J. Lynn FUNKHOUSER
University of Alabama

JULIANN FRIEL
University of Alabama

MELINDA CARR
University of Alabama

KELLY LIKOS
University of Alabama

CHRISTOPHER D. LYNN
University of Alabama

Anthropology is elemental:

Anthropological perspective through multilevel teaching

Modern academia is a concomitant venture involving research, teaching, and service. This article outlines a reimagined service-learning project that provides research and teaching experience to undergraduate and graduate anthropology students. We teach graduate students to teach undergraduates to teach anthropology to elementary school children. We outline benefits of teaching anthropology to children who are considerably younger than the traditional undergraduate student— benefits to the children and to the undergraduate and graduate instructors. We examine student outcomes at the primary and university level and demonstrate how teaching can help university students more deeply integrate research experiences. While not without impediments, we propose this approach as an educational partnership model that can be adapted to suit any elementary school. Teaching anthropological research in elementary schools exposes a more diverse demographic of students to concepts including evolution, race as a cultural construct, and the impact of culture on humans. [applied anthropology, primary education, service learning]

Introduction

Modern academia is a concomitant venture involving research, teaching, and service. The hallmarks of this new era in higher education are an emphasis on the necessity of effective teaching and of service as an engaged community member. This article outlines a "reimagined service-learning project" (Copeland et al. 2016) that provides research, teaching, and service experiences to undergraduate and graduate anthropology students. "Anthropology Is Elemental" is a course we offer in the University of Alabama Department of Anthropology to undergraduate students that trains them to teach four-field anthropology over a whole semester in local elementary schools. The course is directed by an anthropology faculty member, taught by an anthropology doctoral student, and exposes elementary school students in Tuscaloosa, Alabama, to the anthropological perspective via an activity-based, four-subfield curriculum. This outreach effort has two primary foci. The first is to offer anthropology curricula at local partner schools, as there are many benefits of introducing anthropological concepts in early education. Four-field anthropology is grounded in the sciences and humanities and, thus, is able to convey "cross-cutting concepts" as defined by Next Generation Science Standards (NGSS Lead States 2013). More importantly, providing anthropology education at the primary school level exposes a more diverse demographic of students to concepts including evolution, race as a cultural construct, and the impact of culture on humans. The second focus is to train graduate and undergraduate anthropology majors in pertinent pedagogical practices and literature through student-centered instruction and team-teaching methods.

Anthropology education as a form of community outreach uses ideals and methods from applied, practicing, and public anthropology (Lamphere 2004). Collaboration with community partners results in experiential learning for all parties and helps facilitate long-term bonds between participants. These community-based endeavors also assist in situating 21st-century American anthropology onto an increasingly diversified national landscape. Today, our emerging scholars are taught the utility of applying their valuable skill set to areas of public policy, research and health, and primary and secondary education, to name but a few (Lamphere 2004; Scheper-Hughes 2009).

In developing our program, we implicitly follow a philosophy developed by Brazilian educator Paulo Freire (1970) and outlined by van Willigen (2002) as a "cultural action" approach. The cultural action approach aligns with the critical ethos of the anthropology of education model. Freire was concerned with the dehumanization of Brazilian peasants that was taking place through an education system that did not match real-world needs and issues. Freire suggests that education approaches tend to be oriented either toward "banking" or "problem posing." Most institutional models use the banking approach, in which schools deposit knowledge into a student through teacher narration. The banking approach, suggests Freire, is a means by which the dominant class indoctrinates a subordinate class. The problem-posing approach, on the other hand, involves critical interaction and reflection between teacher and students, with each side learning from the other (van Willigen 2002). A pedagogy that involved dialogue between students and teachers has potential to humanize everyone involved as an "authentic" experience. Authenticity, in this way, means the education addresses the social roles and statuses of the parties involved and is created through interaction, rather than a top-down approach (see Brondo et al. 2016 for a similar model). Students and teachers are, at all levels, "equal participants *in* the process, not simply objects *of* the process" (van Willigen 2002:94).

We designed the Anthropology Is Elemental project to be a combination of practice and theory and integrate the banking and problem-posing approaches. Topics are chosen by the undergraduate student instructors and have included lessons and activities on archaeology garbology, museum interpretation, symbolic communication, body art and modification, rites of passage, cultural diffusion, language, landscape, foodways, primate ecology, paleoanthropology, Mendelian genetics, race and ethnicity, osteology, and forensics. We provide our students a baseline of disciplinary knowledge, but, in the classrooms where we train undergraduate and master's students to teach primary students, the education is almost exclusively problem posing in nature. There are no extant models in anthropology that employ this method of multilevel teaching, so, throughout the five-year history of our project, programing has developed as an interaction among undergraduate and graduate students and professors through experience in elementary school classrooms.

Problem posing in elementary anthropology: Developing pedagogy from scratch

The Anthropology Is Elemental project began with a challenge. Some years ago, one of us (C.D.L.) agreed to partner with another professional anthropologist to teach a one-off educational outreach program coordinated by the Parent-Teacher Association (PTA) of a local elementary school in partnership with various University of Alabama faculty. Each partner was asked to teach a 12-week course that would meet for 45 minutes a week with the same group of students. With little awareness of how to teach four-field anthropology at the elementary level, C.D.L. sent an e-mail requesting student volunteers. Seven replied, including the first author (J.L.F.), and each was asked to "come up with a hands-on activity to teach kids something about how we conduct anthropology *with minimal lecturing*."

We were given two months to prep and, in that time, created "modules" with which to team-teach the course. One of the strengths of this initial phase was that the student volunteers had very diverse interests within anthropology, including biological anthropology, biomedical anthropology, archaeology, bioarchaeology, and museum studies. We were able to parlay that array of expertise into the activities we developed for a four-field curriculum. The initial module/activity roster (Table 1) was an assortment of what we thought the students would enjoy, were interested in teaching, and could devise activities for.

Our elementary anthropology course was so successful we have been asked to return each year and, after the second year, to offer a course each semester. Since its inception, our program grew from this first

TABLE 1. Initial Schedule of Activities for a 12-Week PTA Partnership Course in Anthropology

Week	Theme	Activity
1	Archaeology of trash	Assemble home, school, office, restaurant kits
2	Museum interpretation of trash	Build dioramas/interpret material culture exhibit
3	Symbology of hieroglyphs	Mayan symbol system; invent your own for your group
4	Symbology of tattoos and body adornment	Types of body adornment, temporary tattoos for your group
5	Clan rites of passage	Initiate your group as a "clan"—songs, activities, markings, codes, language—baboons, chimps, penguins, ducks
6	Cultural diffusion/telephone	Your clan invented a new way of doing something—communicate it
7	Nonhuman primate food and communication	Other primates have solutions to similar problems such as food
8	Primate walking and bipedalism	Clan races—run like baboon, chimp, penguin, duck
9	Race and Mendelian genetics	Why we compare ourselves to other animals and what are the true differences among people
10	Tree of life	Put all this on a timeline that we can put up in the hall—cut out photos and put in order
11	Forensic anthropology	Solve a crime using what you know about culture, biology, and evolution
12	CSI	Present results of forensics activity

component, elementary school outreach, to a second that includes a cross-listed service-learning anthropology course on outreach and elementary education, to a specialized course at the middle school level.[1] Over the years since, numerous affiliated instructors have since refined the program to include an even greater diversity of expertise, including one former elementary teacher turned anthropology major. Despite a number of changes, however, student-centered teaching has remained at the core of our program.

While student-centered teaching is in many ways an old idea in modern garb, it has come to inform many of the long-term choices made with our outreach program and associated university course. In student-centered teaching, knowledge is co-constructed by the teacher and students rather than transmitted directly from the teacher (Garrett 2008). Broadly referred to as "progressive education" (Dewey 1938), student-centered teaching is an instructional method credited to Locke and Rousseau (Jeynes 2007). In the late-17th century, John Locke introduced the idea of children as a kind of pupil with specific educational needs, most notable of

which is environmental stimulus (Rousseau 1979). Progressive education, unlike traditional teacher-centered learning, emphasizes hands-on learning and development of curricula that promote student engagement though directed interactions with their local environment (Dewey 1938). One of the most significant components of progressivist education is that it demands devoted attention of an educator to very few students.

Unfortunately, for practical reasons, American educators are often forced to adopt teacher-centered instructional styles and corresponding management practices. Traditional teacher-centered classroom management strategies effectively allow for control of large groups of children, mass dissemination of material, and reinforced obedience to authority and self-control (Jeynes 2007). At the university level, instructor-centered teaching is manifest in traditional lecture-based models of classroom interaction. Our problem, then, was how to approach community outreach education using a progressivist strategy that encourages critical thinking using student instructors socialized in traditional teacher-centric frameworks.

Reimagined service learning: The university course

After several semesters of offering anthropology outreach courses through ad hoc groups of student instructors, we developed a formal service-learning course within the University of Alabama Anthropology Department curriculum as an elective for advanced students. The development of the university class was similar to that of the elementary school program. We started by avoiding lecturing. Despite all of our socialization to the contrary, it did not seem logical to preach progressivism in elementary education and not adhere to those practices at the university level. The Anthropology Is Elemental project challenges undergraduate and graduate students to take what they learn in traditional classrooms and reimagine that material as fun activities that will excite elementary students. Students in the university course develop the activities after they begin working with the elementary students so the sense of what will be "fun" is relative to the children with whom they are working.

Service learning, in accordance with the Center for Ethics & Social Responsibility, which administers training in service learning at the University of Alabama, "is a credit-bearing, educational experience that combines organized service activities with academic study and thoughtful reflection to enhance learning of course content and foster a sense of civic responsibility" (http://cesr.ua.edu/about-us/what-is-service-learning/). We used Heffernan's (2001) four basic principles of service-learning curricula to develop our course, as follow:

(1) Engagement—does the service component meet a public good? How do you know this? Has the community been consulted? How? How have campus-community boundaries been negotiated and how will they be crossed?
(2) Reflection—is there a mechanism that encourages students to link their service experience to course content and to reflect upon why the service is important?
(3) Reciprocity—is reciprocity evident in the service component? How? "Reciprocity suggests that every individual, organization, and entity involved in the service-learning functions as both a teacher and a learner. Participants are perceived as colleagues, not as servers and clients" (Jacoby and Associates 1996:36).
(4) Public dissemination—is service work presented to the public or made an opportunity for the community to enter into a public dialogue? . . . How? To whose advantage?

Engagement

As outlined, Anthropology Is Elemental began because of a request from a local elementary school PTA to offer an anthropology course as part of their partnership with the University of Alabama. They have asked us to teach it every semester since. Subsequently, other local school PTAs began similar partnerships and, because of the consistent popularity of our anthropology course and rapport with students, teachers, and administrators in the initial elementary school, asked us to replicate our course in their schools.

Reciprocity

As outlined in Figure 1, the entire program is under the administration of a faculty member director who selects a doctoral student as program manager and primary instructor. The PhD student is charged with the direct oversight of both components of the outreach project. The first component includes (1) coordinating with the elementary schools each semester, (2) drafting themes for the elementary-level courses and what the courses will entail, and (3) securing enough staff to facilitate appropriately program goals and objectives throughout the semester.

We teach at two schools in the fall and spring with different thematic foci each semester, so coordination is essential. For instance, we recently developed modules for teaching "The Anthropology of Southeast Asia." This approach is integral to our problem-posing approach because we try to capitalize on the research experience of our student-teachers, enabling them to compose lessons from firsthand experience (Figure 2). The students teach material from modules that were developed through past interactions and create new ones, but the integration of themes requires weekly discussion to determine how to modify lessons to reflect the teaching objectives.

In preparation for the new semester, the faculty director and primary instructor work together to establish the course curriculum and syllabus. This allows the new primary instructor to gain experience in course construction and the articulation of
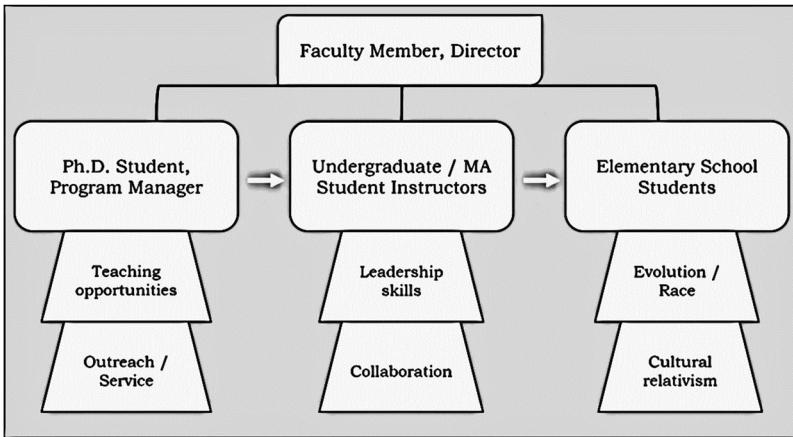
FIGURE 1. Synergistic collaboration of the Anthropology is Elemental model and associated benefits.


FIGURE 2. A student instructor who had spent part of her childhood in Southeast Asia led her elementary class in traditional Balinese dancing. Elementary students were then challenged to combine Balinese dance moves with something more "culturally relative," resulting in variations on "Watch Me (Whip/Nae Nae)" with Balinese twirls. (Source: http://anthropology.ua.edu/blogs/tmseanthro/2016/05/01/food-and-semester-review-tmse/.)

learning objectives and a teaching philosophy through direct mentorship. Finally, the Anthropology Is Elemental service-learning course is dependent on the abilities of the advanced undergraduates and master's students who participate for the quality of education we can offer elementary students.

Therefore, as program manager, the doctoral student carefully recruits undergraduate and master's students who will take the course to ensure the outreach component is an asset to the community.

The university course begins in a roundtable seminar with readings and discussion on pedagogical
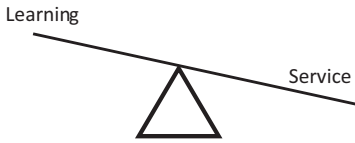
FIGURE 3. Traditional attempts to balance learning and service.
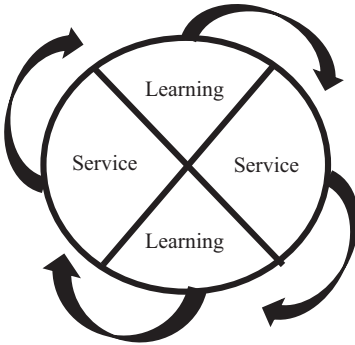
FIGURE 4. Reimagined service-learning model.

methods, including student-centered teaching and management of lesson plans. The seminar format places students literally and figuratively closer to the instructor. Although this increases potential for positive interactions between students and instructors, instructors may struggle to establish authority, as they are still graduate students and relatively new and uncomfortable with this new role and authority. Lecture hall settings entail physical barriers that actually help new instructors establish hierarchical distinctions between faculty and students (Horning 1979). The process of learning how to teach with authority in higher education is a complicated one because effective teaching, like any skill, is a combination of inherent ability, training, and practice. Our approach emphasizes giving new form to what undergraduates and master's students already know more than teaching them anything new. As illustrated in Figure 3, one of the fundamental critiques of service learning is the inability to find a balance between the service to the community and the learning for the college students (Copeland et al. 2016). Our model is less concerned with building a level platform, which would be fundamentally unsuitable for a dynamic process, than with designing objectives that continually complement and reinforce one another (Figure 4). Through a model of reimagined service learning, we combine attributes of applied

and practicing anthropology and create a community service project through experiential learning.

After the outreach program has started in the local school and student instructors have gotten their feet wet, as it were, readings are assigned from the textbook *Anthropology Explored* (Selig et al. 2013). *Anthropology Explored* is a collection of essays by noted anthropologists from the Smithsonian newsletter *AnthroNotes* about teaching anthropology. These readings reinforce concepts covered in the introductory courses required for all anthropology majors at the University of Alabama. This review is important because, although the anthropology major at the University of Alabama is four-field in focus and practice, many students naturally move toward a chosen subdiscipline of interest and may have less confidence in the others. Each seminar discussion concludes with practice vocabulary lessons, wherein student instructors are asked to provide definitions to common anthropological terms without the use of jargon. This exercise gets them thinking about audience-appropriate language in the elementary school classroom (bearing in mind that their students will be 7–10 years old). Thus, a student with an archaeology focus should be able to teach the basic principles of evolution or a biological anthropologist explain the importance of ethnography.

Student instructors are provided with templates of past lectures, lesson plans, and activities that they may borrow from as they craft their own and are assured that they will not be put in front of an elementary school class until ready. Much of the first half of the semester is an elaborate exercise in assurances. During this time, it is important that the primary instructor establish rapport with and among student instructors. Instructors are responsible to students for academic competency, but setting the course within a larger performance framework also helps highlight the need for communicative competency (Bauman 1984). For a team to function appropriately and effectively, there must be clearly outlined objectives and behaviors and individual members willing to work with their peers (Goffman 1959). Without a collaborative ethos, team dynamics are difficult, and individual student instructors end up with inordinate burdens. The deliberate orchestration of "teamwork" also highlights individual performances within the larger collective effort. Teammates are forced to rely on one another through "bonds of reciprocal dependence and reciprocal familiarity" (Goffman 1959:51). For instance,

punctuality, preparedness, and active participation are all encouraged, with the tacit implication that one member's slacking has deleterious effects on the whole.

Reflection

Finally, our service-learning university course is centered on two complementary teaching strategies that provide substantial opportunity for reciprocally developing and reflecting on the service-learning experience. The first strategy is "team-teaching," a term generally employed to denote the involvement of more than one instructor in a class lesson, which emerged as a practical response to teacher shortages in the 1950s and as a pedagogical practice in the 1960s (Wraga 1997). Ideally, teachers work together to develop curricula and manage classroom space, offering improved instruction and a more effective learning environment (Leavitt 2006). Unfortunately, there are also pitfalls. Some educators are ill suited to cooperative endeavors (Goldstein 1967), while others report interpersonal conflicts within teams and between team member faculty and non-team member faculty (Meyer 1968, 1969). While these problems among professional educators are important to keep in mind, using this approach as a tool for apprenticeship in anthropology has worked well for our program. The notion that the university class is comprised of teammates, rather than classmates, is reinforced rhetorically in class and in class-related correspondence.

In the second teaching strategy, team participants develop lesson (or "game") plans that focus on conceptualizing and preparing for unexpected deviations from schedules when working with elementary children. These are developed through synergistic planning sessions called "lesson study." Lesson study is a form of long-term professional development in which teams of teachers collaboratively plan their instruction as a way to determine what will most benefit the students (Lewis et al. 2004). Developing a practical lesson plan is multifaceted and collaborative (Lee and Takahashi 2011). A teacher creates a lesson plan that prepares for the contingent sequences that occur in a classroom. This plan is then presented to a panel of teachers in the same department. The members of the panel imagine the dynamic circumstances of normal classrooms and pose alternative scenarios in which students may push the material in different directions during the course of a lesson or discussion. The lesson plan and delivery of the presentation are then immediately

critiqued by the assembled peers. The critique focuses on how the teacher utilized the plan for dealing with disparate actions, not on whether the teacher explicitly adhered to the scheduled lesson. Moonsri and Pattanajak (2013) found that lesson plans developed collectively by a target group foster confidence of teachers, allow for problem-solving techniques, and increase consistency in lessons. Furthermore, student-learning outcomes are better when lessons are designed based on cumulative knowledge (Lewis et al. 2004; Stigler and Hiebert 1999).

During the lesson-study component of the university course, the student instructor is critiqued using a standardized evaluation form handed out to each classmate. Critiques are a combination of statements with an attached numerical value, ranging from 1 to 4, and questions designed to elicit written feedback. The numerical values are averaged and e-mailed to the student presenter, along with a list of provided comments, immediately after the class period to be taken into consideration when finalizing the lesson (Table 2). The primary instructor also takes notes during the elementary school lesson, emphasizing positive choices, actions, and attributes unique to the respective student instructor. Critiques of the lesson are addressed to the class at large during the subsequent period using team rhetoric and inclusive pronouns (e.g., we, the team, should consider x, y, and z for the next lesson).

When the student instructors present possible logistical issues associated with their lesson plans (What should I do about x, y, and z in this instance?), it is imperative that the primary instructor be transparent in how her or his decision was made (Let us go with this plan—for this reason.). University students are generally socialized in a top-down pedagogy that has the primary instructor acting as the designated arbitrator of executive decisions. Unfortunately, this approach can conflict with helping students learn to think critically. In our Anthropology Is Elemental course, to build confidence and support situational problem solving, the primary instructor only readily offers a solution *in the first half of the semester*. Logistical inquiries are met with a standard answer of "I'm going to defer to your discretion on this, but know that if you decide you need help I'm here" in the second half of the semester. Understanding why certain decisions were made over others helps students gauge how best to approach and resolve problems in this unique context.

Finally, we assess student instructor performance for grades in the university course through the use

TABLE 2. An Example of Evaluation Summations

Mean Numerical Scores for Questions:
(Scale: 1 = Needs significant improvement; 2 = Needs improvement; 3 = Good; 4 = Excellent)
1. Effectiveness of PowerPoint: 3.2
2. Tone, speed, volume of instructor: 3
3. Clearly articulated lesson objectives: 3
4. Thoughtful, well explained, activity: 3.3
Summation of comments:

Add more pictures!
ROCK IT! YOU'VE GOT THIS!
Map of Old World and New World
Slide with phylogenetic tree (maybe right after "What is a primate slide") that shows our relationship
　　(can also use it as an initial segue to discuss why study primatology! They are close relatives/we
　　share a common ancestor)
PowerPoint looks fantastic
Ask more questions throughout the lecture
On Social Structure slide—spend not send
Apes have no tails (which, fun fact, means Curious George is an ape and not a monkey)

of notebooks submitted to the primary instructor twice over the course of the semester. Notebooks contain reflections on class lectures and required readings. Reviewing notebook submission allows the primary instructor to assess the progress of graduate and undergraduate students in the course without testing and allows students to voice their opinions in a confidential manner.

Dissemination

To encourage others to share the fruits of our experiences, we provide open access to lesson plans, activities, and experiences via a site on the Bama Anthro Blog Network (http://anthropology.ua. edu/blogs/tmseanthro/). We think dissemination of this project is important for a variety of reasons. The anthropological perspective is holistic, integrating cultural relativism and an appreciation for human diversity. Multilevel collaboration among teachers and students from the level of university professor down to elementary school affords an opportunity for authentic, humanizing education, to use Freire's terms. At the beginning, we thought anthropology was not commonly taught at the elementary level outside of archaeology because it is too complex or abstract for young minds or for us to simplify sufficiently to teach. We were wrong, and our experiences have transformed our attitudes regarding the power of our discipline. We think our previ-

ous misconception might be common among our fellow anthropologists in general and that, by sharing our model, other professionals and students can adapt and modify it to fit their own community schools.

The Anthropology Is Elemental program has also turned out to be special because we reach minorities and lower socioeconomic demographics underrepresented in the discipline. Despite previous claims of a demographic shift (Gough 1968), anthropology remains dominated by white males from the middle and upper social classes studying, ironically, peoples of diverse heritages, genders, and classes (Howells and Lynn 2016; Hutchinson et al. 2010; Lynn and Howells 2015). Because anthropology is largely offered only at the college and university level, there is a self-selection bias that favors whiteness, liberalism, and class even among the undergraduate students in our courses. The job opportunities for those trained in anthropology are not clear to the average high school student considering options for college. By teaching in elementary schools, we reach children who are not yet concerned with economic considerations or careers. Also, these elementary-age students are not placed in our classes but choose from a list of partnership courses based on a short description. These children are compelled by the subject matter and the word of mouth that anthropology is fun (Figure 5).
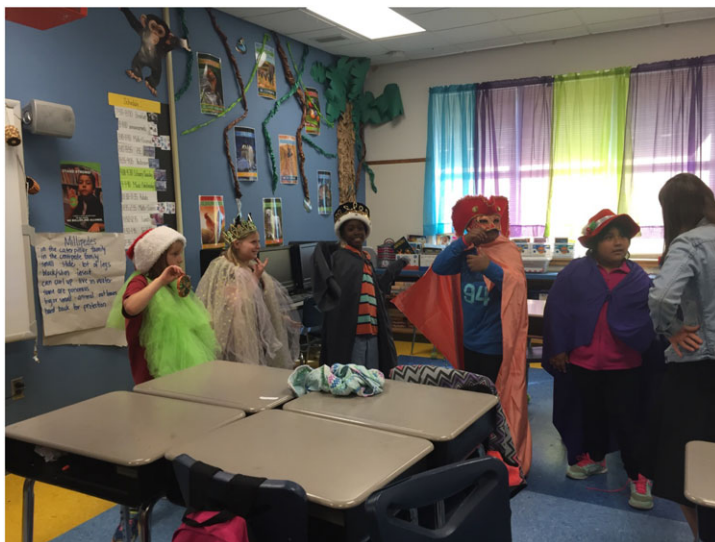
FIGURE 5. During a lesson about how anthropology is interpreted for the public in museums, students at Arcadia Elementary, Tuscaloosa, Alabama, became museum curators of clothing and accessories throughout history. Costumes were donated by the University of Alabama Theatre Department, and students were chosen to dress up as part of the exhibit. (Source: http://anthropology.ua.edu/blogs/tmseanthro/2015/10/29/museums-at-arcadia/)

The Anthropology Is Elemental website, like the overall project, is organic and constantly in development. Nevertheless, from the beginning we have blogged about our experiences to share our lessons and interactions with the parents of the children in our courses, as well as with teachers, administrators, and other anthropologists. Undergraduates are encouraged to write about their lessons and teaching experiences in an engaging manner to reach as many people as possible. The blog site is fully accessible to the public and includes an overview of lesson plans, how lessons were implemented, and reflections on what worked and what did not. This gives readers of the blog who might want to adopt aspects of our model the opportunity to imagine best practices for their own use.

This use of social media is a way to get undergraduates writing publicly about anthropology. In the *Times Higher Education* blog, Thomson (2016) recently outlined several advantages of academic blogging by students, including helping them (1) establish writing routines, (2) discover their writing "voices," (3) get to points quickly without theoretical preamble, (4) direct writing toward specific readers, (5) learn to be concise, (6) try out experimental writing forms, and (6) become more confident communicators (https://www.timeshighereducation.com/blog/seven-reasons-why-blogging-can-make-you-better-academic-writer). Furthermore, as anthropologists, we have a responsibility to disseminate our findings to others. The merits of blogging to achieve this goal have been touted by numerous, well, bloggers. Dunleavy and Gilson of the London School of Economics said that, for social scientists, "blogging is quite simply, one of the most important things that an academic should be doing right now" (http://blogs.lse.ac.uk/impactofsocialsciences/2012/02/24/five-minutes-patrick-dunleavy-chris-gilson/). Research data do little good locked away in the Ivory Tower, where they can take years to be published and read by a few educated specialists. Findings should be shared and discussed with as many as possible, and this is especially true of models for improving education.

Assessing our program success

Our program has facilitated outreach and training to more than 200 elementary schoolers, 12 undergraduates, and 13 graduate students. To

determine how effective our effort has been at the elementary level, we implemented a weekly free-listing exercise to test student knowledge in certain cognitive categories (Borgatti 1999).[2] Free listing is a semistructured interviewing technique borrowed from cognitive anthropology that allows for emic insight without traditional testing. During these exercises, students are provided with a word and tasked with telling their instructors what immediately comes to mind when they hear it. An important aspect of free listing is prominence of terms in the minds of subjects, such that terms toward the beginning of the list are more important to the domain. By determining the salience of terms our elementary school students associated with the elicitation prompts we gave them, we were able to conduct rapid assessments of the cultural domain related to our lessons and course (Bernard 2006).

In the elementary student "clan" groups, student instructors would be supplied with a sheet of paper containing four anthropology terms. The front of the sheet would always start with "anthropology" and "culture," while the back of the sheet would end with two other relevant terms that related to the previous lessons (e.g., "archaeology," "artifact," "museums"). Instructors would ask the students what comes to mind when they hear a particular term. Instructors prompted students with nonspecific cues, such as terms from previous lesson activities, and the students listed the first thing that they could think of that relates to the term. The term "anthropology" yielded results such as "human culture" and the four subfields of anthropology. Culture: "different ways people do things," "religion," and "how people live." The term artifact: "things that are meaningful," "put them in a museum," and "humans created it." Archaeology: "digging," "finding," and "study of past humans." Preliminary results from free-listing data suggest that one of the largest impediments to our educational objectives is preconceived notions. For example, at the beginning of our course, many students associated archaeology with the study of rocks.

Using free listing with elementary school students has its strengths and weaknesses. Weaknesses include the potential for group leader interference and inconsistency in the prompts instructors used to elicit free lists. If instructors are not using similar nonspecific cues, students' answers could vary, contaminating the data. Another difficult aspect to free listing is gathering the attention of a group of sprawling elementary schoolers. The process frames the activity as a chore for the students. Overall, how-ever, free listing is a beneficial exercise for assessing the retention of the students by determining salience of material.

Conclusions

The Anthropology is Elemental project exposes elementary school-age students in Tuscaloosa, Alabama to the anthropological perspective via an interactive, activity-based, four-subfield curriculum. The program is designed to expand children's worldview. Therefore, lessons are adapted each year to couple anthropological aspects of elementary-age students lived experiences in their home state of Alabama with international cultures that students likely have no prior knowledge of, relationships to other primates, and the importance of cultural and biological diversity in all forms. Students that experience the humanistic and scientific study of anthropology at an early age are uniquely positioned to excel in both as they continue their education. Ultimately, graduate and undergraduate students learn through developing and team-teaching activities using their own knowledge bases. In completing this course, our anthropology undergraduates and master's students are able to explain the major tenets of anthropology to anyone, regardless of age or level of education. Furthermore, teaching this course provides our doctoral students with unprecedented experience, novel skills, and a model they can replicate to increase their potential for success in a competitive job market.

The Anthropology Is Elemental program increases the presence of anthropological core concepts in the community, including the importance of ethnocentrism, the concept of race as a cultural construct, and the benefit of cultural relativism in an increasingly globalized society. In the near future, we hope to expand Anthropology Is Elemental through the creation of modules and video tutorials made available online through open access and in multiple languages. Through community engagement and collaboration with clients, the Anthropology Is Elemental program is part of a broader effort to move beyond rote learning in the classroom and help prepare college students to practice and apply anthropology (Copeland et al. 2016; Dengah et al. 2016; Glass-Coffin 2016; Hale 2016; Snodgrass 2016; Stein et al. 2016). This program extends anthropology to the elementary school level and helps anthropology majors integrate knowledge through developing hands-on learning activities. Through Anthropology Is Elemental's complete vertical

integration, elementary students, undergraduates, doctoral students, and professors develop a deeper and more authentic integration of the discipline and perspectives of anthropology.

Notes

1. To this point, the middle school course has been developed and taught in a more traditional manner solely by graduate students, so it is not discussed further in this article.

2. We have not received approval from an institutional review board to collect data for publication, so we only report on the process and our impressions here. We do not include demographic data or complete assessment results.

References cited

Bauman, Richard
  1984 Verbal Art as Performance. Long Grove, IL: Waveland Press.
Bernard, H. Russell
  2006 Research Methods in Anthropology: Qualitative and Quantitative Approaches. Lanham, MD: AltaMira Press.
Borgatti, Stephen P.
  1999 Elicitation Techniques for Cultural Domain Analysis. *In* Ethnographer's Toolkit: Enhanced Ethnographic Methods. Jean J. Schensu, ed. Pp. 115–151. Walnut Creek, CA: AltaMira.
Brondo, Keri, Vacanti Brondo, Suzanne Kent, and Arleen Hill
  2016 Teaching Collaborative Environmental Anthropology: A Case Study Embedding Engaged Scholarship in Critical Approaches to Voluntourism. Annals of Anthropological Practice 40(2):182–195.
Copeland, Toni, Donna Ploessl, Avery McNeese, Curtis Kennett, Victoria Lee, and Dylan Karges
  2016 Creating a Better Tomorrow: Teaching Applied Cultural Anthropological Research by Reimagining Service Learning and Community Engagement. Annals of Anthropological Practice 40(2):218–232.
Dengah, Henri Jean-Francois, II, Erica Hawvermale, Essa Temple, McKayla Montierth, Talon Duston, Tyler Young, Elizabeth Thomas, Kirsti Patterson, Abigail Bentley, and David Tauber

  2016 No Longer the Lone Ethnographer: Using a Research Laboratory Model to Engage Students in Cognitive Anthropological Research. Annals of Anthropological Practice 40(2):167–181.
Dewey, John
  1938 Education and Experience. New York: Macmillan.
Freire, Paulo
  1970 Pedagogy of the Oppressed. Myra B. Ramos, trans. New York: Continuum.
Garrett, Tracey
  2008 Student-Centered and Teacher-Centered Classroom Management: A Case Study of Three Elementary Teachers. The Journal of Classroom Interaction 43(1):34–47.
Glass-Coffin, Bonnie
  2016 Building Capacity and Transforming Lives: Anthropology Undergraduates and Religious Campus-Climate Research on a Public-University Campus. Annals of Anthropological Practice 40(2):245–256.
Goffman, Erving
  1959 The Presentation of Self in Everyday Life. New York: Doubleday.
Goldstein, William
  1967 Problems in Team Teaching. The Clearing House: A Journal of Educational Strategies, Issues and Ideas 42(2):83–86.
Gough, Kathleen
  1968 Anthropology and Imperialism. Monthly Review 19(11):12–27.
Hale, Tamara
  2016 Meeting the Yeti: Learning Design Anthropology, Personal Transformation and Anthropological Habitus in a Student-Led Research Project on Smartphone Use and 'Disconnection'. Annals of Anthropological Practice 40(2):196–206.
Heffernan, Kerrissa
  2001 Fundamentals of Service-Learning Course Construction. Providence, RI: Campus Compact, Brown University.
Horning, Alice S.
  1979 Teaching as Performance. The Journal of General Education 31(3):185–194, http://www.jstor.org/stable/27796766, accessed April 5, 2016.
Howells, Michaela, and Christopher Lynn
  2016 Anthropologists Under Pressure: Perceptions of Stress, Conflict, and Support in the Pursuit of Career-Family Balance. Abstract.

Presentation at the 85th annual meeting of the American Association of Physical Anthropologists, Atlanta, GA, April 13–16.

Hutchinson, Janis, Thomas C. Patterson, Najwa Adra, Karen Brodkin, Carla Guerrón Montero, Sandy Morgen, Yolanda Moses, Leith Mullings, and Rachel Watkins
2010 Final Report 2010: Commission on Race and Racism in Anthropology (CRRA). American Anthropological Association.

Jacoby, Barbara and Associates (Eds.)
1996 Service Learning in Higher Education: Concepts and Practices. San Francisco: Jossey-Bass.

Jeynes, William H.
2007 American Educational History: School, Society, and the Common Good: School, Society, and the Common Good. New York: Sage Publications.

Lamphere, Louise
2004 The Convergence of Applied, Practicing, and Public Anthropology in the 21st Century. Human Organization 63(4):431–443.

Leavitt, Melissa D
2006 Team Teaching: Benefits and Challenges. Speaking of Teaching 16(1):1–4.

Lee, Yo-An, and Akihiko Takahashi
2011 Lesson Plans and the Contingency of Classroom Interactions. Human Studies 34(2):209–227.

Lewis, Catherine, Rebecca Perry, and Jacqueline Hurd
2004 A Deeper Look at Lesson Study. Educational Leadership 61(5):13–14.

Lynn, Christopher D., and Michaela Howells
2015 Anthropologists, Kids, and Careers: When Family Is Strange and the Field Familiar. Abstract. Presentation at the 114th annual meeting of the American Anthropological Association, Denver, CO, November 18–22.

Meyer, James A.
1969 Salvaging Team Teaching. The Clearing House: A Journal of Educational Strategies, Issues and Ideas 44(4):203–205.
1968 Group Grope: Problems of Team Teaching. The Clearing House: A Journal of Educational Strategies, Issues and Ideas 42(6):362–364.

Moonsri, Alisa, and Auijit Pattanajak
2013 Lesson Planning in Primary School Using Lesson Study and Open Approach. Psychology 4(12):1064–1068.

NGSS Lead States
2013 Next Generation Science Standards: For States, by States. Washington, DC: National Academies Press.

Rousseau, Jean-Jacques
1979 Emile: Or, on Education. New York: Basic Books.

Scheper-Hughes, Nancy
2009 Making Anthropology Public. Anthropology Today 25(4):1–3.

Selig, Ruth, Marilyn R. London, and P. Ann Kaupp
2013 Anthropology Explored: The Best of Smithsonian AnthroNotes. Washington, DC: Smithsonian Institution.

Snodgrass, Jeffrey
2016 Online Virtual Worlds as Anthropological Field Sites: Ethnographic Methods Training via Collaborative Research of Internet Gaming Cultures. Annals of Anthropological Practice 40(2):123–136.

Stein, Max J., Ashley Daugherty, Isabella Rivera, Jessica Muzzo, and Christopher D. Lynn
2016 Thinking Outside Anthropology's Box: Socializing Undergraduates through Collaborative Research, Teaching, and Service. Annals of Anthropological Practice 40(2):153–166.

Stigler, James W., and James Hiebert
1999 The teaching gap. New York: The Free Press.

Thomson, Pat
2016 Times Higher Education: Seven Reasons Why Blogging Can Make You a Better Academic Writer. January 2. https://www.timeshighereducation.com/blog/seven-reasons-why-blogging-can-make-you-better-academic-writer, accessed February 11, 2016.

Van Willigen, John
2002 Applied Anthropology: An Introduction. Westport, CT: Greenwood Publishing Group.

Wraga, William G.
1997 Patterns of Interdisciplinary Curriculum Organization and Professional Knowledge of the Curriculum Field. Journal of Curriculum and Supervision 12(2):98–117.