with a personal emphasis on sustainability. I was surprised at the degree of resistance and struggle at metacognitive tasks, and I have recommendations to improve success.

## Context and Problem

I teach at a racially diverse R1 state university with some unique courses on world religions. Namely, we teach an *introductory* course that is offered statewide and that is reciprocally accepted at colleges across the state. In addition, there is a *general* course with more students and fewer credit hours, a *traditions* course for humanity students and religious studies majors, and a *graduate-level* course that examines the concept of "world religions." For the introductory course, faculty are free to take their own approach that would appeal to humanities and non-humanities majors alike. I chose to reorganize my version around sustainability.

I am in some ways following the lead of scholars like Mary Evelyn Tucker who advocate that we integrate environmental concerns into our classrooms and scholarship. But, more fundamentally, I am expanding my work on racial minority communities—Asian American, African American, and Native American—who are increasingly concerned with the coupling of social justice and environmental racism. Thus, my goal of centering a world religions course sustainability has foundations in the pressing issues of social and environmental degradation that my racially diverse student body are confronting in their communities. Since students are, or will soon be, facing these great problems, I thought that they would be willing to take on relatively simple challenges of self-evaluation. I was both right and wrong.

I created course assignments that required students to analyze themselves and the natural world around them utilizing metacognition. Metacognition—in its simplified definition of reflection and "thinking about thinking"—is natural for the religious studies classroom because it undergirds common practices in religion. However, its formal definition in cognitive science and pedagogy has not been commonly applied in our field. As psychologist Anastasia Efklides articulates, "metacognition is a representation of cognition that provides awareness of cognition" (138). Largely in pedagogy, this *image* of cognition provides students the ability to see why they should know information and how they will be tested. When students become conscious of where information sits in this "image," they can adjust study habits to be more efficient test-takers and with practice become proactive learners who "seek solutions to any problems they may encounter" (McGuire, 16).

Skill in metacognition can be incorporated into lecture, class activities, exam preparation, and post-exam assessment. Tests can focus on one's skill in knowing where information sits. Additionally, as my Georgia State colleague Molly Bassett has done, metacognition can be incorporated into multiple-choice exams in religious studies (Bassett). In these ways, the practice of representing cognition can be incorporated to nearly any class, and can help students develop more control over course content and help provide instructors a better sense of how their students are learning. Upper-division courses can utilize metacognitive tasks to reexamine the same topic or idea at multiple points in the semester, thus allowing the class to see how they are applying different processes of interpreting the same thing and deriving different results. Introductory courses do not have this luxury of focus. Instead, I had students examine the only consistent object through the semester: the students' selves. I broke the self into two sides—how one sees oneself and how one sees the world—and detailed religious conceptions of the self and worldviews. I accordingly created two assignments and a final paper to bring these two tasks together.

The first metacognitive assignment is called the Creature Journal. It is an observation journal, like scientists, observe plots of land over time, but modified for the religious studies classroom. Based on research supported by Wabash, I found an expansive definition of "person" in indigenous cultures that includes animals, plants, and natural features like mountains and lakes (Norton-Smith). Students may choose any "person" (which I replace with "creature") as long as they can observe it throughout the semester. For each journal entry, they take on the worldview of a different religion and write down their observations. The trick is that even

though they are observing something else, they are really discovering their selves because they get to vicariously be someone else for the period of the assignment. For example, in one memorable creature journal, a student observed a tree with the lens of Hindu karma and reincarnation, and saw that the tree swayed like a person in the breeze. In fact, a common comment from students is that they have never taken the time to see a nonhuman as a living thing and have never observed the lack of care it receives. Thus, by looking outward they learned to form an image of their interconnection or lack-thereof to other "creatures"; this practice also conforms to the more formal definition of metacognition.

The second assignment is called Reflections. To help students form an image of their selves to reflect upon, I created a diagram of the construction of worldviews and a model of a cycle of learning and transformation. With these two images, students are asked to reflect upon worldviews and how they transformed. To simplify the assignment, each part of the assignment takes one step in the cycle and students choose one aspect of their worldview to analyze. The aspects are drawn from the diagram of worldviews, which depicts major categories, like values, beliefs, experiences, and senses, that undergird worldviews. The aspect of the worldview is any part of any category, like the belief that "everything happens for a reason." In the Reflections students consider where the aspect came from, what it means for them today, and how it might transform in the future.

The trick for the Reflections is that the even though they are analyzing their selves, they are really discovering how they see the world. For example, one student discussed how charity became central to her core values. When the student was in middle school, her family became involved in a charity that distributed clothes to the homeless, and now in college, she cannot see her life without a significant dedication to charity. In this way, through the assignment, she practiced analyzing her self and formed an image of the self that is connected to values, a habit of giving, people in general, and her family.

In the final paper, which brings together the two metacognitive assignments, this student was able to compare her own history and conception of charity to the worldviews of other religions. Thinking-about-thinking thus enabled the student to understand that traditions shape religious worldviews and individual experiences reinforce particular aspects of religious worldviews. The final paper also asks students to consider how an aspect of their worldview assists or deteriorates sustainability. In this example, the practice of charity towards the homeless aids social sustainability, since it upholds the stability of society, and environmental sustainability, since it reuses clothing and household items that otherwise would go directly to landfill. Consequently, the student was able to connect her practices to society, the environment, and religious worldviews. In such ways, metacognition can be an important vehicle for developing systemic, multileveled thinking that is essential for reforming one's relationships in order to create a sustainable world.

Struggles and Advice

While a few students leave with dramatic transformations in understanding their selves and

worldviews, along with an experience connecting complex current issues to the study of religion, a significant portion of the students resisted metacognitive activities and assignments. I anticipated a little resistance because metacognition is unusual for courses, but I hoped that the desire to work on a significant issue of their day and Millennials' narcissistic tendencies would make up the difference. This generation—the Millennials—are notoriously narcissistic (Hoover; Howe & Strauss), so I hoped that spending the semester focused on themselves would be natural and productive. The problem is that narcissism also entails fragility, and self-analysis threatens the stability of the self (which is an important step of self-analysis). As a result, students consistently asked why they needed to think about themselves, and I developed a few ways to mitigate these issues.

Pointing externally, students complained that course information was not being provided. To counter this, I consistently provided study guides at the start of each unit of the course. I also utilized concepts in class lectures, discussions, and activities, and the assignments required the use of course concepts. One student objected that the course focused too much on my own interests and not enough on religion. To meet this issue, I explained thoroughly several times throughout the semester that according to department practice each professor teaches this course by centering their own expertise and using it as a glue to introduce religions to students with diverse academic interests. Moreover, every reading and lecture was on religion. I also anticipated the concern over focusing on a theme that may seem too based in my own politics. To mitigate this concern, I emphasized the ethical and moral argument that environmental and social degradation is a problem for all the world's peoples and that religions' collective wisdom can alleviate the impact of our collective follies. The study guides, assignments using course concepts, clear goals for the course, and ethical call for self-evaluation all helped to address student anxiety with metacognition and self-analysis.

Overall, I found that, in addition to the practical adjustments just outlined, there is a need to consistently and frequently encourage and relieve students as they take on metacognitive tasks. I keep assignments open to different levels of self-analysis and self-disclosure, so students can choose the level of sensitivity or superficiality with which they are comfortable. I model self-analysis by alternating humor and seriousness, light self-deprecation and deep self-critique, personal stories and scientific data on the impact of my own choices. With student preapproval, I also highlight interesting and solid work done by the students. I found this multilevel honesty and support brings students to feel strong, especially those who want to become responsible citizens of the world as well as those who had already taken on responsibilities in their lives, such as students with considerable family commitments, dedications to communities, and who have taken on military service.

Given the pushback by anxious Millennials, the conscious and consistent efforts to alleviate anxieties, and the potential benefits of incremental self-transformation and sustainability, I feel it is worth it to tackle metacognition and sustainability in the religious studies classroom. My numerical validations have so far taken a hit, but the qualitative value of self-confident and self-evaluating students self-sacrificing for the good of the world outweighs the costs, in my opinion.

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