Teaching with Technology: Using Digital Humanities to Engage Student Learning
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Abstract:
In this article, I address the challenge of fostering better student engagement with ancient material, and discuss my experience with designing a course around creative use of technology. In my recent course, The Ancient Christian Church: 54–604 CE, I employed several tactics to encourage student engagement with ancient and modern sources, which also promoted active participation at the level of pedagogy. By designing the classroom experience to allow for student-centered technology use, students were enabled to explore the ancient world in creative ways. In the end, I noticed greater student participation and higher-quality understanding of the ancient church when compared with lecture or seminar focused classroom experiences.

A perpetual challenge in current higher-education teaching is how to encourage and maintain student engagement with material in the face of the increasing presence of laptops, smartphones, and computers in the classroom. This is particularly true of teaching about antiquity, where the chronological gap between student experience and the material is much greater, and can result in difficulties connecting learners with subjects. Using technology to place more responsibility on students for their own learning experiences results in a classroom that is more engaged with the material. I make this argument from an experiential position, and therefore my aim in this discussion is to report on my experience implementing this approach, rather than to speak directly to this issue of pedagogical theory. Having read pedagogical theory about active learning techniques and discussed them with colleagues, I decided to apply these methods to see firsthand whether technologically-engaged active learning using techniques that allow students and the instructor to collaborate in the education process encourages students to take ownership of their learning experience in a way that alters how they process the material; in other words, to evaluate whether it is true that “the one who does the work does the learning”
Peer instruction and active learning informed my methodology. The pedagogical approach of the flipped classroom is not new, nor is my approach of promoting active learning in the classroom. Indeed, the widespread benefits of this approach have been known for almost thirty years, as numerous studies have shown; “the research evidence is clear that cooperative learning promotes higher achievement, higher self-esteem, increased higher-level reasoning, more frequent generation of new ideas and solutions (process gain), and greater transfer or generalization from one situation to another” (Thousand et al. 1994, 116–117).

However, while many instructors have added elements of these approaches to their classes, my experience illustrates the benefits of wholly re-structuring a course; through a series of active-learning problem sets that used new and familiar technology, students were gradually led to have confidence in their abilities as researchers. They were indeed capable of designing a portion of their own final examination at the end of the semester. The goal of this experiment was to determine if this method of instruction resulted in students who were “masters of inquiry” through inquiry-guided learning (Lee 2003). In the end, students were indeed able to ask complex questions about the texts they were reading and, in conversation with their colleagues and with me, the class succeeded in coming up with innovative and intelligent solutions to the problems raised by their exploration of the material. Creative use of technology in a restructured classroom created more engaged students who not only absorbed taught material, but were interested in contributing to the field and their own education. Although not empirical, student evaluations reflecting on the course and its assignments illustrate the potential for using these

1 See also, for example, Johnson, Johnson & Smith 1991; Thousand, Villa & Nevin 1994; Mazur 1997; King 1993; Crouch & Mazur 2001; Lage & Platt 2000; Bergmann & Sams 2012; Rosenberg 2013; Bonwell & Eison 1991; Lee 2003; Gallagher 2007; Satlow 2012; Doyle 2008; Zeller 2015; etc..
types of techniques to foster better student engagement inside the classroom, and better carry over after the end of the semester.

In my winter 2015 course at McGill University, The Ancient Christian Church: 54–604 CE, I experimented with using digital humanities technologies as well as social media as classroom tools. I also disconnected the structure of lessons from the lecture or seminar format, and allowed students to take increasingly greater ownership of the content within the structure of the class as the semester progressed. The class was small, with fifteen registered students, some of whom had a great deal of background in Classics or in Religious Studies, and some of whom had very little; philosophy, art history, and sociology majors, pre-med students, and other science students made up a good portion of the class demographics. One significant outcome of this experiment is that it demonstrates that flipped classroom techniques are also productive at an introductory level, and not only in more advanced seminars.

Course Overview

My goals for the class were that students would gain skills in engaging with ancient sources in a way that led to them asking critical, creative, probing questions about antiquity. Further, I wanted to facilitate students exploring the ancient sources in such a way as to draw a bridge between ancient and current lived experience. In terms of technical skills, I aimed to support them gaining skills in digital media production, including some basic HTML coding, and in communicating complex ideas in ways that are accessible to the general public. These were goals that I discussed with the students in person during an introductory meeting. The course did not require a prerequisite and therefore provided an introduction to the political, social, and theological issues facing early Christian communities. The syllabus outlined the topics covered:

Early Christianity represents a diverse collection of beliefs and practices embraced by a number of
communities. In the context of early Judaism and the Greco-Roman world, followers of Jesus composed texts that developed their ideas about God and his relationship to Jesus. These texts defined Christian identity within or against prevailing modes of religious adherence, and sometimes argued for Christian supremacy. This course provides an introduction to the development of early Christianity as it became an increasingly centralized set of institutions, with special attention paid to how we, as scholars, read these texts. Where appropriate, students will also examine related literature from the world in which the early church flourished. A diligent student will become well versed in the major events and historical persons from Nero’s reign to the papacy of Gregory I, while appreciating the diversity of beliefs and practices that flourished in the first few centuries of Christianity.

The course was structured thematically rather than chronologically. This was done in order to avoid presenting the development of Christianity as a linear progression whose zenith is the Catholic Church. The class began with an overview of the Greco-Roman social and political context in which the early Jesus movement developed, including the complex relationship between Jesus-followers and other Jews, and the so-called “parting of the ways.” Persecution, martyrdom, and the means of growth of the early Christian movement all followed, before approaching ritual in a directed way. Five sessions were then devoted to theological controversies and the councils that were held at Nicea, Chalcedon, and other locations. We then covered modes of leadership, followed by canonization issues. The last sections of the course were devoted to the political and social shifts that occurred in post-Constantinian Christianity. Discussions of the relationship between empire and church—including ascetic responses to Christians’ place in the world—were paired with specific writings by Christians at the edges of the empire. A final class elicited the major trends the students had noticed over the course of the semester, drawing connections between the various themes.

I opted not to assign a specific secondary textbook in order to encourage students to draw
their own conclusions based on close readings of primary sources. Instead, students either purchased Bart Ehrman, *After the New Testament: A Reader in Early Christianity* and Bart Ehrman and Andrew S. Jacobs, *Christianity in Late Antiquity (300–450 CE): A Reader*, or sourced the texts online in copyright-free translations from websites such as earlychristianwritings.com, Tertullian.org, or saintwiki.com. Ehrman’s books are also arranged thematically, and each section provides a brief introduction to contextualize the sources. Students also made use of Andrew McGowan’s *Ancient Christian Worship: Early Church Practices in Social, Historical, and Theological Perspective*.

**Classroom Activities**

To better locate technology as a tool rather than a competitor, I dedicated the classroom to student-led exploration of texts and topics. Over the course of the semester, students became more confident in their own abilities to make sense of ancient texts in light of what they had learned previously. In order to privilege the students’ contributions and self-development, I severely limited the amount of time I spent at the front of the class. The maximum portion of each class session where I would lecture was ten minutes per fifty-minute session; most classes contained no lecturing whatsoever. I used these ten-minute slots to present cultural and historical background information needed in order to contextualize the daily readings. During these mini-lectures I encouraged students to bring up questions about ancient society as they came up. The bulk of each class was taken up with small and/or large group discussion, where students responded to specific questions, came up with their own critical questions in small groups to pose to the larger class, or discussed more generally what surprised them or interested them about specific texts, making connections to earlier texts as the semester progressed. This
classroom format allowed flexibility in responding to the specific interests of the students while maintaining the thematic structure and primary-source focus of the course as a whole. Because I opted to remove myself as sole authority, at the front of the class, this format also explicitly demonstrated to the students that the class was organized to centralize their ownership over the learning process. Further, it created space for students to explore the materials through digital humanities platforms while supervised.

Instead of feeding the class information through lectures, I used a variety of interactive exercises to draw students into the ancient world through the texts they studied, using digital technologies along side performance and games to encourage students to enter into dialogue with one another. One of the earliest activities I tried was using Twitter to have students engage with early Christian martyrdom texts. I broke the students up into two groups and assigned each group a text. While all of the students had prepared all the assigned texts in advance, for this exercise, one group re-read the *Letter of Ignatius to the Romans*, and the other the *Martyrdom of Polycarp*. The students were instructed to come up with five “tweets” or 140-character statements documenting the experience of martyrdom from the perspective of the martyr, the crowd, and/or the persecutors. At the end of twenty minutes, each group wrote the tweets on the board and we discussed them as a class. Some of the tweets were amusing, but at the same time they honed in on important and sometimes subtle rhetorical techniques used by the ancient texts. For instance, the group interpreting Ignatius’ death wrote, “@therealjesus about to be #twinsies,” in order to communicate Ignatius’ conscious interpretation of his fate in light of Christ’s own suffering: “Allow me to be an imitator of the suffering of my God” (*Ignatius, Letter to the Romans* 6.3). Tolerating a casual tone in students’ tweets helps to foster a playful environment where new ideas can be tested without fear that questions might be taken as insulting or blasphemous; the
atmosphere instead promotes student confidence in exploring the topics with an open mind.

While this might seem like a diverting exercise that garners more instructor “cool-points” than educational content, the discussion after the exercise grounds the experience and guides students to query the kinds of statements they chose to reflect in their tweets and which they chose to leave out. Further, using Twitter to communicate significant and violent events is a method currently employed by people today, from Syria to Baltimore to Nepal. Fostering this kind of connection allows students to draw a bridge between ancient and current lived experience, and to imagine differences (and similarities) in the types of media used to communicate, both from a position of power (e.g. imperial inscriptions in marble) and from a position of political or social vulnerability (e.g. graffiti).

Students were also directed to digital research tools both within and outside of class time. Using ORBIS, Antiquity à la Carte (both of which are free, online digital mapping tools), and the *Barrington Atlas of the Greek and Roman World* (also available as an affordable app from iTunes), students spent two class sessions creating a detailed itinerary of Egeria’s fourth-century pilgrimage based on her diaries. Dividing the diaries into manageable portions, students read the text closely and then worked in teams to first define an itinerary and then plot its points on the map on the board. Antiquity à la Carte and the *Barrington Atlas of the Greek and Roman World* were used in the classroom, either on my iPad or on students’ laptops, to locate the itinerary points. Only one computer or tablet per group is required for this exercise, which is important to keep in mind for an economically diverse classroom. Students then used ORBIS to estimate the cost and duration of the journey using a variety of variables such as speed, comfort level, and season, which they interpreted from the diary. When the points had been located, students explained their process to their peers. This kind of exercise was designed, like the other
activities, to encourage students to engage more directly with the ancient world; as a result, students were able to ask critical questions about gender (how did Egeria’s gender affect the way in which she travelled?), class (would an ordinary person be able to afford such an expensive pilgrimage?), and race (can we know anything about Egeria’s racial identity? Or those she met?) in antiquity.

Methods of Evaluation

Promoting student engagement was also factored into my methods of assessment. Indeed, some assessments were designed to evaluate whether students were engaging with the material in innovative or curious ways. “Enthusiastic Participation,” as I term it on my syllabi, made up a small but important component of a student’s overall grade. The rest of the assignments were designed to provide students with the tools to interrogate ancient texts critically and to think creatively and broadly about the major themes in this period of church history. Aside from using digital humanities to this end, I have written about Thinking Pieces, low-stakes critical writing exercises that I assigned throughout the class, elsewhere (Sheinfeld & Warren 2015). An additional map project, assigned at the beginning of the semester, set the stage for the digital itinerary activity later in the term, and challenged students to become familiar with the major cities of the ancient Mediterranean by marking them on blank maps. The exercise is not difficult, but is time consuming, and requires close use of Antiquity à la Carte and the Barrington Atlas of the Greek and Roman World. The assignment was very effective. When called upon in subsequent sessions to recall where a particular city was located, students generally retained the geographical knowledge they had acquired through the project. In evaluations, one student had this to say: “I think it was essential to do, and right at the beginning, as it was. Without having
done it I would have been much less able to critically read texts and see their locations’ influence on the text.” The assignment also encouraged students to develop familiarity with these digital tools so that they could be used more effectively in class later on; as such, the initially mapping project was also extremely valuable when students spent two class sessions creating a map and itinerary of Egeria’s pilgrimage journey using ORBIS, as previously described. A typical evaluation of the assignment reads: “The map project was very relevant to the course, helped us better understand/visualize where these important historical events were taking place.” Students noticed how the mapping exercises affected their learning in positive ways.

One of the major digital tools I employed to encourage students’ participation in the course material was the Wikipedia project, which was designed to encourage students to take ownership of a particular topic in a public way.² Students were instructed to either create or “adopt” an entry, writing a substantial contribution and abiding by Wikipedia’s stated guidelines, which include proper citation and neutral language. I deliberately chose to use Wikipedia rather than a private wiki so that students would be contributing to the wider collection of public knowledge. Students were guided in choosing an appropriate topic, and in finding appropriate sources, but were responsible for learning the process of editing or creating a Wikipedia article on their own. Students were required to monitor the page for one month and to evaluate any changes made during that time; their findings and reflections were summarized in a final brief report submitted at the end of the semester. Student use of Wikipedia at the university level can be fraught with issues of academic integrity, of research skill development, and a general lack of comprehension as to the utility and purpose of Wikipedia. This exercise sought to challenge

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² Cf Satlow 2012; Satlow used a wiki-style assignment slightly differently but shares my aims in guiding students to deeper, independent learning. See West & West 2009.
reflection on these aspects of Wikipedia usage among the students while again bringing them into closer interaction with the subject of their study. It therefore also fostered responsibility in editing and writing about ancient religion in the public sphere, and gave students pride and confidence in their knowledge.

The reason that I decided to assign this kind of exercise instead of a research paper is twofold. First, learning to communicate complex ideas in ways that are accessible to a general audience is a skill that is infrequently taught at the university level and is often completely overlooked. However, this skill is not only crucial for communicating the importance of the humanities to those outside the discipline, but is also a highly valued skill for most non-academic jobs—jobs which the vast majority of undergraduates will one day fill. Further, students gained experience working with basic html coding, including formatting of headings, using open-source media, and creating internal and external links to related webpages. Second, the exercise was intended to foster a sense of responsibility to the topic through the understanding that the general public—and not just the instructor or a teaching assistant—would read the finished product. Students took pride in their contributions, knowing that they might be read and used by the public. These desired learning outcomes were acknowledged in the detailed course evaluation questionnaires that students filled out at the end of the semester. One student articulated his or her experience with the assignment in this way: “[I] finally got to write something for a class that wasn’t just going to be read by me and the TA before being tossed in recycling bin. Love the freedom in choosing topics, and learning how to code Wikipedia pages is a random but useful skill for the future.” Another student wrote, “I thought it was a challenging but edifying way to do research. The novelty of the genre, and its differences compared with a paper, forced me to think about and work with the material in a new light. It also was very effective in prompting me
to think about open access to information, and the responsibilities scholars have to the public.” Several other students echoed these sentiments; students realized that they contributed in a real way to the general public knowledge base and at the same time gained skills in using digital media and in writing for a general (rather than academic) audience.

While the digital humanities-based activities certainly introduced students to the content of the course and taught students important skills in using technology and in writing, the more important result, for me, was that these activities resulted in a more engaged learning community. In my experience, using technology in a consistent way in the classroom encouraged student engagement with course material in a way that built up students’ skills and confidence gradually; in the end, they were capable of designing critical and probing questions that reflected what (and how) they had learned.

**Evaluating Engagement**

In the past, I have seen a high percentage of students struggle to answer essay prompts or exam questions critically. I believe this is because while these methods of assessment test a student’s critical thinking skills, such skills have not necessarily been directly or explicitly developed through classroom experience; traditional lecture- or seminar-based classes tend to focus on content rather than process. These same skills were what the final exam in this course tested, but the course as a whole was constructed to focus on student engagement in a critical way with ancient sources.

Two major effects of this strategy are apparent in the way the final exam took place. The first effect was that the responses I read and graded after receiving the completed exams, worth 25 %, exceeded my previous experience with exams of this nature, and exceeded my
expectations for what this particular class would have gained from these in-class activities. The first portion of the exam consisted of excerpts ("gobbets") from the primary sources we had read throughout the course and a prompt to which students were to respond. For example, an excerpt from The Pastoral Rule by Gregory the Great that described the potential virtues and vices of church leaders using body parts as an over-riding metaphor was paired with the prompt, “What does this text tell us about what informs Gregory the Great’s values?” Students were asked to analyze, in another portion, what John Chrysostom’s concerns about Christian participation in Jewish rituals suggested about the “parting of the ways.” This section therefore tested the students’ analytical reading abilities, a skill developed and practiced during the many sessions during which we explored different ways of reading ancient sources.

But the greatest effect of this kind of engagement in the classroom is visible in the construction of the exam itself. Because the students had been interacting closely and in creative ways with the material throughout the semester, part of the test was to evaluate whether they would be able to come up with their own critical, creative, probing questions—questions that would indicate an appreciation for the larger picture of what they had learned about the ancient Church, and the nuances I had tried to guide them toward noticing using the classroom exercises discussed above. So I had the students themselves design the second half of the exam, which consisted of essay questions. One whole class hour near the end of the semester was dedicated to the process. First, we began by creating a “mind map” on the board, noting major themes covered in the class and their interrelations. The three core themes were “ancient,” “Christian,” and “church,” implying Christianity’s connections to the ancient Mediterranean, its attempts at self-definition, and its liturgical and ritual structures respectively (figure 1):

*Figure 1*
Students supplied other key words and directed me to connect them to other items on the map. As a class, we discussed each thematic entry and its connections to other themes. After the students were satisfied that the major themes were covered, I broke the students into groups and asked each group to come up with six questions that they thought would be good for the exam, using the Thinking Piece prompts as a guideline. Each group was then to narrow down its list of six to two or three finalists, which they wrote on the board. Some questions covered the same ground, and were amalgamated, leaving a list of seven potential exam prompts:

1. Using Emperor Constantine as an example, discuss the diversity of early Christian practice and belief.
2. Discuss some distinguishing characteristics of the Nag Hammadi corpus. What is at stake in these theologies?
3. What is at stake in the debates about Christian meal and/or food practice? Discuss with reference to ritual and boundary creation.
4. How did early forms of martyrdom and asceticism challenge emerging modes of church authority?
5. “I think, Jesus, that the High God would not have chosen a body such as yours; nor would the body of a god have been born as you were born. We even hear of your eating habits. What! Does the body of a god need such nourishment?”—Celsus. Write a response to this criticism of Christianity from the perspective of a proto-orthodox writer.
6. Compare the representation of gender in martyrdom texts and the ascetic movement(s).
7. Discuss some ways that Christianity’s relationship with Empire evolved (e.g. visibility, status, authority) as its socio-political environment changed.

Through this process of deliberation and reflection, the class proved to themselves as well as to me that they were capable of speaking with some degree of complexity about the ancient Christian church, in effect consolidating what they had learned over the semester. The exercise also helped to trace connections between the many disparate themes we had covered throughout the semester, providing coherence in the course. To me, the high level at which these students were able to construct their proposed essay questions signals the success of my chosen pedagogical method.
What Worked and What Didn’t: Considerations for the Future

Generally, the Wikipedia exercise was a success. Rather than have students work on one wiki entry collaboratively, having them do independent work on a subject of their choosing provided a good balance to the constant group discussion in the remainder of the class. Some students were disappointed in the dearth of available topics; I plan to keep a running tally of “stubs,” entries on Wikipedia that are marked for improvement, in order to combat this weakness in the assignment. I would also require students to make changes to their classmates’ Wikipedia entries, in order to foster a greater interaction among the students and to provide students with more to discuss in their final Wikipedia report. I would also consider, depending on the content of the class, establishing a relationship with a scholarly wiki like 4Enoch.org. I have since used a variation of this method of assessment at the University of Sheffield. Rather than create or edit a Wikipedia entry, students created podcasts, to be made publicly available, that were aimed at a general audience. This semester my students are creating multi-page websites. I remain convinced of the utility of public engagement exercises for student learning as well as for community enrichment.

Further, given the thematic structure of the course, I would have students create a grand timeline throughout the entire semester, so that they are better able to situate the events and discussions in their historical contexts. This was something I had been considering when designing the course initially, but had decided against for logistic reasons. I later tried it out on a smaller scale during the sections on theological controversies in order to situate how Christological concerns shifted over time. Creating the timeline for these issues was successful in making the complex debates more understandable for students. One student, without my
prompting, suggested a large-scale timeline activity in her/his course evaluation, confirming in my mind that this exercise would indeed be a valuable addition. The timeline could be done as an additional classroom exercise, be completed online collaboratively and discussed on the final day of the class, or it could be implemented as an individual final assignment, where differences among students’ timelines could be examined and discussed as a class.

Conclusions
In my experience promoting student engagement with the material in The Ancient Christian Church: 54–604 CE, active learning techniques using digital humanities tools helped students develop an ability to think critically and make connections among the many themes and texts covered in the course. Part of why I think these exercises worked the way they did is because they forced students to interact with the ancient sources experientially (for instance, in tracing routes through ancient geographies) and intimately (for instance, through taking ownership of a specific Wikipedia stub). The hands-on, non-essay exercises such as the Wikipedia project encouraged students to think of themselves as informed “experts,” capable of (and responsible for!) researching and communicating information for a public audience. The course design itself guided students toward coming up with their own conclusions about ancient Christians, something that was practiced over and again throughout the semester, and which was finally tested in the students’ own creation of the final exam.

In my own reflections on the class dynamic, I noticed that the students were more curious about the ancient material, more engaged in their learning, and that technology was being used in productive, rather than distracting, ways. My experience teaching the class in this way is echoed in the majority of student feedback I received. In their anonymous evaluations of the class at the
end of the semester, students reflected on how the use of digital humanities technology improved their engagement with the subject matter. One student wrote how s/he “found it to be very helpful when it came to understanding some of the more difficult texts and concepts. […] That type of learning environment made me comfortable to share my ideas and learn from others in the class.” In particular, students noticed how the centrality of this kind of active learning affected their engagement with antiquity: “It made me think about different perspectives, namely those from ancient times themselves and how ancient historical figures would have interpreted their worlds differently from how we interpret our own.” A final student comment indicates just how effective this kind of course structure can be in promoting student interaction with antiquity: “[Warren] wanted us to work through the primary materials; her interpretation and comments were always secondary. She also used a variety of techniques to get us to think more deeply and creatively about primary texts.” In the end, pairing digitally-enabled active-learning exercises with heightened intellectual responsibility yielded class participants who were enthusiastically involved in the material and in their own learning process, but as a benefit, students also developed skills to think more critically and intelligently about the course material.
Bibliography


Figure 1: