



# The Importance of Making-While-Reading for Undergraduate Readers: An Example of Inductive SoTL

## ABSTRACT

This paper gives an example of an inductive Scholarship of Teaching and Learning (SoTL) process, adapting Anthony Ciccone's five conditions of a meaningful SoTL question. Presenting a study on pre-class reading in an undergraduate religion class, I describe how my question went through five life stages. I began with nine different pre-class reading assignments. Students judged the "map" assignment to be most helpful. This led to a further question: why maps? In a close reading of students' reading reflections, two themes stood out: students experienced maps as helping them create a mental overview of the reading, and maps facilitated greater ownership of the act of reading. In conclusion, I argue that humanities instructors who wish to teach advanced reading skills can start by providing pre-class assignments that allow for making-while-reading, and that this making should not be merged with other reading steps. In an epilogue I reflect on the inductive research process. I suggest that SoTL scholars who use this process may reach an impasse when deciding how to present meaningful answers because their conceptual answers will stand in tension with SoTL's practical orientation. I propose focusing on conceptual generalization (rather than empirical generalization), while still foregrounding a balance between "what works" and "what is."

## KEYWORDS

reading, humanities, expert and novice skills, maps, scholarship of teaching and learning

## PROLOGUE: MEANINGFUL QUESTIONS

Anthony Ciccone (2018) has suggested that meaningful questions in the Scholarship of Teaching and Learning (SoTL) should meet five "conditions." I propose that his five "conditions" should be changed to five "life stages," and that the life stages work for *inductive* SoTL studies that move from the particular to the general (but will not work for *deductive* studies).<sup>1</sup> This paper is an exercise in showing the five life stages in practice. I use them to frame the five sections of the paper as I present an inductive SoTL study in its various iterations from beginning to end. In the epilogue I return to a reflection on the process.

## 1. A QUESTION ABOUT A PROBLEM IN MY CLASSROOM: STUDENT READING

The first condition of a SoTL question, Ciccone proposes, is that the question arises from a perplexing teaching experience (2018, 15–16). In my case, that productive problem was: How can I encourage undergraduate students to think about what they read in discipline-specific ways?

I teach at the University of Georgia—a large, Southern, public, research university in the United States. This context has several implications for students reading across the disciplines. First, students

need a high score on their SAT test<sup>2</sup> while in high school to be accepted to the university. The SAT measures reading proficiency through closed-ended, multiple-choice questions about a decontextualized excerpt of text. Only one answer is correct. Once students have been admitted to the university, however, there is a striking discontinuity between the SAT and how they are expected to read in classes on campus. This applies across disciplines, but perhaps especially in humanities classes, such as mine, where the emphasis is often on looking for good problems in a web of texts rather than solutions in a single excerpt, and using texts to form arguments that are not “correct,” but instead are supported by textual patterns and may be contested by other readers. Second, there are also sometimes discontinuities in the way students have learned to approach topics. For example, my religion classes at the University of Georgia are taught from a non-confessional standpoint, and this academic lens on religion is not familiar to many students, requiring them to relate to texts about religion in new ways. Third, all students at the university take a range of core liberal arts classes and choose upper-level electives. Students therefore typically take classes from different disciplines in the same semester, perhaps walking between my religion class and biology, journalism, Spanish, and calculus classes in the same week—five disciplines that all require different reading practices. Understandably, then, students do not usually arrive in my class with much practice in advanced, discipline-specific reading skills for the humanities.

Ciccone suggests that classroom problems naturally make us ask a “what works?” type of question first (2018, 17; cf. Hutchings 2000, 4). And indeed, this had been a pressing question for me. In response, I began requiring students to read and complete an ICE QQ log (three Ideas, a Connection, an Experience, a Quote, and a Question) before each class session, and then built directly on the log in our exercises in class (for more on this project, see Hovland 2019a, 2019b). The combination of pre-class ICE QQ logs and in-class reading exercises addressed my initial concern with making reading “work” insofar as it held students accountable for doing the reading and thinking about it. My observation here fits with the findings of the *Writing to Read* report (Graham and Hebert 2011), a meta-analysis of studies of “writing-to-read” (that is, low-stakes writing that has the purpose of enhancing reading). The report concluded that four types of writing-to-read assignments do indeed reliably work to improve reading comprehension (and, I might add, heighten accountability for doing the reading): summarizing, taking notes, answering the teacher’s questions, and writing a response.

However, as I continued to read about reading, I came across a great variety of other pre-class reading assignments. I also noticed that in the small but growing SoTL conversation on reading in the humanities, some studies explored how to leverage pre-class assignments to teach discipline-specific reading skills (Manarin 2012; Manarin et al. 2015; Salvatori and Donahue 2005; cf. also Chick, Hassel, and Haynie 2009; Cisco 2020; Manarin 2016; Staudinger 2017).<sup>3</sup> I began to wonder how my students perceived the pre-class reading assignments and whether they understood the connection between the assignments and the reading habits in my discipline. I felt, in Ciccone’s words, that while my ICE QQ assignments “worked,” I was still only addressing “the most visible part of the problem [...] without really knowing what else lay below the surface” (2018, 17).

I decided to carry out a SoTL study focused on pre-class reading. I proposed the study and received approval from the university’s ethics review board (the IRB or Institutional Review Board), for my undergraduate class “Women in Christian History” that ran for a 16-week semester from August to December 2019. The class is offered by the Religion Department but enrolls students from a wide range of majors who take it as an elective, typically in their third or fourth year of a four-year degree. The class had 34 undergraduate students, largely in the traditional student age range (18–23 years old), and the

vast majority of whom were female (31 women and 3 men). In this paper I will present how my question morphed into new iterations over the course of the study. In sections 2 and 3 below I outline how I assigned nine different types of pre-class reading logs and tracked my students' use and evaluation of the different logs. They found the "map" log most helpful. In section 4, I discuss how this gave rise to a further question: "why maps?" In conclusion, section 5 presents the final question about differences between novice and expert readers in the humanities. I argue that humanities instructors will most effectively help their students learn discipline-specific reading skills if they use pre-class writing-to-read assignments that encourage students to "make" something in their minds while reading. I then add a reflective epilogue.

## 2. DIGGING DEEPER INTO THE QUESTION: PRE-CLASS READING LOGS

At this point, Ciccone encourages us to move to the second life stage of a SoTL question: to dig into lines of inquiry that are more "consequential" and to formulate a "what is happening?" type of question (2018, 17; cf. Hutchings 2000, 4). In my case, as I considered what I would do with my students regarding pre-class reading, I repeatedly returned to the question: *What is happening when students read before class?* I decided to work with this issue in two ways in my class design: I included a cycle of nine different pre-class writing-to-read assignments, and I assigned three "Reading Reflections" over the course of the semester.

Let me outline the nine writing-to-read assignments. I referred to these as "reading logs" in class. I put together a workbook that the students purchased from a local print shop, with one page dedicated to each reading the students would do. At the top of the page I noted which reading log format was assigned for that day. The students completed each log by hand before class and brought the workbook to class. I introduced the formats in the following order:

- *ICE QQ*: I designed this assignment to steer students toward specific reading practices, drawing inspiration from the ICE approach (Ideas, Connections, Extensions; Young and Wilson 2000). It was the only log for which I provided a structure on the page in the workbook: the page was divided into two columns, and the left column contained instructions to note down three *Ideas* from the reading, while the right column contained instructions to note down a *Connection*, an *Experience*, a *Quote*, and a *Question*. It is similar to a variety of other pre-class reading assignments that provide structured steps, such as the "3-2-1 log" for 3 ideas, 2 quotes, and 1 question.
- *Outline, Connect, Perspective, 3 Quotes, 3 Questions*: Some days I assigned a "reading roles" assignment that used the five components of the ICE QQ log (with some changes), but asked students to distribute these five roles among their small group members: *outline* the reading; draw *connections* from the reading to others; jot down words or images that convey the *perspective* of the people in the reading; choose 3 *quotes* (a summary one, a good one, a difficult one); and ask 3 *questions*.
- *Map*: I included this assignment based on the literature on using concept maps to make learning visible (for a humanities version, see Kandiko, Hay, and Weller 2013). The workbook page was blank, with this instruction at the top: "Draw a map of the reading. It could be a concept map, a diagram, or a different type of map that helps you make sense

of the reading.” I sometimes drew traditional concept maps on the board during class, with a key concept in the middle and related concepts branching off, and many students chose to use this familiar format. However, we also used other diagrams to make sense of readings on the board (such as cause-effect tree diagrams, Venn diagrams, tables, and word clouds), and some students chose these types of diagrams to “map” the reading, or came up with their own graphic organizers (such as flow charts).

- *Join*: I added a “join the conversation” assignment inspired by Chris Anson’s (2017) response to the *Writing to Read* report (Graham and Hebert 2011). As mentioned, the report drew attention to the benefits of four writing-to-read activities (writing a summary, taking notes, answering questions, writing a response). However, Anson argues that these particular tasks are dull both for students and teachers. He calls for activities that are more engaging, as well as more focused on underlying intellectual processes, and offers a few examples. Using these as guides, I wrote short prompts for some of the readings for my class, for example creating three-sentence dialogues that voiced contradictory takes on a central theme and inviting students to reply. A more structured version of this type of application assignment is the “What? So what? Now what?” log (Manarin et al. 2015, 29–46).
- *Meta*: I selected a “metacognitive” assignment after seeing Karen Manarin’s (2012) examples of students’ metacognitive reflections on their own reading strategies. Adapting the idea, I asked students to use the workbook page to jot down what was going on in their head and around them while they read.
- *Free choice*: After the first few weeks of the semester I gradually added more and more “free choice” logs in the workbook. For these days students were free to choose one of the formats above or to come up with their own.<sup>4</sup>

To increase the likelihood that the students would take the reading logs seriously, I paid special attention to motivation. I decided not to motivate students through supplementary reading quizzes with correct answers as this might reinforce superficial reading techniques. Instead, the main types of motivation I built into the class design were: intrinsic, “doability,” social, alignment, ownership, and accomplishment (Ambrose et al. 2010, 66–90; McRae and Guthrie 2009).

First, for intrinsic motivation I tried to choose readings that covered topics the students found interesting, such as conflicting interpretations of the story of Eve and Adam from different historical moments. I assigned readable, narrative overviews of historical periods; primary sources from those periods; and a few draft chapters of my own current research.

Second, to make the three weekly readings (of around 20–25 pages each) seem “doable” to students, we discussed strategies in class to help with reading efficiency—such as how to read for a particular purpose, how to focus, and how to vary one’s reading speed. In this case I intentionally avoided longer readings.

Third, the most immediate motivation was social, as I sought to foster a sense of being part of a reading community in class. At the start of each class session I asked students to take out their workbooks and share their reading log with their small group for 10 minutes. I allowed students to choose their own group of around three to five students, and they remained in the same groups the whole semester to build trust. Following these first 10 minutes I did not say anything about the reading

itself, but instead gave brief instructions for one or two active-learning exercises that presupposed knowledge of the reading. We worked through the exercises in a combination of small-group and whole-class discussion.

Fourth, I showed that I valued the pre-class reading by aligning it with the class assessment. At the end of each of our three modules, I asked students to scan or take pictures of their reading log pages (there were 8-10 logs in each module) and submit them online. I decided not to require students to submit the logs more frequently as I wanted to reduce the sense of teacher control and instead give students a sense of control over their own reading. I did not grade the logs for quality but simply gave points for completion, altogether worth 16 percent of the final grade. At the end of each of the three modules the students also completed two other assignments for which they used their reading logs: an open-book, open-workbook test (again to increase students' sense of control) in which they gave their own short description and analysis of selected key concepts from the readings; and a brief paper discussing one issue they had found interesting in the readings.

Fifth, I tried to turn over some ownership of the reading assignments to the students by adding in the "free choice" logs. After the first few weeks I also told students that they could replace any given reading log format with a different format if they wished.

Finally, I used accomplishment motivation—and this brings us back to the "Reading Reflection" assignments. In the first week of class I talked with the students about advanced reading skills in the humanities. Drawing on my own discipline of the anthropology of religion, I emphasized the following (anthropology inspired) reading goals: don't take the reading as the last word, ask questions about it, seek to understand others' perspectives as described in the text, discuss with other readers, and connect to other texts. I printed these goals in the students' workbook. I asked students to discuss the reading goals I had proposed in small groups and to make an initial stab at formulating their own individual reading goals for the semester. At the end of each of the three modules students submitted a brief Reading Reflection (around 250–500 words) in which I asked them to write about the progress they had made or not made toward their own reading goal(s), which reading log formats had been helpful or unhelpful in this respect, and whether their reading had changed or stayed the same. The three Reading Reflections were not graded but the students received points for submitting them, altogether worth eight percent of the final grade. I refrained from "correcting" any of the reading practices, goals, or challenges that students described in their reflections, and instead simply affirmed, when appropriate, that the reading skills we were practicing were indeed difficult and advanced.

### 3. THE QUESTION REQUIRES NEW INFORMATION: STUDENT EVALUATIONS OF THE READING LOGS

As we dig deeper into a SoTL question, a third life stage of the question emerges: we need to find ways to gather new information (Ciccone 2018, 17–18). In my class I considered the question: *How can student viewpoints on pre-class reading be made visible?* I decided to pay attention to two types of material. First, during the semester I counted the number of times that each reading log format was chosen freely by students. Second, when I read through each batch of Reading Reflections, I kept count of how many times each format was mentioned as helpful or unhelpful. In this way I was—in anthropological vein—looking for patterns. Since SoTL is an interdisciplinary field, let me mention here

that although I was counting, these numbers were not meant to be valid in a statistical sense; rather, their purpose was to guide me toward issues that mattered to the students in the class, providing me with possible directions to pursue as my inductive study moved forward.

Table 1 gives an overview of the number of times that students chose freely to use each reading log format over the course of the semester, as well as the number of times that students intentionally replaced a format with a different one. The table also gives the number of times that each format was mentioned by students in their Reading Reflections as being either helpful or unhelpful for strengthening their reading skills. The table shows that the overall student response to the different reading assignments fell into five categories: First, the two most highly valued assignments were “map” and “outline,” which were often freely chosen by students, and often mentioned as helpful. The second most popular group of assignments included the “3 quotes” and “3 questions,” which were frequently chosen, and somewhat frequently mentioned as helpful. Third, the “metacognitive” assignment turned out to be the most contentious in our class, with a split student response. The “ICE QQ” assignment also fell into a category of its own; it was freely chosen a relatively low number of times, but somewhat frequently mentioned as helpful. The final category encompassed the “join the conversation,” “connect,” and “perspective” logs, which saw relatively low student use and evaluation.

**Table 1. Student use and evaluation of the reading logs**

	Map	Outline	Quotes	Questions	Meta	ICE QQ	Join	Connect	Perspect.
<i>Chosen</i>	155	106	69	29	19	5	4	3	3
<i>Replaced</i>	3				13		10		
<i>Helpful</i>	61	25	6	8	21	14	3	0	0
<i>Unhelpful</i>	4	1	2	1	17	6	9	0	0

#### 4. THE QUESTION GIVES RISE TO MORE QUESTIONS: WHY MAPS?

In the fourth life stage of a SoTL question, Ciccone suggests, the question raises more questions (Ciccone 2018, 19). And indeed I had many questions about the patterns in my students’ use and evaluations of the logs, such as: Why did students shy away from “join the conversation”? What was happening with the metacognitive log? Why did they find maps helpful? To explore these questions, I returned to my students’ Reading Reflections after the end of the semester to do a close reading. I read and re-read these student texts slowly and carefully, pulling out phrases and excerpts related to the many questions I had. I grouped student excerpts together around my questions and synthesized the themes voiced by the students. I was again drawing on my own disciplinary reading practices of trying to understand the other’s perspective, paying attention to particular moments, and placing my own thoughts in conversation with the students’ thoughts. This type of anthropological close reading overlaps with literary close reading, which may attend both to what students say and *how* they say it (Manarin 2016), or the close reading used by a political theorist attuned to her students’ use of “political judgment” in their writing (Staudinger 2017). In all these cases of close reading in humanities SoTL studies, the goal is a rich description of the complicated set of factors that come together in student expressions.

At this point in the inductive research process I had not only an excess of potential questions, but also an excess of materials (student texts) and accompanying analysis (my own notes about the texts). I arranged the material in different ways in several draft outlines and through some trial and error decided to focus on one question to explore in depth. I chose the question that was most pressing to me: *Why maps?* What did students say about them? How did they use them? What did moments of learning look like to students, and how did these moments of learning happen with maps? I am still considering a “what is happening?” type of question here, but it is complemented by a “what is possible?” type of question, as shifts in student understandings of what knowledge is and how it is acquired (epistemological changes), and experiences of who they are in relation to knowledge (ontological changes<sup>5</sup>), begin to enter the picture (Ciccone 2018, 20; cf. Hutchings 2000, 4–5; Timmermans 2010).

Two themes stood out to me in the Reading Reflections concerning the maps: maps helped students create a mental overview of the reading, and maps helped students take responsibility for this creative act. I will discuss each in turn.

### **Creating a mental overview of the reading**

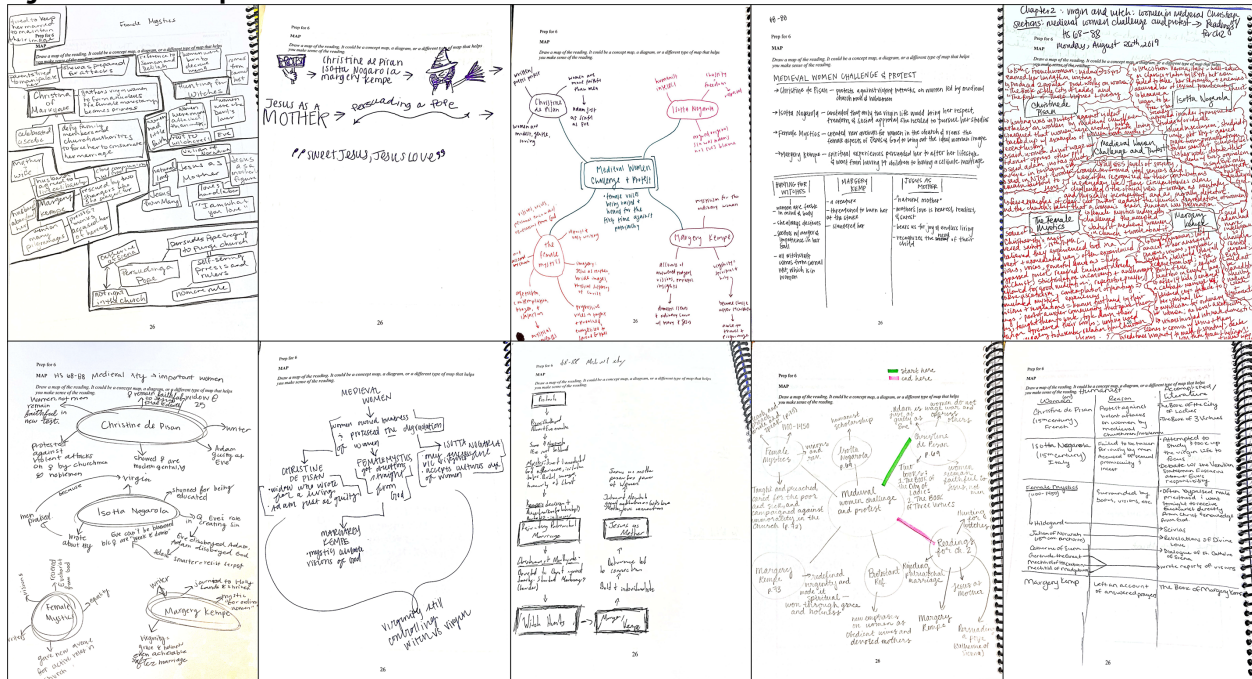
First, students often commented that they chose the maps because these more readily helped them grasp, in my student Morgan’s<sup>6</sup> words, “the whole reading”—or, as I might put it in more technical terms, the maps seemed to help them build an overview, or a representation, of the reading in their minds. Their comments indicated this in different ways. For example, students frequently used terms such as “the main points” or “main ideas” in their reflections on the maps, saying, like Jordan: “[my reading goal is] to localize main points of the reading from a broad and long section of text [...] I have found that mapping out the reading can most effectively localize the main points.” A related observation students made frequently was that maps helped them see “the big picture” or “a big theme” instead of getting lost in the details, as in these representative comments: “I enjoyed the concept maps as well because you were able to put a big central theme (example: ‘Catholic Sisters’) and surround that theme with thoughts throughout the reading”; “it helps me to see and understand the bigger picture of a reading when I can see the concepts in front of me and connect them on paper”; and “[it] lets me look back through [my workbook] and see the bigger picture of the reading.” In this regard the maps seemed to help students keep the structure of the text in mind, as Eva noted: “I think the concept map reading log has been the most helpful because when I’m reading, I use the bolded section headers as guidelines [...] When I read through the context of these headers, or main ideas, the smaller details align easier and make more sense. For example, the [map] reading log about the Cult of True Womanhood helped me to not only define the term but recognize key themes and characteristics.” Similarly, students also reflected frequently that the map format helped them to “see,” or, in Morgan’s words, “to see all the concepts being connected or seeing the key points of a section.” In short, as Tali put it, “I use these [map] logs to get my thoughts straight.”

I have included some student maps in figure 1 to show what this student attention to seeing the big picture looked like in practice. These maps were all created based on a pre-class reading on women and Christianity in medieval Europe in the third week of the semester. As a teacher, I notice that I can easily see that each map includes key ideas from the whole reading mirroring the students’ reflections that this is what the maps did. The map log was one of only two logs that easily allowed for this (the



other being the outline). As a teacher I also noticed that the students created different types of maps, matching Tali's observation that maps could be used for getting their own thoughts straight. The map log was the only log that generated this diversity.

Figure 1. Student maps



The students' creation of a mental overview did not happen without difficulties, however. Some students described a process of gradually learning how to use a concept map in tandem with epistemological changes. For example, Savannah said in her first Reading Reflection that "when I made concept maps it was difficult for me to organize all the information in a way that made sense to me." But in her third and final Reading Reflection, she hinted at what I might call an epistemological transition during the semester, saying: "I [previously] had trouble reading textbooks and primary sources for any purpose other than memorization," but now, having used the "effective method" of maps, she found that "maps help me to understand information as a whole." This was a new way of thinking about text for her. She comments that the change has transferred beyond our classroom: "I can even see this in the way that I read other things [...] to ask what is actually meant by a lot of this text." Similarly, Isabella also decided to set herself the goal of "[becoming] better at drawing concept maps" in her first Reading Reflection because she wanted "a visible approach." She too interpreted her growing confidence in her maps as being related to a change in how she thought about the reading—in my words, an epistemological change. In her second Reading Reflection she wrote, "Once I changed how I thought and processed the reading, I was able to make concept maps that allow me to visually see what is happening in the reading instead of doing a wordy outline." Maps seem to have helped her move away from viewing reading as a process of retaining as many words as possible, and instead view reading as a process of "see[ing] what is happening."



Maps seemed to allow students to think of the reading not as pieces of information to be transmitted and memorized, but instead as a “whole” that “meant” something and that they should work to “understand.” This had implications for how some of them thought of themselves as readers, touching on ontological changes. For example, Chloe described herself as a reader by contrasting maps to the “3 quotes” format:

*Having the concept map in my head helps organize my thoughts and helps me focus and look out for specific topics that I'm reading. My least preferred log type is the three quotes [...] I have found that if I attempt this one, I do not entirely grasp the reading, I just look for random quotes and hope for the best [...] I would say that the aspect of my reading that has changed would be the attempt to fully grasp what I am reading.*

In other words, Chloe was not yet ready to point out a quote that summarized the reading or that she found difficult, but she *was* ready to take on the new task of seeing herself as a reader that needed to have a map “in her head” so that she could “organize her thoughts” and “grasp” what she was reading. Similarly, Mia commented that at first she disliked the map format “because I never knew the correct way to draw the map.” Later in the semester, however, she began to prefer maps as she took on a more active role in relation to them, and she commented: “Once I realized that the maps were up to my discretion, I was able to organize them in a way that helped me.” Victoria too referred to an early moment of experimenting with who she could be as a reader:

*I have never been a great analytical reader, so learning how to read analytically for this class has been a helpful challenge. When I [previously] had to read for certain classes at a higher level, I would get discouraged and never read the whole reading [...] The readings can be very full in the aspect that the author has a lot of details [...] I feel that mapping is a beneficial way for me to break the reading up into topics that relate to the class and my thoughts. I really found the metacognitive reading log to be helpful to really see how I actually read the reading [...] mapping the reading and thinking about how I read at the same time, really puts into perspective how the readings work and how I should be thinking while I read.*

Finally, students’ comments also described the core humanities challenge of coming to terms with the dizzying range of perceptions and experiences of humanity. Victoria, whose early moment of experimenting with reading was quoted above, later in the semester moved on to the difficulty of imagining others’ perspectives:

*I would try to put myself in the same perspective as the women who faced much more persecution of being told to be silent or that they could not have any form of leadership in church, but I could not put myself there in that perspective because there is much more freedom for me now as a young woman [...] So, my goal for these readings was to just ask questions as if the women were there because I honestly would feel so confused.*

Reading about what women and men said in other times and places sometimes carried some personal resonance for the students, and Alyssa expressed what several students felt when she said, in her second reflection: “I do find the readings kind of exhausting to me [...] I find a lot of the argument rooted in bias and coming with an agenda, which I find frustrating.” The log formats that she found most helpful were maps and outlines. As she continued to work with these, she began to take on the goal of understanding “the material first,” and in her final reflection she wrote:

*In the beginning I couldn't understand the content of the reading because I was so focused on my analysis of [it] [...] but as time went on I learned that the best way to analysis is to understand the material first [...] just [read] and consider the history and arguments for what they are instead of trying to reassure myself that my thoughts going in have to be true.*

Maps, as well as outlines, seem to have been a useful way for her to write down the writers' points and create some space to think about them. Lucia reflected on the same challenge at the end of the semester:

*Some perspectives and opinions about women from certain people might bother me or make me angry. However, I have to understand that their experience is not mine. Their views of society and order and etiquette have been molded by the circumstances in which they were raised [...] my love for concept maps hasn't died down [...] For one or two of the logs that were designated to be different logs, I opted to [use] concept maps instead because ultimately, I just want to understand the reading.*

### **Taking ownership of the act of reading**

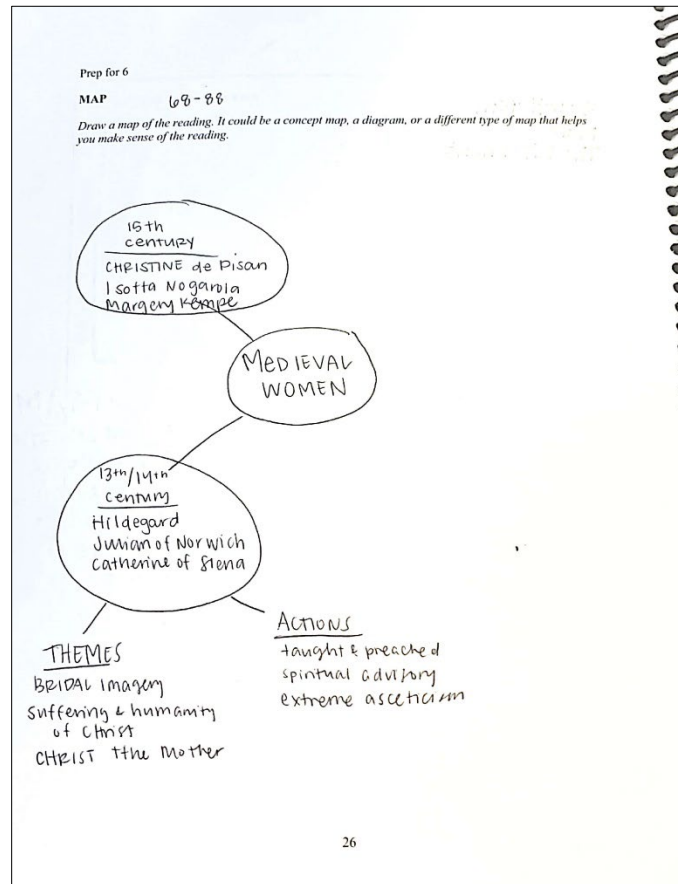
The second theme that surfaced concerning maps was that students often seemed to use them as part of a process of developing ownership of the act of reading. Students indicated this in different ways, small and large, in their Reading Reflections. Let me present one illustrative example.

Kayla's Reading Reflections showed how, over the course of the semester, she used maps as a stepping stone toward ownership. In the first reflection she explains that: “Because I am a [non-humanities] major, I don't usually do a lot of academic reading.” She also mentions that she is not practiced in crafting analytical questions about texts and that “[I] have always felt like too much interpretation is somehow bad.” However, she spends some time discussing her small group, which seems to have impacted her view of reading:

*The group of people that I discuss with in class is varied [...] I've grown a lot from hearing about their logs [...] My reading this semester has definitely challenged me in a new way [...] But in discussing and reading with my classmates I've realized how eye-opening it [interpretation] can be.*

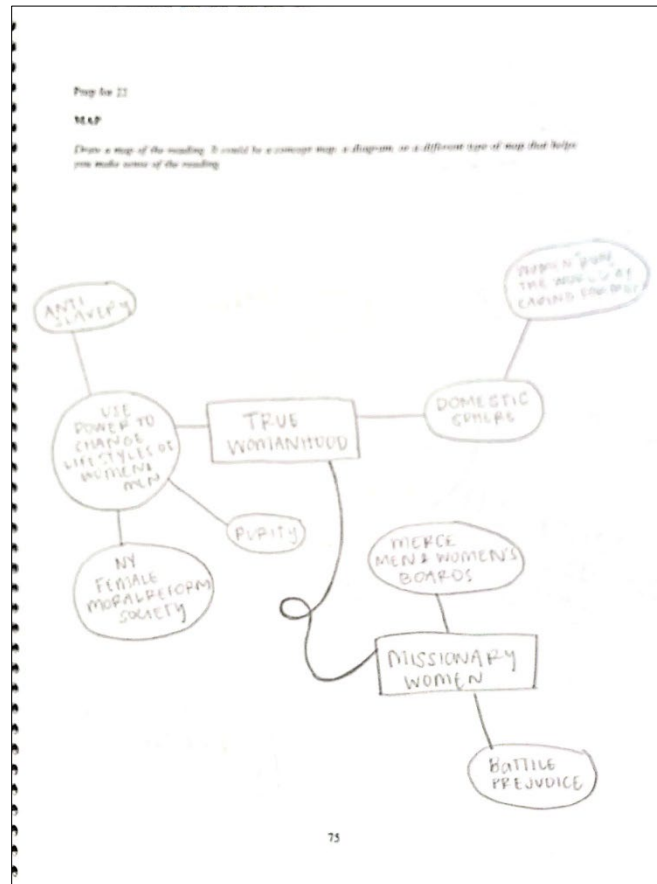
She states that the most helpful assignments for her have been the 3 quotes, 3 questions, and the outline, and that she feels she has been able to develop her reading techniques in this way. She adds, “I don't particularly connect with [logs] where I have to draw. Even the maps sometimes stress me out because I have no spatial awareness.” While this is not immediately apparent in her first concept map of the semester on women and Christianity in medieval Europe (figure 2), her comment underscores the additional information that can be gained from student reflections in addition to work samples.

Figure 2. A map from the first third of the semester



However, over the next third of the semester, her experience seems to have changed. In her second reflection, she remarks: “I did settle into more comfort with the more creative logs; mostly the concept maps. I found myself more able to make concept maps that had logical organization that I could look back on and understand.” Figure 3 shows one of her maps from this period. This time she credits the effort she had put in: “I definitely think this was entirely due to trial and error, and slowly figuring [it] out.”

**Figure 3. A map from the middle third of the semester**



At the end of the semester, she uses the final reflection to take stock and chart an abbreviated reading history:

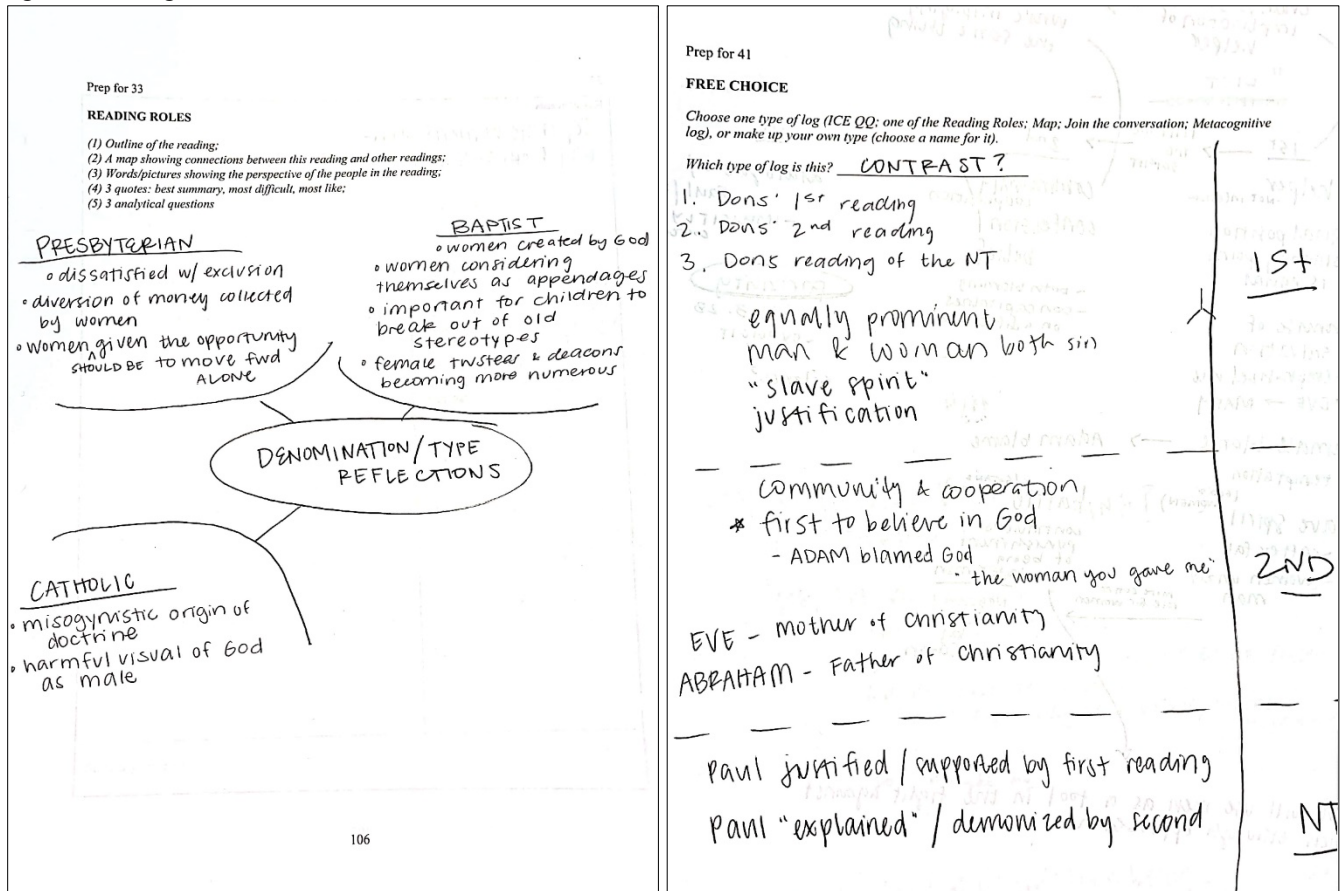
*At the beginning of my college career, I hated reading [...] I think that in the past I made the mistake of thinking that reading was a one-dimensional activity, and that the act of reading was the same regardless of the subject matter. That couldn't be farther from the truth [...] [This semester] I've been able to tailor my reading to my needs.*

She lists examples of practical strategies she has adopted, such as reading in a well-lit space and paying attention to conclusions. In terms of reading process, she comments that her use of maps has now evolved into her own style, which she describes as follows: “a jumble of descriptive and analytical statements and questions that I organize loosely.” Figure 4 shows two of her logs from this period, both of which have taken on a different organization than her previous maps. She continues:

*I think it was beneficial for me to go out on my own [...] to form my own connections and questions and takeaways [...] but I'd say I need a little bit more time to really hone my skills. I definitely think I'm capable of doing my own thing in a way that makes sense after the fact, but I'm not there yet.*

By the end of the semester, then, we can see in this student's story an epistemological change in how she thinks about what reading is and what can be done with texts, but also an ontological change in how she thinks about who she is, and can be, in relation to reading as a mode of acquiring knowledge. She has taken ownership of her own process of reading and envisages that it may still need more work.

Figure 4. Two logs from the last third of the semester



## 5. THE QUESTION ADDRESSES LEARNING: THE IMPORTANCE OF MAKING-WHILE-READING

Let me return to Ciccone one last time. He suggests that the fifth condition of a meaningful SoTL question is that it moves beyond the perplexing classroom problem that prompted it and grows to address the broader process of student learning, that is, "the process in which students experience changes in their ways of thinking and being through our courses" (2018, 21). At this final iteration of a SoTL question "[w]e're usually not looking for a better way to use small-group learning, for example, but rather what we can find out about student learning through its use—a subtle but essential difference" (2018, 21). In my case, after working through the close reading, my question grew into this final form: *Which habits have experts automated when reading in my discipline that novices have not?* In conclusion, I suggest that expert readers in the humanities (and other fields) have automated the habit

of making-while-reading, and because of our expert blinkers we assume that undergraduate novices in our classrooms automatically do this too, but they do not.

What do I mean by making-while-reading? While the act of drawing maps is a tangible process of making (which can be helpful in itself), the more important outcome it led to was students being able to mentally “make” an overview of the reading in their minds—that is, to understand the big picture of what the text was saying—and to become aware of this act as their own. Competent undergraduate students, who nevertheless are novice readers in humanities classes, may not know that when the teacher instructs them to “do the reading before class” they are expected to make a mental overview of the reading and to take responsibility for this making. This act of creating may not match the ways in which they have been asked to demonstrate reading proficiency previously. In this situation an open page that asks students to “make a map of the reading,” in any way they would like, seems to be particularly helpful from a student perspective. In creating their own map of the reading as a whole, students themselves discover the experience of making-while-reading, and after a while are able to notice that this constitutes a new way of relating to the text and to themselves as readers. It seems to me that other pre-class writing-to-read assignments can also achieve the same goal, such as drawing up an outline with annotations, or writing a response to a well-worded question from the teacher.

Further, students need to do this making-while-reading as a separate step in their reading process. Here I am attending to the student perspective on steps rather than relying primarily on the expert perspective. The student choices and reflections from my class seemed to broadly sketch out a series of four steps that they engaged with as they consciously worked on their own advanced humanities reading skills (though these steps were not rigid, and might overlap, be repeated, and so on):

- Step 1: Read the words; consider appropriate reading techniques; annotate or jot down notes along the way;
- Step 2: Try to understand what the reading (as a whole) is saying; “make” a mental overview of the reading (as a whole); take responsibility for this “making” in one’s own mind;
- Step 3: Further develop own understanding of the reading during discussions with others; use others’ comments as feedback to inform own understanding;
- Step 4: Develop own response in conversation with the reading; trace others’ differing perspectives in and on the reading; look for a pattern of connections across a field of readings; find connections from the readings to life.

Expert readers in the humanities commonly carry out steps 1, 2, and 4 simultaneously, and move on to step 3 as we share our work for feedback. Hampered by expert blinkers (cf. Staudinger 2017, 5), I had initially assumed my students did the same, and that they could therefore, for example, both make an overview and apply the reading before class. My students, however, needed to practice the step of making-while-reading separate from other steps. This need was signaled, I think, by the fact that the reading assignments that most directly asked students to produce analytical outcomes, namely “connect,” “perspective,” and “join the conversation” (belonging to step 4), were largely not taken up by students in their pre-class logs. Students did reflect on working *toward* these advanced outcomes, but it was usually as a result of our in-class reading exercises or afterward in their own writing assignments that students began to coherently articulate “perspectives” and “connections” across readings, and joined in their own “conversation” with these readings (step 4). This accords with what we know about expert

thought in general: disciplinary experts relate to information in their field as a connected whole and slot new statements into their own elaborated schema to make sense of them, while novices in a field relate to different pieces of information as separate and have difficulty finding connections between them (Ambrose et al. 2010, 40–65). Moreover, experts in a field have practiced their skills so extensively that they execute them fluently without consciously thinking about what they are doing, while novices need to tackle one step at a time and consciously try to carry it out (Ambrose et al. 2010, 91–120).

In sum, making-while-reading is a conceptual lens that might help instructors as we work to provide space for students to reach their own realization of what a reading can be in the humanities, and who they can be as a reader—namely someone who is trying to take steps to understand, discuss, and contribute to a web of ideas about humanity. I suggest that humanities instructors who wish to teach these advanced reading skills can start by providing pre-class assignments that allow for making-while-reading as a separate step.

**EPILOGUE: MEANINGFUL ANSWERS**

This paper has presented an example of an inductive SoTL process, using Ciccone’s (2018) five “conditions” of a meaningful question as a guide—though changing these “conditions” to “life stages” to clarify that there is a sequence of questions involved. Table 2 gives an overview.

**Table 2. An example of the five life stages of inductive SoTL**

Life stages	Actions	Example questions
1. A question about a problem in my classroom	Experience a problem. Try out “what works” to address the problem. Read about the problem. Propose a broadly conceived study with an (initial) question and a group of students.	How can I encourage undergraduate students to think about what they read in discipline-specific ways?
2. Digging deeper into the question	Formulate a deeper question: What is happening when...? Do something with the students.	What is happening when students read before class?
3. The question requires new information	Collect material. Analyze the material.	How can student viewpoints on pre-class reading be made visible?
4. The question gives rise to more questions	Consider further questions that arise. Return to the material (or collect new material) to analyze further, deeper questions.	Why maps?
5. The question addresses learning	Form a broader question about student learning. Present a meaningful answer.	Which habits have experts automated when reading in my discipline that novices have not?



As a final reflection on this process, I suggest that SoTL scholars who use this inductive approach to meaningful questions may reach an impasse when deciding, in the end, how to present a meaningful answer. The type of inductive, open-ended process described here will usually produce *conceptual* answers—that is, thick descriptions, interpretations, analyses, and arguments. In other words, the inductive process moves quickly past considering “what works” and instead digs deeper into considering “what is,” foregrounding student experiences and multi-faceted moments of learning. These types of answers are judged to be significant, or insignificant, by other scholars, based on their assessment of whether the arguments presented move the conceptual conversation forward: Do the answers generate new and productive questions for other scholars? Do they give others conceptual lenses through which to see patterns they had not noticed before? Can they be discussed and contested? However, such conceptual answers stand in some tension with SoTL’s practical orientation. Thus while these conceptual answers are considered meaningful in many disciplines, they may not constitute meaningful answers in SoTL without some further work. This is not only because SoTL is an interdisciplinary field. It is also because even scholars who use inductive processes in their own disciplines may turn to SoTL articles with a different expectation: the reasonable need to know what worked in the author’s classroom, what that looked like from the author’s perspective as a teacher, and whether it can be reliably replicated in their own class when they walk through the classroom door on Monday morning.

It seems to me this impasse presents us with two paths. The first path, I think, is not viable. This is the temptation to end an inductive process on a note of empirical generalization. In this scenario, my conclusion in the fifth section above would have been that all instructors should use maps as an effective teaching technique. This is not viable because my inductive research process, moving from the particular to the general, does not produce answers that are replicable, and thus they are not empirically reliable, in the deductive sense, or empirically generalizable. The second path aims instead to end on a note of what I will call “conceptual generalization.” Another class, taught by a different instructor, is not the same empirical *setting* as my study (my class in fall 2019), but the same conceptual *situation* may be in play (novices learning expert reading skills in the humanities). Thus the events in my setting need to be translated into generative questions, conceptual lenses, or contestable arguments that may help another instructor understand the same conceptual *situation* in her own, different *setting*. And in this case I would argue, as I did in the fifth section above, that this instructor should not trust her own expert assumption that her novice students are making something in their minds while they read, or her expert assumption that they can carry out this step of making simultaneously with other steps, such as responding. At this point, we have come back full circle to the practical side of meaningful answers in SoTL. While an inductive process initially moves past the question of “what works,” the final conceptual answer can return to this issue and incorporate a balance between “what is” and “what works” at a deeper level, interrogating *how* processes work in our classrooms. And this can provide an instructor with conceptual lenses to understand not just what she might do, but also why she is doing it, on Monday morning.

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## ETHICS

The research was deemed exempt by the Institutional Review Board (IRB) at the University of Georgia. Participation was voluntary and all students consented to participate.

## NOTES

1. This is not always an opposition, as there are potential overlaps between inductive and deductive processes. For other interesting ways of categorizing studies in the SoTL field, see e.g. Berenson (2018) and Miller-Young and Yeo (2015).
2. The SAT is a standardized test that often plays a role in college admissions in the United States. SAT originally stood for Scholastic Aptitude Test, but today “SAT” is officially used as a name and not an acronym.
3. There is a vast research literature on reading; I have tried to focus here on the sub-set that presents systematic SoTL studies of undergraduate reading in humanities classes. In addition, there is a wealth of pieces that focus on practical teaching advice (for thoughtful examples based on both experience and the literature, see e.g. Anson 2017; Corrigan 2013/2014).
4. In hindsight, I should also have included a log format that specifically offered strategies for reading historical primary sources, such as one designed to focus on the rhetorical situation (who is saying what to whom, when and where, how and why?).
5. In anthropology the term “ontological changes” would refer to changes in the nature of reality; I instead use the term here to denote changes in self-understanding, which is the sense the term has taken on in the SoTL literature.
6. All student names are pseudonyms.

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