Teaching Archaeology with Inclusive Pedagogy

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Abstract

Introductory archaeology courses are attractive general education offerings at many colleges and universities, and teach students about human diversity in the past and present. Yet many professors struggle to manage the tremendous diversity within the classroom. This article incorporates inclusive pedagogy models, particularly Universal Design for Learning and Teaching Across Cultural Strengths, to propose an inclusive model of education in archaeology classes. An emphasis is placed on large introductory lecture classes, where many students are exposed to academic archaeology for the first time.

Introductory archaeology courses are popular general education classes at many colleges and universities, taught in large lectures to a diverse cross-section of the undergraduate population. These classes often fulfill social science, historical studies, or global diversity requirements, yet it can feel daunting to teach a large lecture class in a way that is inclusive of the internal diversity of our students. Undergraduates come to our classes from diverse socio-economic, ethnic, cultural, racial, and educational backgrounds, and with a wide range of physical, emotional, and neurocognitive disabilities. According to the National Center for Education Statistics (2019), 19.4% of undergraduates reported having a disability in 2015-2016. This number was significantly higher in certain populations, and does not include undiagnosed disabilities.

What does it mean to be inclusive? Broadly conceived, inclusive education recognizes that all learners are unique, and focuses on ways to include all students into traditional academic classrooms by providing accommodations or modifying the environments of schools (Ministry of Education and Science and United Nations Educational 1994; O’Neil 1994; Wade 2000). Although inclusive education was traditionally envisioned for students with learning and physical disabilities, recent scholarship has expanded the definition to cultural inclusivity, with a focus on the ways that our cultural values, socioeconomic status, and other factors shape the way we learn (Chavez and Longerbeam 2016; Pliner and Johnson 2004; Quaye and Harper 2007).

Welcoming diverse learners into our archaeology classes is crucial for increasing the diversity of our field, and therefore the diversity of interpretations and reconstructions about human history and experience. Introductory archaeology classes are, for many students, their first exposure to academic archaeology. These classes are therefore the discipline’s first tool in the recruitment of a more diverse population of archaeologists.

In this article I think about teaching introductory archaeology classes from an inclusive perspective, drawing on two broad educational frameworks. The first, Universal Design for
Learning (UDL), recognizes that the environment of the college classroom privileges neurotypical students and those that come from an elite educational background. Although colleges today provide accommodations to students with documented disabilities, UDL seeks to provide equal access to learning for students with a diverse set of learning needs, without having to self-identify disabilities (CAST 2018).

The second, Teaching across Cultural Strengths, recognizes that the environment of the college classroom is oriented towards a set of implicit goals and values based in the dominant western white culture (Chavez and Longerbeam 2016). Those who were apprenticed in the individuated values and methods of learning tend to succeed, while students from non-dominant cultures (broadly defined at the intersection of race, ethnicity, class, geography, etc.) are less likely to thrive. Chavez and Longerbeam (2016) argue that to teach across cultural strengths provides students from both dominant and non-dominant cultures opportunities to thrive at some times, while being challenged at others.

After developing a model based in these two frameworks, I provide a guide for faculty to transition to a more inclusive archaeology classroom. This guide is not exhaustive, nor is it meant to be implemented all at once. Rather, it provides options for building an inclusive classroom slowly, one step at a time. I describe some of the changes I made based in my work as a TIDE (Teaching for Inclusiveness, Diversity, and Equity) fellow at the University of Massachusetts-Amherst, and make suggestions for resources that archaeologists can use to implement changes in their curricula.

A Model for Academic and Cultural Inclusiveness

Universal Design for Learning

The Center for Applied Special Technology (CAST 2018), an educational non-profit dedicated to increasing learning opportunities for all individuals, argues that to implement Universal Design for Learning, a curriculum should: 1) Provide multiple means of representation (the WHY of learning); 2) Provide multiple means of expression (the WHAT of learning); and 3) Provide multiple means of engagement (the HOW of learning). Instructors must present information in a variety of ways to keep students interested, allow multiple “ways in” to the information, and multiple “ways out” for the students to express what they know. This approach emphasizes student choice and customization at every level, in order to facilitate self-motivation and self-reflection, accommodate physical and cognitive challenges, and to build student competence and confidence. The goal of UDL is to produce “expert learners,” who are purposeful and motivated, resourceful and knowledgeable, strategic and goal-directed (CAST 2018).

Universal Instructional Design is an evidence-based practice that takes as its foundation the idea that an instructor can thoughtfully prepare a course with diversity in mind, taking into consideration a set of principles (McGuire and Scott 2006; Scott et al. 2003). These include
considerations in the delivery of content, such as teaching in a simple and intuitive manner, using a variety of instructional techniques, making classroom materials accessible to diverse learners, tolerating error, and allowing students to grow in skills throughout the course. Sally M. Scott and colleagues (Scott et al. 2003) suggest considering the physical constraints of all students, and designing lessons that use the classroom space in a way that all students can participate. Finally, they argue for designing the classroom as a community of learners, in which there is mutual respect and trust, and high expectations that students are encouraged to meet.

Teaching Across Cultural Strengths

In their book, *Teaching Across Cultural Strengths: A Guide to Balancing Integrated and Individuated Cultural Frameworks in College Teaching*, Alicia Fedelina Chávez and Susan Diana Longerbeam (2016) lay out a model designed to be inclusive of, and challenge, students that are apprenticed into different cultural frameworks of learning. According to their model, in a culturally *individuated* framework a private, compartmentalized, linear, contextually independent conception of the world is common, assumed, and valued. In a culturally *integrated* framework, an interconnected, mutual, reflective, cyclical, contextually dependent conception of the world is common, assumed, and valued.

The authors argue that we should create classrooms in which both frameworks are embraced, but that traditional educational systems tend to privilege the individuated framework. The authors break down their model into eight parts: the purpose of learning, ways of taking in and processing knowledge, the interconnectedness of what is being learned, responsibility for learning, time, the role of the teacher, student interactions, and sequencing.

The individuated framework emphasizes individual goals, individual assignments (such as papers and individual assignments), and has a teacher that delivers knowledge through lectures. Knowledge is compartmentalized and linear, and the mind is the primary or only way of knowing. The individuated learner is responsible for one’s own learning, so as not to burden the family, and learning is private. Being on time in the individuated framework shows respect, and time is linear. Interaction is primarily between a teacher and student, and the perspectives of others is optional. Finally, learning is done by mastering abstract theory, without application except on a test.

The integrated framework, in contrast, emphasizes learning as a way to better the lives of the learner’s family or community. It engages learning through the mind, body, and spirit, and sees all knowledge as contextualized and connected. For an integrated learner, learning is a collective and shared activity, and students are responsible for their own and others’ learning. Time is often cyclical, process-oriented, and dependent on relationships, and to allow for enough time to complete tasks shows respect. The role of the teacher is more of a facilitator of learning experiences, and there can be a wide variety of interactions between students, and
between students and teachers. The integrated framework sees others’ perspectives as essential to learning. Finally, learning is achieved by doing and experiencing first, before moving to the abstract theory.

The authors stress that we all benefit by working outside of our comfort zone, and that it is beneficial to individuated learners to stretch into more integrated techniques and perspectives. Integrated learners, on the other hand, are stretched all of the time and forced to learn within an individuated framework. By moving between both of these frameworks, a college professor can allow all students to vary between comfortable and stretched, and all students will develop new skills and capabilities.

**Table 1. Aspects of the two models from which this article draws.**

<table>
<thead>
<tr>
<th>Universal Design for Learning (CAST 2018)</th>
<th>Teaching across Cultural Strengths (Chávez and Longerbeam 2016)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provide multiple means of representation, expression, and engagement so that all students can learn</td>
<td>Vary teaching between an individuated framework and an integrated framework of education</td>
</tr>
<tr>
<td>The goal is to produce “expert learners,” who are purposeful and motivated, resourceful and knowledgeable, strategic and goal-directed</td>
<td>The goal is to move away from an educational model that privileges only individuated (western, white) forms of knowing and learning</td>
</tr>
<tr>
<td>Teaching that takes into account all types of learners is good for all students.</td>
<td>It is good for all students to stretch outside of their culturally-apprenticed forms of learning.</td>
</tr>
</tbody>
</table>

**Attempting Inclusion in Large Classes**

Both UDL and cultural inclusion are challenging in large classes, where content is delivered in lecture format, the curriculum is not particularly flexible, and students and professors are unable to form personal relationships. David H. Rose and the faculty at CAST (Rose et al. 2006) illustrate how they use the three principles of UDL (multiple means of representation, expression, and engagement in learning) in a large lecture class at the Harvard Graduate School of Education. Although information is conveyed primarily in lecture format, they provide
multiple representations of the lecture. They have sign language interpreters, when necessary, and orally describe visuals for any student that is visually impaired. They also videotape each lecture, which allows students with learning disabilities, those learning the English language, or those with attention difficulties to view and absorb the lecture in a way that is convenient to them. Finally, they solicit multiple notetakers for each week of the class, and make multiple versions of the notes available to all students, regardless of any documented disability. Powerpoints with headers provide a structure for the lecture, which helps students keep organized and understand what is being presented. Visuals and graphics present an alternative to verbal and text-based information.

Despite the uniformity and rigidity of a lecture class, the CAST team developed ways to offer flexibility and choice so that students stay invested in their learning. They offer multiple versions of discussion sections, some of which are review sessions, while others are advanced (and have additional readings). Still others are online groups. They also offer a choice of textbook: one is heavily text-based, while the other has a lot of visuals. They explain that they are equivalent in terms of the information, but students may prefer one format over the other. Both are available for free as a downloadable e-book, which appeals to students that use a voice browser, those that need a free version, or students that like to explore the embedded links. They offer additional links to websites each week on the course management page, so that students can see the same information explained in different ways.

Students in this class are assessed on two collaborative projects, rather than on tests or papers. One project is a website, which is very challenging for some students, but allows others to shine. They offer scaffolding and support for the building of the website, and provide models.

*Combining UDL and Teaching for Cultural Strengths: Designing Instruction to Meet the Needs of All Students*

Pliner and Johnson (2004:108) advocate for the combination of UDI (Universal Design for Instruction: a framework for applying UDL principles to learning environments) with multicultural and social justice education as a way to consider “issues of difference, discrimination, inequity, and the exclusion of historically underrepresented populations in higher education.” Students with disabilities often have to fight for access and accommodations, and thoughtful instructional design can alleviate many of the struggles that make students feel excluded. Similarly, multicultural and social justice education (i.e. Nieto and Bode 2018) argues for an examination of power in our institutions and curricula, and that we can make students from underrepresented minorities feel included by addressing issues of representation and privilege in our classes, our syllabi, and our faculty.
Chita-Tegmark, et al. (2012) argue that UDL can be used to support culturally diverse learners. Similar to Chavez and Longerbeam (2016), they argue that learning occurs in a cultural context, and that many students learn how to learn in a context very different from the dominant western model that is typical in the university setting. Using the UDL framework, the authors suggest that we design our curricula in a way that allows students to learn and express information in the thought systems and knowledge patterns with which they are culturally familiar, while building fluency in new ways of learning.

For example, instructors can provide multiple levels of support for practice and performance for those learning new ways of seeing and organizing information. Instructors can recognize that students may have ways of grouping relationships and forming categories distinct from the instructors’ own categories, and provide graphic organizers for students to express these. They also suggest that instructors can help students to develop personal coping strategies, by sequencing the curriculum so that tasks become more challenging over time. They advocate using breaks and pausing to reflect as ways to avoid ego depletion in challenged students (Chita-Tegmark et al. 2012). By providing graphic organizers, a sequenced curriculum, and opportunities to pause and reflect, instructors offer students multiple ways to achieve success, maintain their stamina, and feel positive about their growth.

Many features of the UDL and Teaching Across Cultural Strengths frameworks do in fact overlap. Both stress maintaining a respectful and positive relationship with students, and position the learner at the center of instructional design. Both emphasize that students should have choice in aspects of their own learning. And both support engaging students with assignments, resources, and an environment that enhance and maintain their interest in learning the subject material.

Although I could draw from so many aspects of these frameworks, my personal model for an inclusive classroom has simplified these frameworks into three categories.

1) **Create a safe and welcoming learning community.** Students need to feel safe in order to learn, express their opinions, and collaborate. Creating community stems from knowing each other as people, setting classroom norms and guidelines, and stressing that the responsibility for learning comes from each other. It stresses collaboration and group learning in addition to individual tasks, with clear guidelines to promote positive interactions.

2) **Create choice for students to direct their own learning experience.** Both UDL and Cultural Strengths frameworks stress empowering the student to make decisions, offering flexibility when possible, and moving away from a rigid one-fits-all approach to teaching. This includes providing a variety of ways to take in information, and a variety of ways to show what they have learned.
3) **Provide engaging and active learning experiences that are meaningful to students.** Although there is a place for the lecture format, and some classes and classrooms are designed exclusively for this activity, both frameworks would stress balancing thoughtful lectures with more engaged learning. This is both methodological and epistemological. It involves the creation of meaningful projects and options for active learning outside of, or within, the lecture classroom. It also involves considering why the subject matter is relevant to students, and continually linking subjects like archaeology to the present day and to contemporary politics.

**Teaching Archaeology in Inclusive Ways**

During the 2018-19 academic year I had the opportunity to participate in the TIDE (Teaching for Inclusiveness, Diversity, and Equity) Fellowship at the University of Massachusetts-Amherst. This program, run by the university’s center for Teaching Excellence and Faculty Development (TEFD), focused on ways that faculty could create more inclusive classrooms, to honor the diversity of our students, and to create a more equitable campus experience. As a faculty learning community, we discussed educational theory and method, and linked these readings to our own experiences in the classroom.

During this year I worked as a lecturer at UMASS-Amherst, teaching five classes and more than 400 undergraduate and graduate students. My largest class (and the largest enrollment in the anthropology department) was Ancient Civilizations, a 330-person class that fulfills the Gen Ed requirements for Historical Studies and Diversity. Smaller classes included a section of Ancient Civilizations and a section of Introduction to Archaeology for the Commonwealth Honors College (classes capped at 22), an upper-level Gen Ed course in South American Archaeology (capped at 30), and a small graduate seminar in the Archaeology of Colonialism.

I used these courses to experiment with new techniques and strategies for creating a more inclusive classroom for my students, and spent time reflecting on my pedagogy. In the following section I describe some of activities and practices that I adopted into my classes. Some of the techniques were piloted in the small classes and I did not have the opportunity to develop them further for a large class. I reflect on ways to scale up some of the activities to a large lecture format, and provide some resources and references to work that inspires my future teaching of large lectures.

**Create a Safe and Welcoming Learning Community**

**Inclusive Syllabi**

When designing a more inclusive archaeology class it made sense to begin with the syllabus. There has been considerable focus on promoting diversity in syllabi by assigning minority
writers and including non-dominant thoughts and ideas in the course design (Anderson and Erlenbusch 2017; Quaye and Harper 2007). This is important for several reasons, among them to make minority students feel included, to honor the diversity of voices in the field, and to disrupt entrenched systems of power within the discipline. Yet it is also important to use syllabi to honor the diversity of students within the course, and make it easy for all students to access important information. Syllabi help set the tone for a course, and provide crucial information for students to achieve success and stay organized throughout the semester. Inspired by Womack (2017), I changed my syllabus to be more inclusive of all learners, regardless of disability or educational background, to communicate my desire to create a safe and welcoming learning environment, and to be engaging so that students would get excited about learning.

I made several small changes to my syllabi that made them more accessible to students with learning disabilities. For example, I made sure my syllabi were written in a sans-serif font, double-spaced my text, and arranged the page to have two columns rather than one. All of these changes assist students with dyslexia and other processing disorders to read more clearly and easily.

I also made sure that the text could be read by a screen reader for students with visual impairments and other disabilities. I used headings and sub-headings to organize the document, and inserted a table of contents that linked to those headings. This formatting allows students using screen readers to quickly navigate to a particular section, without listening to the entire document.

I included an inclusive learning statement that goes beyond the disabilities statement required by the university. It expresses my intention to work with any student that is struggling in the course, and has the contact information for various offices on campus (Writing Center, Learning Resource Center, Disability Services, ESL Program, and Counseling Services). I also included a Name and Pronoun Statement, indicating how students can change their preferred name and pronoun within the university computer system.

Finally, I tried to increase engagement with the course topic by using positive and encouraging language, and by including pictures and infographics. I removed all negative and punitive statements from the syllabus, such as how students would lose points, and replaced it with statements about how students could earn points. I tried to indicate my respect for the students with my tone. I also tried to make the syllabus visually appealing, by including pictures of artifacts, sites, and people throughout the text. I created a word cloud of the syllabus using a free online word cloud generator (https://www.wordclouds.com/). And I created a pie chart of the grading breakdown to accompany the text description.

While many of these are simple changes, and may not be consciously noticed by students, taken together they change the tone of the course. The syllabus is often the first
course document that students will see. It is an opportunity to set the stage for a learning environment that is respectful, engaging, and accessible.

Table 2. Syllabus changes, inspired by Womack (2017), and the desired outcome.

<table>
<thead>
<tr>
<th>Syllabus Changes</th>
<th>Desired Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>-use sans-serif font</td>
<td>-make syllabus text more readable for students with dyslexia and other processing disorders</td>
</tr>
<tr>
<td>-double-space text</td>
<td></td>
</tr>
<tr>
<td>-arrange text in two columns on the page</td>
<td></td>
</tr>
<tr>
<td>-insert table of contents with hyperlinks to headings and sub-headings</td>
<td>-make syllabus accessible and navigable to visually-impaired students using screen readers</td>
</tr>
<tr>
<td>-include an inclusive learning statement that is more extensive than required</td>
<td>-make all students feel welcome in the classroom community, and open lines of communication for accommodating student difference</td>
</tr>
<tr>
<td>-include a name and pronoun statement</td>
<td></td>
</tr>
<tr>
<td>-replace negative and punitive language with positive and welcoming language</td>
<td>-make students feel respected, and create sense of the classroom as a learning community</td>
</tr>
<tr>
<td>-add pictures, word clouds, infographics</td>
<td>-increase engagement in the course material and in the syllabus document</td>
</tr>
</tbody>
</table>

Getting to know you questionnaire

Ideally, I like my students to think of our class as a learning community, in which we are all responsible for our own and each other’s learning, and to which each person brings a unique and important perspective. Laura Rendón (2014) argues that to know a student as a whole person is an act of social justice, and allows learning to happen at a deeper integrated level. When culturally diverse students feel validated and known, they are more likely to succeed (Rendon 1994). “Getting to know you” activities are therefore key to transforming classrooms into communities where all students feel known by their peers and professors.

One method I use for students to introduce themselves is a brief questionnaire on my course management page that students fill out in the first week of class. This seven question survey asks students for their preferred name, pronouns, major (or possible major), and class year. The question about name and pronouns is particularly important for students with non-normative gender identities, and at schools where students cannot change these details in their
own student record. It also asks students where they are from (which can be interpreted in a few different ways), to tell me about one thing that they are really into right now (a tv series, book, type of music or artist, favorite activity, game, etc.), and if there is anything else I should know. These are my favorite answers because I learn something personal about each student. They sometimes take the opportunity to tell me about their learning disability or anxiety disorder, or share with me that they are self-funding their education and work full-time to support themselves.

Name Tents

In smaller classes I have all students put their name and pronouns on table tents (such as https://amzn.to/2XxeQ71), so that I and their classmates can always address them appropriately. Students pick up the table tents at the beginning of each class and display them on their desks, and then return them to me at the end of class. Students become named individuals, to me and to their peers, all part of a mutually respectful learning community. Coincidentally, this is an unobtrusive way of taking attendance, as I can quickly record the names that are left at my table.

Hopes and Concerns

One way I build community in smaller classes is to have students write about their hopes and concerns about the course. We usually do this on the first day of classes, after discussing the syllabus and course expectations. Many versions of the Hopes and Concerns (or Hopes and Fears) activity can be found online. In my version, I hand out index cards to all the students and ask them to anonymously write their hopes for the class on one side, and their concerns on the other side. I collect the cards, mix them up, and redistribute them. We then go around the room and each student reads the concern written on the card in front of them. Some common concerns are “I’m worried I won’t have enough time to complete the class assignments given the heavy course load for my major” or “I am concerned that I won’t like archaeology, since I don’t know anything about this subject.” By the end of it, we are all feeling worried!

We then go around the room again and each student reads a hope. Responses include sentiments such as “I hope that I do well on the tests” and “I hope to learn a lot about South American archaeology, as I want to study abroad in South America next year.” We all leave the class full of hopes for the class, and I have a sense of how students are feeling. Students have given me feedback at the end of the semester that this exercise really did make them feel better about the first day of class, as it made it clear that other students were also worried about things. The activity takes about 10 minutes. It helps students to feel less isolated and alone in their concerns, and is a great step toward forming a learning community.
**Icebreakers**

Many of us already do some kind of icebreaker on the first day of class, such as “tell us your name, major, and why you are in this class”. These can feel very awkward and students often rush through them because they don’t yet have a feeling of safety. For this reason, I tend to avoid whole class icebreakers that put students on the spot at the beginning of the course, and aim for smaller group activities so that each student initially gets to know 2-3 others. Some examples of easy icebreakers include the game “two truths and one lie” in small groups, or “if you were an animal, what animal would you be, and why?” (this can also be adapted to “if you were a South American animal, which would you be”, etc. for geographically focused archaeology classes.)

I have found that icebreakers can be a nice way to break up a lecture class, and students have provided feedback that they truly appreciate the mental break. For this reason, I often plan a 5-10 minute icebreaker for the middle of a class, rather than the beginning of one. I also plan out several icebreakers to use over the course of the first two weeks, as the formation of community takes time (and new students will also often join the class later in add/drop).

One icebreaker that works well for archaeology classes is an adapted version of Pocket Archaeology ([https://jas6y5.wixsite.com/arch-blog/pocket-archaeology](https://jas6y5.wixsite.com/arch-blog/pocket-archaeology)). In my South American Archaeology class (30 students), I first divided the class into two halves, based on which side of the room they were on. Each student took out a few everyday objects from their pockets, backpacks, purse, etc. and laid them on their desk. Then the two sides of the classes switched, and each student sat down with someone else’s objects. Using a brief worksheet, the students observed the objects like an archaeologist, trying to figure out what they could know about the person that owned them, and what they could not. After a few minutes I asked one half of the room to go back to their original objects and introduce themselves to the person sitting with their stuff. Then we switched and did the same thing on the other side of the room. This was an excellent way for students to know something in depth about two others in the class, as well as an effective jumping off point to talk about material culture and the nature of archaeological evidence. I allowed about 30 minutes for this activity so that it did not feel rushed.

A final suggestion is to do an either/ or activity that polls students and asks them to move across the room to indicate their answer. For example, I might ask “are you a cat person or a dog person?” and ask students to move themselves along a line to indicate their answer (cat people to the right, dog people to the left). Some other suggestions include, “do you prefer the beach or the mountains?” or “do you like to travel or stay at home?” Other questions could gage students’ learning styles: “are you a visual learner or an auditory learner? Or, “do you work better alone or better in groups?” Often students will choose the middle rather than pick a side, or put themselves somewhere along the continuum, and I can engage with students in a...
casual way asking them to explain their answers. This activity is a low-stakes icebreaker in which we learn a something personal about each other, without anyone being on the spot or singled out. It takes 5-10 minutes, depending on how much time you spend asking students follow-up questions or to clarify their positions.

*Establishing Classroom Norms*

One of the ways I create a safe space in my classes is through the establishment of classroom norms. I impress upon the students that we are a learning community, that we are here to learn together and from each other, and that we all need to feel safe and have ownership over the way our classroom is run. I ask them to spend a few minutes and write down some norms/rules that they would like to have in their classroom. I then ask them to share at least one norm/rule with us as a class. In some classes I go around the classroom and ask each student to speak. Other times I ask for volunteers. While students speak, I type their norms into a PowerPoint slide, and then post the slides as PDFs later on the course management website. This takes approximately 10-15 minutes. Ideally, we would revisit these norms at a later date, and check in about whether we need to add or change anything, although I have never done this. Nonetheless, I find that the act of creating class rules together contributes to a positive classroom climate.

*Community Building in Large Classes*

These community building activities can be harder in large classes. In lecture classes with TAs I make sure that the questionnaire can be sorted by section, and ask the TAs to review the responses to their own sections. I also ask them to do some version of an icebreaker for the first one or two TA sections, and encourage them to establish classroom norms with their students. I have not done most icebreakers in the lecture hall, nor have I done the hopes and concerns activity. It is a goal for future classes to find ways to do some small group activities so that students can get to know the few students sitting around them, and can get a sense of being part of a community while sitting in the lecture hall.

Polling activities can be more effectively done in a lecture hall by having students stand or raise hands in response to questions. For example, I asked students in my 330 person Ancient Civilizations course some questions about what they were studying (“Who here is in the sciences? Who is in the humanities?” Etc.), about what year they are in their studies, about who is an anthropology major, who is taking it to fulfill a general education requirement, etc. Although I could have gotten much of this information from the questionnaire or even student records, there was value in doing it publicly. Students could see that there were very few anthropology majors in the class, and that it was in fact mostly business and science majors taking this for their Gen Ed distribution in historical studies. This was a very short 5-10 minute activity.
Another way to do this would be to use free polling software and have the results appear on-screen in real time, although I appreciated the opportunity to address them in a more casual way outside of the lecture format. For example, when I asked about their majors I forgot about the business school. I asked, “what am I forgetting?” and they had the opportunity to enlighten me. I do think creating an opportunity for some casual back and forth early on in the class helped to create a more relaxed atmosphere. Students were more comfortable asking questions during lecture, which normally never happened in the intimidating 330-person lecture hall.

Create Choice for Students to Direct their own Learning Experience

Multiple Means of Representation

It is a central tenet of UDL that students should be offered choice in the way that they take in information. The Cultural Strengths framework emphasizes a balance of individuated (teacher-centric and individual work) and integrated (student-centric and collaborative) approaches to learning. In small classes I use a variety of teaching methods, including short lectures, activities, and small and large group discussions. Students have either a textbook or readings available online through the course management website. I post PDF versions of the lecture slides online for students to download.

In my Ancient Civilizations lecture class (a 330-person lecture), lecture plays a much larger role in the delivery of information. My slides use a mix of text and visuals to describe concepts. I try to use text slides to provide key definitions and to provide organization to the lecture. I sometimes use online video clips to provide other expert perspectives or to illustrate key concepts through action or animation. For example, I often use You Tube videos about radiocarbon dating, as these videos do a much better job of explaining the science than I can, and are far more engaging. I also use videos to talk about heritage issues in different countries, to illustrate flintknapping or pottery production, and to show experts analyzing human bones.

I do post a PDF version of my lecture slides. At the request of students, I started posting these slides before class, to allow for students to take notes alongside the slides during the lecture. I also use lecture capture by Echo360, which automatically records my lecture and voice, and displays the slides alongside a video of me talking. Echo360 syncs with the course management website at my university, allowing me to see how many students are watching and engaging with these online videos of the lectures. The highest number of views for any class was 94, and most video lectures were watched between 30 and 60 times.

I do require in-class attendance, and students use clickers (UMASS-Amherst currently supports the iclicker technology) to record their presence by answering a majority of questions posed during the lecture. Each student is allowed to miss three classes without any documentation needed, and I am willing to work with any student that needs more classes
excused, in collaboration with the Dean of Students. I might rethink this policy in the future, as lecture capture technology makes physical presence in class less necessary, and it negatively affects the grades of students with anxiety or other disabilities that prevent them from attending classes. I do feel, however, that physically attending a class allows the creation of community in a way that lecture capture cannot achieve.

In the future I would like to experiment with other ways of providing more choice of content to students. I recently learned that both PowerPoint and Google Slides can provide automatic captioning at the bottom of slides, translating what is heard through the microphone into text. The captioning on Google Slides seems to be more accurate, although PowerPoint can provide a transcript at the end of the lecture, which could be very useful to students. I would also provide alt-text for images, which I have never done before, but which is useful for students with visual impairments.

I would also like to provide more regular and abundant links to web resources and additional readings about the topics presented in lecture. This would provide students other examples, additional voices, and the ability for advanced students to dive further into the material if they have a particular interest or find the material too easy.

Finally, I would like to adopt the practice described in the article by Rose, et al. (2006) of engaging multiple notetakers each week, and making the notes available to everyone. Currently the Office of Disability Services can employ a notetaker for each class in which a student has that accommodation, but it is often hard to recruit someone in a timely manner, the notetaker might miss classes or do a poor job, and only the student with disabilities has access to the notes. The practice of assigning multiple notetakers each week, and making those notes available to everyone, allows every student access to a variety of voices, emphasizes that we are a learning community responsible for each other’s learning, and makes students with learning disabilities feel fully included in the class community.

Textbooks and Socio-Economic Inclusion

Many anthropology professors are conscious of the economic burden that college places on students. Keeping costs low for our students recognizes the socioeconomic diversity of our student population, and is an act of inclusion. I was fortunate to take over a large lecture class that had been designed around articles and book chapters rather than a textbook, and to work at a university where the library is committed to helping professors provide free resources to students through digital course reserves. Students could download all readings free of charge via the course management page, and scans provided by the library accommodated the copyright laws. One problem I encountered with scans of book chapters is that they were not all optimized for text recognition, and could not be used with screen readers. This was a significant barrier to one student and something I will try to rectify in any future classes.
I do assign textbooks for some courses, for reasons of practicality and to provide appropriate content. I try to make sure that these textbooks cost less than $40, and are available at a lower cost in the digital format, used, or as a rental. Having the choice of a digital format provides students with disabilities the option to alter text size and display, or to have books read aloud with a screen reader. I try to assign books that the library owns as a digital copy and have asked the library to buy digital copies of others. The library has been very supportive of my mission to provide low-cost options to students. They are, however, unwilling to invest in digital textbooks that will be upgraded to a new edition after 1-3 years.

In the future I would like to incorporate more Open Education Resources, which are distributed for free online. As of 2019, I have not found any open access textbooks that could replace the ones I use for Introduction to Archaeology or South American Archaeology, although there is a growing list of resources available via the Mason OER Metafinder database (https://oer.deepwebaccess.com/oer/desktop/en/search.html). There are a few open access textbooks related to archaeology, such as *Introduction to Human Osteology* (Hall et al. 2008), or *World History: Cultures, States, and Societies to 1500* (Berger et al. 2016). There are also several recent edited volumes, articles, collections of photograph archives, and archaeology lesson plans available for download, and websites devoted to indexing open access resources in archaeology (https://openaccessarchaeology.tumblr.com/).

**Multiple Means of Expression**

Both UDL and Cultural Strengths frameworks emphasize multiple means of expression so that students can illustrate what they know in comfortable and meaningful ways, while building skills toward new modes of expression. I try to vary my assignments between those that are writing based, and those that allow for a more creative non-written expression. Although ultimately students need excellent writing skills if they are to continue in anthropology, most of the students in my courses are taking them for general education distributions. It is more important to me that that these students learn concepts, engage critically with ideas, and become more anthropological in their thinking.

I have replaced several traditional writing assignments with more creative media-based projects. For example, students in my honors version of Ancient Civilization complete a Virtual Museum Exhibition project, in which they select images of five artifacts from one of the complex societies that we study (Mesopotamia, Egypt, Maya, or Aztec) and curate an exhibit about a particular theme of their choosing. Some examples include topics such as gender roles in Aztec society, medicine in ancient Egypt, or the relationship between religion and power in the Classic Period Maya. They provide a photograph of each artifact, and accompany it with a two-paragraph description of how that artifact helps to illustrate the topic of the exhibit, with references to at least five scholarly sources. This project involves a significant amount of
research, and writing, but students always tell me that it was one of the most meaningful assignments of the semester, and that they enjoyed the research.

In Introduction to Archaeology, I used to assign a project inspired by E. Christian Wells (2008) in which students would learn to identify formation processes in the archaeological record using the campus as an observation space. Students would watch an area of campus for 30 minutes, draw a plan map of the area, and then write about the primary and secondary refuse, and the natural and cultural transformations that affected the artifacts in that space. I have since adapted this project to use the web-based platform ThingLink (a free software; have students select Education mode, and register as a “teacher” for maximum flexibility), which allows students to create multi-layered photographs tagged with labels and information. Students now take a series of pictures of their area, including refuse, garbage containers, and features, and create a visual tour that contains information about formation processes, primary and secondary artifacts, and features. They also complete a short write up to accompany the ThingLink, but the bulk of the information and analysis is present in the visual tour.

In Ancient Civilizations I assign a project designed to combat archaeological pseudoscience on the internet. Students create short (~3 minutes) videos that can be uploaded to YouTube or other sharing platforms, and which challenge myths about the ancient complex societies we have studied. In the Mythbusters Video Project students have to identify a myth (i.e. the Egyptian pyramids were built by aliens, the Maya calendar predicted that the world would end in 2012, the myth of the Maya Collapse, the myth of Aztec cannibalism, etc.), and then provide evidence showing why it is not true, based in scholarly research and using engaging visual imagery and audio narrative. They produce the videos in free web-based software such as Adobe Spark or Powtoon, or using more complicated filming and editing software if they are comfortable with it. As with other non-traditional assignments, this project requires significant effort in writing, research, organization, and collaboration, but presents the information in a way that the public can access. In the large lecture class I have TAs select their favorite videos after grading them, and we do a film festival at the end of the class in which we show the top five videos. Students vote for the “People’s Choice Award” using their clickers, and the producers of the top three videos win prizes (in the form of chocolate and caffeine).

Collaborative Learning

The Mythbusters project is (except in rare circumstances) a collaboration between two students who are paired up by the TA or by myself. Collaborative projects appeal to students from more integrated cultural backgrounds, and are encouraged by the UDL framework as a way to sustain effort and persistence (CAST 2018 checkpoint 8.3). There is also evidence to show that collaborative projects have significant psychological, social, and academic benefits for students (Laal and Ghodsi 2012).
I require at least one collaborative project in almost every class. Before introducing the project we have a class discussion about what works and does not work in a group project. I ask the students to tell me what has gone wrong in past group projects (i.e. people don’t respond to texts, one person does all the work, group members don’t meet their deadlines, etc.). I type all of these out in a PowerPoint slide. We then reframe these complaints into norms and guidelines for a great group project, and I type out the positive statements in a new slide (i.e. stay in communication with group members, make sure everyone has an equal role, always meet the deadlines that were agreed upon, etc.). I post these slides as a PDF on the course management website.

Students are informed that part of their grade comes from a confidential peer review and self-reflection form that all group members must complete upon finishing the project. This form is available on the course management website, and asks students to rate their peers based on the norms agreed upon by the class. I make sure to include one question about feeling safe with and respected by this peer. Finally, I ask the student to reflect upon what went well and what could have gone better with this group project. This allows me some insight into group dynamics, and gives the student the opportunity to reflect on their own practice and their development of collaboration tools.

Another tool for collaborative learning that I have used with success in small classes is Perusall (free online software). This program allows students to annotate the readings together by making thoughtful comments throughout the article. I used this program with great success in the honors version of Ancient Civilizations. Students were responsible for making seven substantive comments throughout the article, and could respond to other students’ comments and ask questions of their peers. Students complained that this was a lot of work, but they arrived in class well-prepared to talk about the reading. It was a useful tool for the maintenance of our learning community, and a more integrated alternative to a traditional essay response to the reading. I found it less successful in a large lecture class, if only because the program did not automatically break students out into discussion sections, making it cumbersome for teaching assistants to identify their students.

Provide Engaging and Active Learning Experiences that are Meaningful to Students

Engagement—between students and faculty, between students and students, and between students and material—is central to both UDL and Cultural Strengths frameworks. All of the pedagogical techniques already discussed have involved interpersonal engagement, or have sought to increase student interest in the subject of archaeology by allowing students to use creative expression rather than traditional papers. These creative assignments still involved significant writing, planning, and analysis, but allowed students to present their work in more
dynamic ways. This section expands on ways to increase engagement in the large lecture classes, as well as on keeping students engaged with the true purpose of archaeology.

**Engagement in Large Lecture Classes**

In many ways, archaeology classes are well-adapted to active and engaged learning, and there are many books and online sources that suggest activities in which students can learn archaeological methods and concepts through “doing” (e.g. Burke and Smith 2007; Rice and McCurdy 2004; Rice et al. 2000). Students find these lab activities to be fun and engaging, and allow them to grasp complicated concepts in ways that are more concrete. When teaching archaeology lecture classes, many of these activities get pushed into the TA sections, where the space and scale of the class is suitable for active and hands on learning.

Up until now my main source of engagement with my large lecture classes has been through clickers (I use iclicker, a technology that is supported by UMASS-Amherst: https://www.iclicker.com/students/apps-and-remotes/remotes). Throughout the lecture I have opportunities for students to answer multiple choice questions that gauge their comprehension, review previous material, or ask them to hypothesize about something we have not yet learned. These questions are answered via the clickers, and my computer aggregates the responses, but they are ungraded and used only for attendance (students must answer 70% of the questions to be counted present). They are therefore a low-stakes way of engaging with the material, and provide a pause during an otherwise passive lecture period. Sometimes, after posting the question, I will ask students to check in with their neighbor and confer with them about their answer. Each question takes between one and two minutes to ask, answer, and for me to discuss.

For the most part, students seem to appreciate the clickers, and the break in lecturing that the questions provide. They do not like the attendance policy (mentioned above), and a few students experience financial hardship in attaining the clicker. It is used widely across the university and students can even share a clicker if they are not in the same class. Nonetheless, it can present a socioeconomic barrier for some students to fully succeed in the class.

I have not used many other active learning techniques in my large lecture classes, but am encouraged to experiment with them in future semesters. For example, Hudson (2017) suggests trying techniques such as “think, pair, share” or small group discussions in the large lecture format. These short activities could be accomplished in three to five minutes, with a short follow-up by the instructor. She advocates for other active learning experiences within the lecture, such as having students compete a “minute paper” reflecting on a concept from the lecture, or engaging in a debate or role-play. Since Ancient Civilizations has a TA discussion section component, I might save the debate for that part of the class, but am encouraged to promote small group interaction and reflection within the large lecture. These activities would
take between one and eight minutes, and would increase engagement by providing students the opportunity to process information rather than passively receive it.

Several studies show that learning can be improved in large diverse classes with the addition of engaging activities outside of class. For example, Snowball (2014) found that performance in a large first year Economics course was improved by replacing one lecture per week with blended learning activities. A study by Dean, Lee-Post, and Hapke (2017) assessed four instructional tools meant to provide multiple means of representation, engagement, and expression. The authors provided PowerPoint lecture slides, lecture notes, clickers, and MindTap (a Cengage product that integrates the textbook with other learning activities) so that students had multiple ways of taking in and putting out knowledge from the course. They measured how clickers and MindTap (which both provide electronic data) improved actual learning and students’ perception of learning. Interestingly, they found that students perceived clickers to be effective in helping them learn, but that MindTap had a much stronger impact on actual learning. It is interesting that while there may be multiple means of learning, not all of them are equal in terms of learning impact. It was also fascinating that minorities were much less likely to engage with out of class tools, such as MindTap, suggesting that we have to consider cultural factors in the choices that are created in a UDL environment.

Engaging the Past in the Present

On a more epistemological level, students are engaged with material when it feels relevant to their lives, and the world around them. A tenet of the Cultural Strengths framework is to balance the individuated focus on method and theory with the more integrated focus on real-world applications, the uses of the knowledge, and the relevance of the knowledge for communities and families. Archaeologists can engage students when they stress how archaeology articulates with the larger geopolitical world, and how it is implicated in narratives of indigenous people and developing nations.

For example, in Ancient Civilizations I have increased the number of articles that deal with heritage, nationalism, tourism, cultural identity, pseudoscience, and the “civilization” narrative (e.g. Harmanşah 2015; Heaney 2017; Medina 2003; Morehart 2012; Silberman 1996; Waxman 2008). Although much of what we study is far in the distant past, students are able to see and discuss the ways that archaeology is very much part of the narratives that we tell about ourselves and others. They are able to make connections between the Neolithic Revolution and the industrial food system of today. They see how the destruction of archaeological artifacts and ruins in the Middle East by ISIS and other terrorist organizations is tied up with narratives about civilization and ownership of the past. They read about looting, NAGPRA, and repatriation, and learn to think about the ethics of our profession.
In Introduction to Archaeology, students love learning about Community Based Participatory Research (Atalay 2012), community archaeology, and ways that archaeology can be used to benefit the public. They are highly engaged with questions of “who owns the past?” and enjoy debating the role of museums and collecting in contemporary society. Finally, they respond with tremendous compassion and emotion to archaeology that bears witness to the horrors of the recent past and present day, such as the archaeology of the contemporary U.S.-Mexican border (De León 2012), or archaeologies of slavery, internment camps, and massacres (see Hauser et al. 2018). This work reminds students that the material record has great power in the present day, and brings archaeology into an entirely different light.

**Conclusion**

Archaeology has the power to reveal the diversity of the past and the present by looking at the material record of human activity, but few of us are trained in supporting the diverse communities of students that we teach. The purpose of this article is to think intentionally about the way we operate in the archaeology classroom, particularly in the large lectures where our introductory classes are often taught, guided by broader educational models. The pedagogy of inclusion has the power to honor and acknowledge the diversity of our students.

This approach benefits all students, both majors and non-majors, as it seeks to increase engagement in the critical analysis of our ancient and recent human past, and to create students that can apply a spatial and material lens to other disciplines. It also serves to welcome a diverse population of learners into archaeology, in what is often their first exposure to the discipline. The recruitment of underrepresented minorities and diverse thinkers can only benefit archaeology. It is important to recognize the significant role introductory courses play in this recruitment.

Of course, many introductory courses in archaeology (as in other disciplines) are taught by adjunct or temporary professors, who are paid a fraction of their colleagues’ salary for teaching the largest number of students, may teach at multiple institutions, and do not often have access to the training and professional development of tenure-track professors. As a long-time contingent employee, I can acknowledge the frustration and exhaustion of this position, and the difficulty of changing teaching practices when our labor is not valued. It is incumbent upon senior and permanent faculty to take introductory teaching seriously, and to value the temporary employees, graduate instructors, and teaching assistants that are truly the gatekeepers to our discipline.

The suggestions in this article are by no means an exhaustive description of the exciting pedagogical techniques now being employed by archaeology professors. Nor do we have to employ every single technique, or all of them at once. The evolution of our teaching practice is a work in progress, and will look different depending on the positionality of the instructor. It is
Table 3. The model developed in this article, with a summary of suggestions for how to implement it.

| Create a safe and welcoming learning community | -create an inclusive syllabi (see Table 2, above)  
|                                               | -have students fill out a “getting to know you” questionnaire  
|                                               | -hopes and concerns activity  
|                                               | -name tents in smaller classes  
|                                               | -establish group norms  
|                                               | -lots of icebreakers, preferably mid-class  
| Create choice for students to direct their own learning experience | -mix of lecture, slides, and engaged learning activities  
|                                               | -lecture-capture technology (if available)  
|                                               | -consider automatic captioning of lectures (as technology improves)  
|                                               | -additional web links and resources for students to go beyond course material  
|                                               | -multiple notetakers and notes available to all students  
|                                               | -open access resources or library-owned articles as an alternative to textbooks  
| Provide engaging and active learning experiences that are meaningful to students | -replace some traditional assignments in introductory classes with free web-based assignments (video project, virtual exhibit, ThingLink exercise)  
|                                               | -group presentations with required reflection and peer grading  
|                                               | -Perusall (free software) for class-wide annotation of articles  
|                                               | -clickers or polling software for large lectures  
|                                               | -try “think, pair, share” in large lectures  
|                                               | -teach archaeological content that is relevant to the present day  

my hope that colleagues will find some aspect of inspiration from these models, and make subtle shifts towards a more inclusive and welcoming archaeology classroom.

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