Affording Archaeology: How Field School Costs Promote Exclusivity

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ABSTRACT

Field schools are essential for undergraduate students pursuing careers in archaeology, but they are expensive and, consequently, inaccessible to many. Although there have been efforts to rectify this through the creation of scholarships, there have been no systematic studies of the full cost of archaeological field schools. Here, we present a study of 208 field schools from 2019, including their tuition, room and board, and airfare, as well as the wages that students may lose by participating in them rather than working. We also explore how archaeologists interviewed for Heath-Stout's dissertation study of diversity issues in the discipline have navigated finding field experiences. We argue that scholarships are an ineffective and insufficient means of promoting equity and accessibility in the field because the root of the problem lies in institutionalized inequality and exclusivity. We provide strategies that students and faculty can use to address these problems on both individual and systemic levels. By making field schools affordable and accessible to a more diverse set of undergraduate students, we can create a more just and inclusive discipline.

Keywords: field schools, scholarship, diversity, equity, inclusion, classism

Las escuelas de campo son esenciales para los estudiantes universitarios en arqueología, pero son muy caras y por tanto inaccesibles para muchos de ellos. Aunque hay iniciativas para solucionar este problema mediante la creación de becas, no se ha realizado ningún estudio sistemático sobre los costos completos de estas escuelas de campo. En este artículo presentamos un análisis de 208 programas del año 2019, teniendo en cuenta sus matrículas, costos de alojamiento y comida, costos de transporte aéreo y los salarios que los estudiantes dejan de ganar por participar en vez de trabajar. También exploramos cómo los arqueólogos entrevistados para la tesis de Heath-Stout (un estudio sobre la diversidad en la disciplina) han navegado la búsqueda de experiencias de trabajo de campo. Sostenemos que las becas son un instrumento ineficaz e insuficiente para promover la equidad y la accesibilidad en la disciplina porque las raíces del problema son la desigualdad y la exclusividad institucionalizadas. Ofrecemos estrategias que pueden ser utilizadas por los estudiantes y profesores para abordar estos problemas tanto a nivel individual como sistémico. Si conseguimos hacer escuelas de campo económicamente asequibles y accesibles para una mayor diversidad de estudiantes universitarios, podremos crear una disciplina más justa e inclusiva.

Palabras clave: las escuelas de campo, las becas, la diversidad, la equidad, la inclusion, el clasismo

Field schools are crucial to aspiring archaeologists. Not only do they confirm an undergraduate student's interest in the discipline, but they can also teach fundamental methods, provide knowledge about a particular region of the world, and help students establish connections with professionals. The exorbitant costs of these field schools, however, make them inaccessible to individuals of lower socioeconomic statuses. Although many archaeologists have suggested field school scholarships as a potential solution (Heath-Stout 2019a), the limited number of existing scholarships supply funds that are insufficient to cover the full cost of a field school. Furthermore, the creation of additional field school scholarships would be an inadequate solution to the problem of expensive field schools. Instead, all field schools should be affordable to all students without the need to apply for scholarships. Additionally, the exclusivity of expensive field schools is part of larger structural inequities in higher education (e.g., Ahmed 2012, 2017).

In this article, we demonstrate that field school costs include many expenses beyond the initial fee, and that scholarship funds insufficiently cover the costs of these schools, contributing to these institutionalized inequities. These expenses, along with institutionalized inequalities in academia, contribute to keeping the archaeological community exclusive. Archaeologists remain predominantly upper-middle class, which tends to correspond with being white in the United States (e.g., Reeves and Joo 2017; Willie 1989). According to the Census Bureau, in 2018, the median household income for non-Hispanic white households was \$70,642. whereas for Hispanic households it was \$51,450, and for Black households it was \$41,361 (Semega et al. 2019:4). The discipline needs a radical structural change in order to make it possible for a more diverse group of students to enter archaeological careers. We suggest strategies for marginalized undergraduate students to enter the

Advances in Archaeological Practice 8(2), 2020, pp. 123–133 Copyright 2020 © Society for American Archaeology DOI:10.1017/aap.2020.7 field and for their mentors to support them before those changes have occurred.

DEMOGRAPHY OF THE FIELD

Since the 1980s, activist archaeologists have been criticizing the lack of diversity in the profession of archaeology. This has come most commonly in the form of gender equity publications, in which scholars assign masculine or feminine identifications to journal-article authors or grant recipients in order to quantify men's domination in the discipline (e.g., Bardolph 2014, 2018; Bardolph and Vanderwarker 2016; Beaudry and White 1994; Ford 1994; Ford and Hundt 1994; Fulkerson and Tushingham 2019; Gero 1985; Goldstein et al. 2018; Hutson 2002; Rautman 2012; Tushingham et al. 2017; Victor and Beaudry 1992; Yellen 1991). The most recent Society for American Archaeology (SAA) Needs Assessment Survey (Association Research 2016:5), which was conducted in 2015, demonstrated that the membership of the organization is approaching gender parity, with 50.5% of respondents being male, 47.9% being female, 0.2% being of another gender, and 1.3% preferring not to answer. When this data is broken down by type of member and by age, we can see that women are overrepresented among the youngest members and student members, while the regular members and retirees as well as those of older age groups are predominantly male. These data, combined with the results of publication studies cited above, suggest that although the gender balance of the field is improving, archaeologists in positions of authority continue to be predominantly men.

Critiques of imbalances with regard to race and ethnicity (Battle-Baptiste 2011; Colwell 2016; Colwell-Chanthaphonh 2010; Colwell-Chanthaphonh et al. 2010; Díaz-Andreu Garcia 2007; Franklin 2001; Gosden 2006; Silliman 2008; Watkins 2002, 2005, 2009), sexual orientation (Blackmore et al. 2016; Rutecki and Blackmore 2016), class (Shott 2006), and disability (Heath-Stout 2019b; O'Mahony 2015) have usually been qualitative rather than quantitative; however, the SAA's Census (Zeder 1997) and Needs Assessment Surveys (Association Research 2003, 2011, 2016) have provided important quantitative information about the racial composition of the discipline. For example, in 2015, 77.7% of SAA members who responded to the Needs Assessment Survey were white (non-Hispanic), 6.7% were Hispanic or Latino, 2.5% were multiracial, 2.4% were of another race, 1.9% were Asian or Pacific Islander, 0.8% were Native American or Alaskan Native, 0.3% were Black or African American, and 7.7% chose not to answer the question (Association Research 2016:6). Furthermore, Heath-Stout's (2019a:Chapter 5) quantitative study of journal authorship patterns demonstrated that a notable plurality of authors in major archaeology journals are straight, white cisgender¹ men (45%), and that they represented a majority (51%) of publications.

Taken together, this literature shows that the discipline of archaeology is dominated by straight, white, cisgender people. Archaeologists in positions of power tend to be men. Although we lack quantitative data on class and disability issues in archaeology, the emerging critiques suggest that the discipline also has problems with diversity along these axes. In this article, we show how field schools participate in reproducing class inequalities by making it easier for wealthy students to enter archaeological careers.

THE COST OF FIELD SCHOOL

Archaeology undergraduates are often obligated to attend a field school, whether as an explicit degree requirement or as a de facto prerequisite for graduate school or employment. To estimate the cost of this essential part of an archaeological education, we present information on the 208 field schools posted on the Archaeological Institute of America's Archaeological Fieldwork Opportunities Bulletin (AFOB) or advertised to us by e-mail² for Summer 2019 as of January 2019. The costs listed on AFOB generally included room and board, local transportation, and tuition for some college credit. The costs of field schools of varying lengths were normalized by calculating the cost per week for each school and multiplying by four. We chose to normalize the data for four weeks because it was the median and modal length of a field school, and the mean length was 3.95 weeks. The average cost of a four-week field school was then calculated for various regions of the world (Figure 1). The global average cost of a four-week, for-credit field school is \$4,065. North American field schools were, on average, the least expensive, and those in Africa were the most expensive.

Overall, 101 of the 208 field schools offered academic credit for the course. One field school that was only one week long offered a single credit; the maximum number of credits was 12 (offered by four field schools). The average credited field school offered 6.75 credits for \$702 per credit. The minimum cost per credit was \$332.50, and the maximum cost per credit was \$2,000. Twenty-two field schools offered 3-5 credits (equivalent to one course), 68 offered 6-8 credits (equivalent to two courses), and 10 offered 9-12 credits (equivalent to three courses). The variation in number of credits offered and the cost per credit are important factors to students who are considering which field schools they can afford.

To address variation between countries within a region, average tuition was calculated for a credited four-week field school in countries for which at least five schools were posted on AFOB (Table 1). These countries are nearly all European, with the exceptions of Belize, the United States, and Israel. Among the European countries, there is notable variation in cost, with the average tuition of a Portuguese field school costing more than twice as much as a Romanian field school.

Although it is possible to find a field school with relatively affordable tuition, there are many other costs to consider that prevent many students from gaining essential field experience. Of the 209 field schools in our sample, not a single program included airfare in the final cost. We estimated the cost of airfare using the least expensive flights from Chicago to major airports in each of the countries listed in Table 1. Flight prices were obtained from Kayak.com in February 2019 and again in March 2019 for roundtrip flights from Saturday, June 29, to Sunday, August 4, 2019, with three days of variation in either direction from both start and end dates. Chicago was used as the point of origin because of its major airport and central location in North America.

It is also important to consider the potential wages that students may lose when participating in a field school for four weeks or more out of the summer. In 2017, 43% of full-time undergraduate students in the United States worked, and the majority did so more than 20 hours a week during the school year (National

Average Tuition for a Field School by Region (normalized for a 4-week field school)

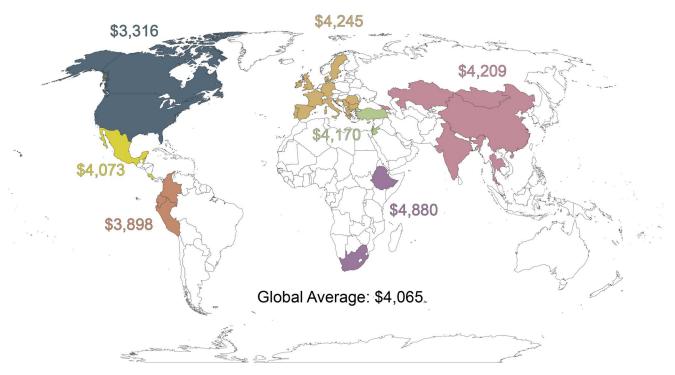


FIGURE 1. Average cost of a four-week, for-credit field school in various regions of the world.

Center for Education Statistics 2019). Although we were unable to find statistics on the numbers of students working during the summer, presumably many of these 43% work year-round, and even the 57% of students who do not work during the school year may have summer jobs that are vital to their school attendance. A currently employed student may not receive their employer's permission to leave work for a month. A student without a job may

Table 1. Average Cost of Tuition and Airfare for Credited Field Schools.

| Country | Number of Field Schools | Average Tuition | Airfare | Total |
|----------------|-------------------------------|--------------------|---------|---------------|
| Belize | 5 | \$3,147 | \$409 | \$3,556 |
| Bulgaria | 9 | \$4,236 | \$860 | \$5,687 |
| Greece | 12 | \$4,257 | \$1,101 | \$5,358 |
| Ireland | 20 | \$4,115 | \$718 | \$4,833 |
| Israel | 8 | \$4,178 | \$1,086 | \$5,264 |
| Italy | 43 | \$4,151 | \$772 | \$4,923 |
| Portugal | 5 | \$5,668 | \$616 | \$6,284 |
| Romania | 11 | \$2,495 | \$855 | \$3,350 |
| Spain | 18 | \$4,823 | \$864 | \$5,687 |
| United Kingdom | 7 | \$3,196 | \$757 | \$3,593 |
| United States | 28 | \$3,419 | \$0-300 | \$3,419-3,719 |

Note: These data represent countries with five or more listed field schools on AFOB, normalized for a field-school length of four weeks.

not find an employer willing to hire them for the summer, knowing the student will be absent for a number of weeks. Consequently, attending a four-week field school may prevent a student from maintaining any form of summer employment, producing yet another cost to attending a field school.

To illustrate these potential lost wages, three different hourly wages and full-time hours (40 hours per week) were used to predict an estimated weekly income for students working during the summer. These weekly incomes were then multiplied by 4 and 12 to indicate the amount lost if a student participated in a four-week field school or if an individual could not find employment for the entire summer. Students who worked full-time at the national minimum wage, \$7.25/hour, would lose \$1,160 by attending a four-week field school and \$3,480 by not working all summer. At \$10/hour, they would lose \$1,600 for a four-week field school and \$4,800 for 12 weeks without employment. Finally, students working for \$15/hour could lose \$2,400 by missing four weeks of work and \$7,200 if they could not find employment for the summer. These are considerable amounts of income lost, in addition to the cost of flights and the field school itself. These estimated costs demonstrate how the necessity to complete a field school may limit the students who are able to pursue a degree or a career in archaeology, thereby maintaining a predominantly white and upper/middle-class population in the field.

The actual cost of a field school includes tuition, airfare, and any lost wages. In order to demonstrate the variation in the complete cost of a field school, we present three different hypothetical

scenarios (Table 2). The least expensive scenario includes a not-for-credit field school in the United Kingdom, which has a tuition, on average, of \$1,320 for four weeks. The cheapest round-trip airfare from Chicago to London was \$757. Assuming only four weeks of minimum-wage work is lost (\$1,160), the total field school cost is \$3,237. Even this least-expensive scenario may be a significant enough cost to bar students without thousands of dollars of disposable money from entering the discipline. Additionally, some graduate programs or cultural resource management firms may require that students have a credited field school experience, which may deter students who can only afford not-for-credit field schools from pursuing a career in archaeology.

For a more typical example, we chose to use figures for a non-European, for-credit field school. The average cost of a four-week credited field school in Belize is \$3,147. The least expensive flight to Belize City was \$409. If an individual lost 12 weeks of \$10/hour work, at 40 hours per week, the field school would cost an additional \$4,800 in lost wages. Consequently, the total cost for a more moderately priced field school in this scenario is \$8,356.

Finally, one of the most expensive field schools—Boston University's Heritage Management program in Menorca—costs \$9,175 for credit and room and board, and it lasts five weeks. Because the project is located on the island of Menorca rather than mainland Spain, the flight is also more expensive, at a minimum of \$940. A full summer of lost wages at \$15 per hour is \$7,200. These three expenses generate a potential field school cost of \$16,315, which is the most expensive hypothetical scenario we could create. Dr. Ricardo Elia, director of this field school, clarified that the extreme cost of the Menorca program is mainly a result of exorbitant tuition fees that Boston University charges for the eight credit hours that students earn as a result of completing the program (Ricardo Elia, personal communication 2019). Although we have not interviewed the directors of other university-associated field schools, it is logical to predict that other archaeological experiences may be similarly expensive due to the cost of credit hours. Dr. Elia notes that the Menorca program allows students to complete half a semester of work (eight credit hours) in just five weeks and at a tuition price that is cheaper than on-campus course equivalents at Boston University (Ricardo Elia, personal communication 2019). His program, however, was only one of the 47 that offered eight credit hours, and it was the most expensive of these in terms of base cost, cost per week, and cost per credit hour. Earning credits from this program at a cheaper price than school-year tuition may be a beneficial strategy for students who already have a means of paying tuition fees, but it may not be a reasonable option for students who are receiving financial aid, which they may not be able to apply to summer courses.

Even in our least expensive scenario, a field school experience could cost thousands of dollars—even cost up to \$15,000, as in our Menorca example. These costs are significant for many students, making it difficult for those who need to spend their summers working in order to pay for college to enter our discipline. The obligatory field school is therefore much less of a hurdle for students from wealthy families, which leads to the reproduction of the discipline's middle- and upper-class demographics for the next generation.

SCHOLARSHIPS

In response to the financial challenges posed by field schools, many archaeologists have suggested scholarships as a potential solution. For her dissertation work, Heath-Stout (2019a) conducted in-depth interviews with a diverse sample of 72 archaeologists, exploring their career paths; research interests; and experiences of race, gender, and sexuality issues in the field. Discussions of classism and other forms of identity and oppression often occurred organically in these interviews.² When these informants were asked what could be done to promote inclusivity within the field, the majority commented on the affordability of entering the field and approximately one in three discussed field school scholarships.

A student who is awarded a scholarship may have the opportunity to pursue a degree in archaeology, regardless of economic status. Several of Heath-Stout's interviewees, many of them from lowincome backgrounds and/or people of color, had used scholarships (either awarded to them as individuals or through funded projects) to enter the field. For example, a young Black woman with the pseudonym of Angela, told this story:

I was also volunteering in the historical archaeology lab. . . . The lady I was working for, she asked me have I ever done a field school. I was like, "No, because I personally can't afford it. You know, it's twelve hundred dollars and I don't have twelve hundred dollars lying around." So, she was like, "Oh, we have scholarships!" and I applied for both scholarships and I got them, so I only had to come up with 350 dollars.

In this particular case, scholarships were effective in allowing a student to attend a field school. Even with two scholarships and an extremely inexpensive program, however, Angela still needed to pay a portion of the field school out of pocket and forgo paid work that summer.

Despite Angela's success earning funding, the scholarships available may not be sufficient to supply each student with the help they need. We compiled a list of scholarships available to

Table 2. Three Scenarios for Field School Total Costs.

| Scenario | Tuition | Credited | Airfare | Hourly Wage | Weeks of Work Lost | Lost Wages | Total Cost |
|-------------|---------|----------|---------|-------------|--------------------|------------|------------|
| Inexpensive | \$1,320 | no | \$757 | \$7.25 | 4 | \$1,160 | \$3,237 |
| Moderate | \$3,147 | yes | \$409 | \$10 | 12 | \$4,800 | \$8,356 |
| Expensive | \$9,175 | yes | \$940 | \$15 | 12 | \$7,200 | \$16,315 |

Note: These three different scenarios demonstrate inexpensive, moderately expensive, and expensive field school total costs, assuming a 40-hour work week. The inexpensive scenario assumes that a student is able to find work for the parts of the summer before and/or after the field school; the moderate and expensive scenarios assume that the student is unable to find paid work because the field school would disrupt their schedule.

undergraduate students studying archaeology in the United States (Table 3). This list includes 33 scholarships of varying amounts. The scholarships offer, on average, \$2,268.33 to help cover the cost of a field school (for the 30 awards that included a specified amount). An average amount was calculated for scholarships that offered a range in their awarded amount. The remaining three scholarships with an unspecified amount either partially or fully cover the cost of tuition at a field school.

In the United States, there are currently 54 colleges and universities that offer archaeology as an undergraduate major (College Board 2019). At our alma mater of Boston University alone, there were 43 undergraduate students majoring in archaeology in April 2019 (Maria Sousa, personal communication 2019). Therefore, the 33 scholarships available are not nearly enough to support the number of archaeology students who may be struggling financially to pay the complete cost of a field school. Furthermore, these scholarships, on average, only cover about half of the cost of field school tuition and airfare, not counting lost wages. Even if awarded one of these scholarships, a student may still not be able to attend a field school and complete the degree in archaeology.

Beyond these scholarships, some universities may also provide scholarships for their own students. These may be in the form of the students' regular financial aid applied to a summer field school, or there may be departmental scholarship funds for which students can apply. Because the rules for applying academic year financial aid to summer field schools and the availability of university-specific funding vary so widely between universities, it is difficult to determine how much these forms of funding ameliorate the problem.

The expense of attending a field school impacts students of marginalized communities the most, which maintains an archaeological field of privileged, primarily white and upper-middle-class scholars

STRATEGIES FOR STUDENTS TO GAIN AFFORDABLE FIELD EXPERIENCE

These data on field school costs and scholarships demonstrate that field schools are a significant expense for aspiring

Table 3. Current Scholarships Available for Undergraduates.

| Institution | Scholarship | Eligibility |
|---|---|---|
| Archaeological Institute of America | Jane C. Waldbaum Archaeological Field School Scholarship (\$1,000) | First time doing fieldwork |
| | AIA New York (\$1,000) | Same as above, but also must be at a university in New York City |
| Society for American Archaeology | Historically Underrepresented Groups Scholarship (\$3,000) | Individual of a racial/ethnic minority, citizen/resident of the United States or Canada |
| | Arthur C. Parker Scholarship (up to \$6,000) | Must be a Native American student or employee of tribal cultural preservation programs |
| | Native American Undergraduate Archaeology Scholarship (up to \$6,000) | Can cover tuition, travel, food, housing, books, supplies, equipment, and child care of Native American undergraduate student |
| | Cheryl L. Wase Memorial Scholarship (covers tuition, fees, and books for all field-based and classroom courses) | Women who are pursuing a B in anthropology and focusing in archaeology at an institution in New Mexico |
| American Schools of Oriental Research | Various scholarships (\$2,000 each) | Applicable to excavations in the eastern Mediterranean; must be ASOR member |
| Institute for Field Research | Twelve different scholarships of varying amounts | Must be applying for IFR field school |
| University of California Los Angeles | Cotsen Undergraduate Research Grants (\$1,000) | UCLA undergraduates |
| Classical Association of the Middle West and South | CAMWS Excavation/Field School Award (\$2,000) | Enrolled in a classics program or history, art history, anthropology, or archaeology with a primary focus on Greco-Roman world |
| Classical Association of New England | Alison Barker Travel Scholarship (\$750) | For travel to a Classical site (Greek or Roman) for educational purposes |
| | Renata Poggioli Award (\$4,000–6,000) | Must be studying/teaching at the high school or undergraduate level in New England; cannot be a tenured professor or must have taught less than 10 years at secondary level; only for those with no access to major university research grant |
| Society for Classical Studies | Minority Scholarship in Classics and Classical Archaeology (\$4,500) | Must be of a historically underrepresented ethnic or racial minority in the United States or Canada |
| Center for American Archaeology | Women in Archaeology Scholarship (partial coverage) | Must be a woman studying archaeology or anthropology; exclusively for the Kampsville field school |

archaeologists, making it difficult for those without class privilege to enter the discipline. This raises the question of how current archaeologists have navigated this difficulty. Heath-Stout's (2019a) interviews with diverse archaeologists provide insights about strategies for affording archaeological research experience. This study was conducted as part of Heath-Stout's (2019a) dissertation, "Diversity, Identity, and Oppression in the Production of Archaeological Knowledge." The sample consisted of 72 archaeologists, all of whom are affiliated with universities in the United States and engaged in Mediterranean archaeology, prehistoric archaeology of Latin America, and/or historical archaeology of the Americas. Informants were recruited through a mixture of social media announcements, invitations in relevant conference interest-group meetings, and snowball sampling. Interviews focused on the informants' career trajectories; research interests; and experiences of gender, race, and sexuality in the discipline. They were recorded, transcribed, and analyzed using a grounded theory approach (Charmaz 2014). This study was approved by the Boston University Institutional Review Board (protocol number 4381X). See Heath-Stout's dissertation (2019:Chapter 8) for a more detailed description of the sample and methods.

Although the sample of field schools presented here is global, Heath-Stout's interviewees were concentrated in three subfields. Their experiences of recruitment into archaeology nonetheless suggest broader trends in the discipline. These interviews indicated that although the cost of field schools is a significant barrier to entry for aspiring archaeologists, there are a variety of ways for archaeologists without access to thousands of dollars to strategically gain archaeological field experience. We present a variety of these strategies so that readers can use them or supply them to mentees. Although the discipline needs to change systemically in order to become more diverse and inclusive, these approaches may help individuals enter archaeological careers before those changes have been made.

Several interviewees began their archaeological research experience not with field schools, but with local laboratory opportunities, whether as volunteers or as paid employees. Julian, now involved in Mesoamerican archaeology, describes his first archaeological experiences:

I started doing archaeology when I was 13. Just like, local lab night up in [home city] every Wednesday and then volunteering and doing field work in the summers. . . . So while I was volunteering, I met a couple of Mesoamericanists who taught at a neighboring college just down the street from where I went to college. And so, I took a J-term class down to [Mesoamerica] with them and saw my first archaeological site.

Similarly, Keisha's high school guidance counselor responded to her interest in anthropology by helping her find volunteer work at an archaeology lab at a nearby college. Others began paid or volunteer lab work after entering college: Jada volunteered in a professor's lab after taking an introductory archaeology course but before participating in a field school. Jeremy planned to major in forensic anthropology when he entered college, but due to a clerical error in the work-study office, he was given a job in the archaeology laboratory instead and decided to become an archaeologist. By starting with lab work, these archaeologists gained essential archaeological skills and professional

connections without paying for additional tuition, international airfare, or other travel expenses.

Some interviewees found paid museum work as an entry point to the field. Anna attended a liberal arts college where her high school interest in history led her to take an archaeology course, during which she decided to pursue the discipline. But she was facing a decision:

I wasn't sure what kind of archaeology to do. And so going through and doing work study jobs at different kinds of museums and collections as an undergrad helped me figure out what kind of archaeology to do. So, I started out at a fine arts museum library and then moved into an archaeology work-study job at an archaeology and anthropology museum where I was actually working on collections from [a site in] my hometown that I had no idea was there.

Anna was able to find opportunities to be paid—rather than paying for her early exploratory archaeology experiences. Two other interviewees found similar opportunities: Caitlin began working in a museum in her hometown as a high school student, and Candace did the same as a community college student. Although museum work is not the same as fieldwork, it provides valuable experience, knowledge of the discipline, and professional connections.

One interviewee even found paid CRM work before entering college. She explained:

When I turned 16, which was the legal age to work, and my parents said, "What do you want to do for your birthday?" I said, "I want to make sure that I'm at home," because we often would go on trips over the summer, "because I want to, on my first day of being 16, get a job and be working in archaeology." I got a job at a contract archaeology firm.

This path seems particularly unusual, but we share it here to show the breadth of possibilities for gaining field experience when the young archaeologist is creative and determined.

Many interviewees were also strategic about choosing credited or noncredited fieldwork opportunities to maximize learning, resumé building, and affordability. Some pursued a credited field school in order to save on tuition later. Sandra, now a leader in her subfield, reflected that

At the end of my freshman year, when my summer job that I had lined up as an undergraduate at [my university] fell through, a woman I'd gotten to know really well . . . said, "Oh, you can do this archaeology field school." . . . I was interested in history, but I figured that my parents are never gonna buy this idea of not working for the summer. But I persuaded them that I could graduate a semester early if I did this and took this field school.

Others gained field experience during the semester, excavating on campus or at nearby sites on weekends. Barbara said, "I was in a state university as a commuter. I was offered the opportunity to work on an archaeological site that was local. I was in an anthropology program, and I didn't know really what I wanted to do." By excavating during the semester, students may be able to apply for financial aid that covers ordinary courses in order to gain field experience and college credit at the same time.

Some interviewees participated in for-credit field schools and then found noncredit fieldwork experiences for future summers. This was the case for Lindsay, who told Heath-Stout:

I did the field school in [Latin America] and found that one specifically because it had to have a certain number of credit units and the requirements of [my] major. And then I ended up going back as junior staff the next year. And then once I had that resumé of two field projects . . . I e-mailed every single field school in the Western Hemisphere that summer, and I was like, "I don't want to pay, but I will come and work for you free. I will get myself there." And so, that project in [the Caribbean] let me go there.

Lindsay paid for an expensive field school just once, fulfilling her department's requirement, and then was able to leverage that experience in order to find other opportunities that were less expensive.

These stories show that there are ways for students without thousands of available dollars to enter archaeology. Students should think strategically about whether field school credit is necessary for their degree, and if not, consider volunteer opportunities. If a foreign field school is too expensive, they should explore local field schools or archaeological volunteering opportunities. Additionally, they can consider work-study jobs and internships at museums or government agencies. It is possible for them to receive training at a local location for a more affordable price and later be hired as a staff member for a project located in a region that they prefer. Although there is a lack of available funding for field schools, it is still important to apply for the existing scholarships (Table 3). With these strategies, entering a successful career in archaeology becomes more affordable and attainable to a wider range of students.

STRATEGIES FOR SCHOLARS TO PROVIDE AFFORDABLE FIELD **EXPERIENCES**

Not only should students look for affordable opportunities, but field school directors should also make efforts to lower the cost of field schools. There are some resources available to support this (Table 4). For example, the National Science Foundation Research Experience for Undergraduates (REU) Program provides money to institutions in order to pay students for their research work. Unfortunately, the REU program is highly competitive, with just five out of the 719 programs pertaining to archaeological research (National Science Foundation 2019). It is still valuable, however, to utilize the limited resources that are available. Directors can also offer noncredit field school opportunities at lower prices for students who cannot afford the full cost, although some students may need the credits for their academic programs.

There may be additional resources at universities to fund scholarships. Interviewee Jada negotiated scholarships for her field school as part of her academic job offer instead of asking for a

higher salary. Some private and wealthy universities may have additional funding for archaeology students. At Stanford University, for example, the field school expenses of undergraduates are paid for by the university (Stanford Archaeology Center 2019a). Although not all universities have the resources to provide such generous support, faculty can advocate for the allocation of available resources to support students most in need.

One particularly radical field school does not charge tuition at all. Interviewee Brendan, who has worked on the same project since he was an undergraduate and is now a co-director, explained:

We don't charge money for the project. There are very few projects in the Mediterranean that do that, and I never would have been able to . . . if I went to this info session and the professor had said, "And it's a \$5,000 program fee," I don't think I ever would have become an archaeologist. I honestly don't know where that path would have led, because I had saved enough money from working to get a flight over, I could do that, and I think I got some kind of grant or something from the university. So, that's always been in place, and that's important. And we've maintained that through . . . I just write a shit ton of grant applications.

By not charging tuition when Brendan was an undergraduate, this program fostered the development of a scholar who is now committed not only to doing the research but also to passing on that opportunity to the next generation. Although it is important that field school directors attempt to institute one of these strategies, it should be noted that these approaches to decreasing field school costs are not feasible for all field school directors. If minimizing or removing the cost of field schools is not possible, there are additional strategies that field school directors can use to assist students in their pursuit of affordable field schools.

Some universities have on- or near-campus archaeology projects and/or archaeological field-methods classes that incorporate hands-on experience during the semester, with the price included in normal tuition. These include the University of Texas Rio Grande Valley (Sarah Rowe, personal communication 2019), Rice University (Jeffrey Fleisher, personal communication 2019), Harvard University (Stubbs et al. 2010), Brown University (Dufton et al. 2019), Michigan State University (Mustonen 2007), and Stanford University (Lowman 2018; Stanford Archaeology Center 2019b). These programs allow students to use their regular financial aid to cover the cost of fieldwork and to stay at home or on campus without the expense and disruption of travel. Sometimes, the research conducted in campus field courses is unrelated to the instructors' primary research interests. For example, the Brown University campus archaeology project in Providence, Rhode Island, is directed by graduate students at the Joukowsky Institute for the Study of the Ancient World, who usually focus on the archaeology of the Mediterranean (Dufton et al. 2019). These graduate students learn and teach about U.S. historical archaeology in the process of giving Brown students a much more affordable and accessible introduction to archaeological field research than a summer excavation in the Mediterranean. Campus archaeological field schools are a similar cost-effective option for some undergraduate students (Camp 2010; Turnbaugh 1976). Like an on-campus field methods course, campus field schools can provide archaeological research experience to students without any additional travel or institutional costs.

Table 4. Current Scholarships Available for Directors of Field Schools.

| Institution | Scholarship | Eligibility |
|---|---|---|
| National Science Foundation | Research Experiences for Undergraduates (pay students for excavation work; amount depends on university) | Undergraduate students who have not yet received a bachelor's degree; must be a permanent resident or U.S. citizen; other requirements depend on the site |
| Register of Professional Archaeologists | RPA Field School Scholarship (\$1,000) | Awarded to director of an RPA-approved field school to give to a student |

Even faculty who do not direct field schools (or who have limited control over the costs of field schools they direct) can contribute in a broader way to making field schools affordable. They can participate in the committees that administer scholarships, such as the SAA Minority Scholarships Committee and Native American Scholarships Committee. It is important that a diverse group of archaeologists—not only scholars who are marginalized themselves—advocate for these resources. One of Heath-Stout's interviewees, Nick, a person of color who has served on a scholarship committee, reflected that " It felt, too, like why is it all women and people of color on this committee? Right? . . . It's because no one else in the institution wants to do it or cares." Administering scholarship programs can and should be conducted by all archaeologists, not just women, people of color, and archaeologists from poor and working-class backgrounds.

Instructors can also help their students find low-cost field schools and scholarship programs and strategize how to afford fieldschool costs. One of the most important factors for marginalized people entering archaeology careers is proactive mentorship from professors and teaching assistants (Heath-Stout 2019a). One professor, Andrea, describes how she reaches out to students:

As a young faculty member, the other thing I try really hard to do is to be an advocate for my students of color, and will write them 10 million letters of recommendation. I'll write them as many as they want, especially, you know, the really good students. I have one student, I just continually forward him scholarship applications and other things, and, "Hey, did you hear about this? And da-da-da," because I don't want him to fall into the trap and then just not get a graduate degree. He just graduated as an undergrad and has an amazing archaeology project. I'm like, "[Conference] is in [our city]. You need to present. Submit something." It takes effort, but no one else is going to do it unless you do, you know?

Andrea's students, such as Angela, might not know about scholarships. Without a mentor actively passing them resources and advice, they might not be able to attend field schools and begin archaeology careers. Instructors should reach out to engaged students about their summer and career plans and help generate

ways to make their goals attainable and affordable. Through these actions, scholars may be able to help students pursue a career in archaeology who otherwise may not have had the privilege to do so

CONCLUSIONS

Field schools are not only essential to completing a degree in archaeology but also crucial to establishing a career in the field. The extensive costs of a field school (room, board, airfare, lost wages) often dictate which individuals are able to pursue this degree. This is just one of the many factors that contributes to maintaining a scientific field dominated by white and wealthy scholars.

The exclusivity of the archaeological field is an extensive and institutionalized problem—one that scholarships cannot sufficiently address. With more scholarships, marginalized scholars will be able to continue to enter the field in small numbers. Archaeologists, however, have a tendency to cite field school scholarships as a fix for inequities. Many of Heath-Stout's interviewees mentioned scholarships as examples of good work being done to diversify the field. This happens on the institutional level as well: the SAA web page concerning scholarships states, "Through its scholarship programs, SAA works to increase diversity in the field of archaeology, support the future of the field, and help today's students become tomorrow's archaeologists" (Society for American Archaeology 2020). This characterizes the SAA as a progressive organization that promotes diversity on the basis of this small scholarship program, even though the scale of the problem is beyond the scope of the SAA. Feminist theorist Sara Ahmed (2017:11) might characterize this statement as an example of how "feminist work in addressing institutionalized failure is appropriated as evidence of institutionalized success." Consequently, any attempt at acknowledging pervasive issues in archaeological academia is used by institutions as evidence that they have already succeeded. If the organization is pressured to implement additional approaches to promoting diversity, they can refer back to their scholarship program as a successful example of diversity work and refrain from broadening their efforts.

Generating more scholarships, in fact, would only perpetuate the standard of charging expensive tuition rates. Scholars and institutions may attempt to absolve themselves for charging expensive tuition by aiding in the creation of additional scholarships. This is a means of altering the perception of the archaeological community without substantially changing demographics. It is important for us to acknowledge that this article is not evidence of improvement or success. It will not create a more inclusive archaeological field. It is merely a means of specifically addressing one issue that perpetuates exclusivity in our field and providing suggestions to those who are in a position to generate change.

In order to create a truly diverse and equitable discipline, we must make free and low-cost field schools the norm rather than the exception. These might take the form of local or campus projects during the semester (e.g., Dufton et al. 2019; Stubbs et al. 2010), field projects that generate all of their funding through grants rather than tuition, or Research Experience for Undergraduates

programs (National Science Foundation 2019). Directors of credited field schools should advocate with the financial aid offices of the credit-granting universities for financial aid to be applicable to the programs and with the international program offices for tuition to be lowered. They should also consider offering a sliding scale, or different options for students seeking either credit or noncredit volunteer opportunities. The model of funding archaeological research by charging tuition to students reinforces inequality, and new models must be found.

This article has outlined the problem of expensive field schools, and it has suggested ways for students to navigate the problem and for faculty to ameliorate it. However, there is more work to be done to fully understand the economics of field school participation. Future research may include surveying undergraduates who have attended field schools to better understand the different ways in which students fund their archaeological experiences. This may illustrate the percentage of undergraduate students who get financial support from scholarships for field schools. It would also be useful to investigate how field-school tuition money is used within an institution. Does this money directly fund the field school, or the archaeology or anthropology program? Or is it allocated elsewhere within a university?

Field schools remain a crucial element of an archaeological education, but they are extremely expensive. The scholarships that are touted as a solution to this problem are insufficient to meet the needs of diverse students, which contributes to the discipline's continuing domination by white, middle-class or upper-class individuals. Field research opportunities must be made more accessible to students, regardless of socioeconomic status. In the meantime, undergraduate students need support in finding strategic ways to gain these experiences. In this article, we have suggested interim measures that students and their mentors and field directors can use. We call for radical change to reduce the need for these measures and to create a field of archaeology that is as socioeconomically and culturally diverse as the past people we study.

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Data Availability Statement

The spreadsheet of data about field schools will be made available through The Digital Archaeological Record (tDAR) alongside the publication of this article. The interview data cannot be shared in full under the terms of the Boston University Institutional Review Board (protocol number 4381X) in order to preserve the anonymity and privacy of interviewees.

NOTES

- 1. The word "cisgender" refers to people "whose gender identity corresponds with the sex the person had or was identified as having at birth" (https://www. merriam-webster.com/dictionary/cisgender).
- 2. A handful of the included field schools were not posted on AFOB, but the authors received e-mail advertisements for them in early 2019.

REFERENCES CITED

Ahmed, Sara

2012 On Being Included: Racism and Diversity in Institutional Life. Duke University Press, Durham, North Carolina

2017 Living a Feminist Life. Duke University Press, Durham, North Carolina. Archaeological Institute of America

2019 Archaeological Fieldwork Opportunities Bulletin. Archaeological Institute of America. Electronic document, https://www.archaeological.org/ fieldwork/afob, accessed April 1, 2019.

Association Research

2003 2003 Member Needs Assessment. Society for American Archaeology, Washington, DC. Electronic document, http://ecommerce.saa.org/saa/ Member/SAAMember/Members_Only/2003_Needs_Assessment.aspx, accessed February 28, 2020.

Association Research, Inc.

2011 Report on the 2010 Member Needs Assessment Conducted for the Society for American Archaeology. Society for American Archaeology, Washington, DC. Electronic document, http://ecommerce.saa.org/saa/ Member/SAAMember/Members_Only/2010_Needs_Assessment.aspx, accessed February 28, 2020.

2016 Report on the 2015 Member Needs Assessment Conducted for the Society for American Archaeology. Society for American Archaeology, Washington, DC. Electronic document, http://ecommerce.saa.org/saa/ Member/SAAMember/Members_Only/2015_Needs_Assessment.aspx, accessed February 28, 2020.

Bardolph, Dana N

2014 A Critical Evaluation of Recent Gendered Publishing Trends in American Archaeology. American Antiquity 79:522-540.

2018 Controlling the Narrative: A Comparative Examination of Gendered Publishing Trends in the SCA and Beyond. California Archaeology

Bardolph, Dana N., and Amber M. Vanderwarker

2016 Sociopolitics in Southeastern Archaeology: The Role of Gender in Scholarly Authorship. Southeastern Archaeology 35:175-193.

Battle-Baptiste, Whitney

2011 Black Feminist Archaeology. Left Coast Press, Walnut Creek, California. Beaudry, Mary C., and Jacquelyn White

1994 Cowgirls with the Blues? A Study of Women's Publication and the Citation of Women's Work in Historical Archaeology. In Women in Archaeology, edited by Cheryl Claassen, pp. 138-158. University of Pennsylvania Press, Philadelphia.

Blackmore, Chelsea, Leslie Drane, Richard Baldwin, and David Ellis 2016 Queering Fieldwork: Difference and Identity in Archaeological Practice. SAA Archaeological Record 16(1):18-23.

Camp. Stacev Lynn

2010 Teaching with Trash: Archaeological Insights on University Waste Management. World Archaeology 42:430-442.

Charmaz, Kathy

2014 Constructing Grounded Theory. 2nd ed. Sage Publications, London. College Board

2019 Big Future College Search. College Board. Electronic document, https:// bigfuture.collegeboard.org/college-search?major=1256_Archaeology, accessed April 1, 2019.

Colwell, Chip

2016 Collaborative Archaeologies and Descendant Communities. Annual Review of Anthropology 45:113–127.

Colwell-Chanthaphonh, Chip

2010 Living Histories: Native Americans and Southwestern Archaeology. Issues in Southwestern Archaeology. AltaMira Press, Lanham,

Colwell-Chanthaphonh, Chip, T.J. Ferguson, Dorothy Lippert, Randall H. McGuire, George P. Nicholas, Joe Watkins, and Larry J. Zimmerman 2010 The Premise and Promise of Indigenous Archaeology. American Antiquity 75:228-238.

Díaz-Andreu García, Margarita

2007 A World History of Nineteenth-Century Archaeology: Nationalism, Colonialism, and the Past. Oxford University Press, Oxford.

Dufton, J., Andrew, Linda R., Gosner, Alex R., Knodell, and Catherine Steidl 2019 Archaeology Underfoot: On-Campus Approaches to Education, Outreach, and Historical Archaeology at Brown University. Journal of Field Archaeology 44:304-318. DOI:10.1080/00934690.2019.1605123.

1994 Women in Mesoamerican Archaeology: Why Are the Best Men Winning? In Women in Archaeology, edited by Cheryl Claassen, pp. 159-172. University of Pennsylvania Press, Philadelphia.

Ford, Anabel, and Anna Hundt

1994 Equity in Academia—Why the Best Men Still Win: An Examination of Women and Men in Mesoamerican Archeology. In Equity Issues for Women in Archaeology, edited by Margaret C. Nelson, Sarah Milledge Nelson, and Alison Wylie, pp. 147-156. Archaeological Papers 5. American Anthropological Association, Washington, DC.

Franklin, Maria

2001 A Black Feminist-Inspired Archaeology? Journal of Social Archaeology

Fulkerson, Tiffany J., and Shannon Tushingham

2019 Who Dominates the Discourses of the Past? Gender, Occupational Affiliation, and Multivocality in North American Archaeology Publishing. American Antiquity 84:379-399. DOI:10.1017/aaq.2019.35.

Gero, Joan M.

1985 Socio-Politics and the Woman-at-Home Ideology. American Antiquity 50:342-350.

Goldstein, Lynne, Barbara J. Mills, Sarah Herr, Jo Ellen Burkholder, Leslie Aiello, and Christopher Thornton

2018 Why Do Fewer Women Than Men Apply for Grants after Their PhDs? American Antiquity 83:367–386. DOI:10.1017/aaq.2017.73.

Gosden, Chris

2006 Race and Racism in Archaeology: Introduction. World Archaeology 38:1-7.

Heath-Stout, Laura E.

2019a Diversity, Identity, and Oppression in the Production of Archaeological Knowledge. PhD dissertation, Department of Anthropology, Anthropological Archaeology Track, Boston University, Boston.

2019b The Invisibly Disabled Archaeologist. Paper presented at the 84th Annual Meeting of the Society for American Archaeology, Albuquerque, New Mexico

Hutson, Scott R.

2002 Gendered Citation Practices in American Antiquity and Other Archaeology Journals. American Antiquity 67:331-342.

Lowman, Christopher B.

2018 Artifacts Spark Stories: Archaeology and Oral History at Stanford's Arboretum Chinese Quarters. Chinese America: History and Perspectives 2018: 65-73.

Mustonen, Heather L.

2007 Public Archaeology and Community Engagement at Michigan State University: The Saints' Rest Archaeological Project. Master's thesis,

Department of Anthropology, Michigan State University, East Lansing. Proquest (ATT 1448508).

National Center for Education Statistics

2019 College Student Employment. Institute of Education Sciences. Electronic document, https://nces.ed.gov/programs/coe/indicator_ssa.asp, accessed September 29, 2019.

National Science Foundation

2019 REU Sites. National Science Foundation. Electronic document, https:// www.nsf.gov/crssprgm/reu/list_result.jsp?unitid=5054, accessed December

O'Mahony, Theresa

2015 Enabled Archaeology. BAJR Guides 41. British Archaeological Jobs and Resources, Dunbar, United Kingdom.

Rautman, Alison E.

2012 Who Gets Published in American Antiquity? SAA Archaeological Record 12(2):25-26, 30,

Reeves, Richard V., and Nathan Joo

2017 White, Still: The American Upper Middle Class. Brookings. Social Mobility Memos (blog), October 4, 2017. https://www.brookings.edu/blog/ social-mobility-memos/2017/10/04/white-still-the-american-upper-middleclass/, accessed February, 28, 2020.

Rutecki, Dawn M., and Chelsea Blackmore

2016 Towards an Inclusive Queer Archaeology: An Overview and Introduction. SAA Archaeological Record 16(1):9-11.

Semega, Jessica, Melissa Kollar, John Creamer, and Abinash Mohanty 2019 Income and Poverty in the United States: 2018. U.S. Census Bureau, Current Population Reports, P60-266. U.S. Government Printing Office, Washington, DC. Electronic document, https://www.census.gov/content/ dam/Census/library/publications/2019/demo/p60-266.pdf, accessed February 28, 2020.

Shott, Michael J.

2006 An Unwashed's Knowledge of Archaeology: Class and Merit in Academic Placement. In Reflections from the Wrong Side of the Tracks: Class, Identity, and the Working Class Experience in Academe, edited by Stephen L. Muzzatti and C. Vincent Samarco, pp. 221–241. Rowman & Littlefield, Lanham, Maryland,

Silliman, Stephen W. (editor)

2008 Collaborating at the Trowel's Edge: Teaching and Learning in Indigenous Archaeology. University of Arizona Press, Tucson.

Society for American Archaeology

2020 Scholarships. Electronic document, https://www.saa.org/career-practice/ scholarships-and-grants, accessed March 6, 2020.

Stanford Archaeology Center

2019a Field Schools. Electronic document, https://archaeology.stanford.edu/ academics/field-schools, accessed December 26, 2019.

2019b Arboretum Chinese Labor Quarters Project. Stanford Archaeology Center. Electronic document, https://archaeology.stanford.edu/researchfaculty-projects/arboretum-chinese-labor-quarters-project, accessed December 26, 2019.

Stubbs, John D., Patricia Capone, Christina Hodge, and Diana DiPaolo Loren 2010 Campus Archaeology/Public Archaeology at Harvard University, Cambridge, Massachusetts. In Beneath the Ivory Tower: The Archaeology of Academia, edited by Russell K. Skowronek and Kenneth E. Lewis, pp. 99-120. University Press of Florida, Gainesville.

Turnbaugh, William A.

1976 An On-Campus Alternative to the Archaeological Field School. American Antiquity 42:208-211.

Tushingham, Shannon, Tiffany Fulkerson, and Katheryn Hill

2017 The Peer Review Gap: A Longitudinal Case Study of Gendered Publishing and Occupational Patterns in a Female-Rich Discipline, Western North America (1974-2016). PLoS ONE 12(11). DOI:10.1371/journal.pone.0188403.

Victor, Katharine L., and Mary C. Beaudry

1992 Women's Participation in American Prehistoric and Historical Archaeology: A Comparative Look at the Journals American Antiquity and Historical Archaeology. In Exploring Gender through Archaeology: Selected Papers from the 1991 Boone Conference, edited by Cheryl Claassen, pp. 11-21. Monographs in World Archaeology 11. Prehistory Press, Madison, Wisconsin.

Watkins, Joe

2002 Marginal Native, Marginal Archaeologist: Ethnic Disparity in American Archaeology. SAA Archaeological Record 2(4):36-37.

2005 Through Wary Eyes: Indigenous Perspectives on Archaeology. Annual Review of Anthropology 34:429-449.

2009 Indigenous Archaeology Expands the Field: The Benefits of a New Perspective. Anthropology News 50(9):10.

Willie, Charles Vert

1989 The Caste and Class Controversy on Race and Poverty: Round Two of Willie/Wilson Debate. 2nd ed. General Hall, New York.

Yellen, John

1991 Women, Archaeology, and the National Science Foundation: An Analysis of Fiscal Year 1989 Data. In The Archaeology of Gender, edited by Dale Walde and Noreen Willows, pp. 201-210. University of Calgary Archaeological Association, Calgary, Alberta, Canada.

Zeder, Melinda A.

1997 The American Archaeologist: A Profile. AltaMira Press, Walnut Creek, California.

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