

**ARCHAEOLOGY FOR THE PEOPLE: COMMUNITY-BASED RESEARCH, HANDS-  
ON EDUCATION, AND THEIR PLACE IN ARCHAEOLOGY**

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## **ABSTRACT**

### **Cailey D. Mullins: Archaeology for the People: Community-Based Research, Hands-On Education, and Their Place in Archaeology (Under the direction of Patricia McAnany)**

Archaeology has long been in the interest of the public, but archaeologists have not always been capable of bringing our discipline to the people. There is untapped potential for archaeology to bridge gaps between communities' pasts and presents, and to provide practical assistance in the realm of social change and education. Through a series of online surveys targeting former participants and coordinators of pre-college archaeological education programs, this thesis seeks to understand how archaeology can impact students' ability to learn basic STEAM (science, technology, engineering, arts, and mathematics) skills and their relationship with their own communities through community-based educational programs. These educational youth programs can lead to a better educated – and more interested – citizenry, creating a community of fierce protectors of the past, and it can lead to a more inclusive field of archaeology.

To my mother, whose example of strength and sacrifice led me to where I am today.

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## CHAPTER 1: INTRODUCTION

I remember learning about archaeology only a handful of times growing up in the Ohio public school system. We were taught Ohio's "prehistory," as it was called, in fourth grade; the class barely skimmed the surface of the thousands of years of pre-European civilizations of Ohio's past, and completely skipped out on the fact that any of it had happened in my little, seemingly insignificant hometown of Portsmouth. I became interested in archaeology almost by accident some four years later while watching a documentary on Jamestown, and from that moment on I sunk my free time into researching the field and finding out what I would need to do to pursue a career in archaeology. A few years later, my mother stumbled upon the Center for American Archeology's high school field school in Kampsville, Illinois. It looked like the perfect opportunity for me to see what archaeology *really* was, and to decide once and for all if it was my true calling.

As it turned out, that camp changed my life. It solidified my love of archaeology, and made me eager to pursue the profession. What that field school ultimately did was win over a future archaeologist; it recruited not only a citizen newly devoted to preserving and studying the past, but a future professional. I often wonder what would have happened had I not attended that field school. More often, I wonder how such an opportunity might affect the students in my hometown. In this thesis, I present a study of pre-college archaeological education programs and analyze their impact on the students who participate in them in hopes of discovering what such a program might do in a place like my hometown and how to run one most effectively based on

former participants' likes and dislikes. I also analyze where the field of archaeology stands in terms of educational and community-based programs, and investigate what might happen when these two paradigms are blended together. This, I argue, is the best avenue through which archaeology can serve as a form of education *and* community service.

In recent years, community-based archaeology has become a hot topic. It is a practice known by many names – public archaeology, community archaeology, collaborative archaeology, and on and on. Even its definition seems to be a moving target. Regardless of what exactly it is called or how exactly it is defined, it is clear that archaeologists have a duty to interact with the many publics with whom we work and whose past we study. A quick brush through many archaeological organizations' code of ethics (e.g. the Society for American Archaeology, the American Institute of Archaeology, the World Archaeological Congress, and so on) will demonstrate that the idea of stewardship of the past and a commitment to the public are inherent to our professional code of ethics. The Society for American Archaeology's first and fourth principles address these topics. The first principle, stewardship, states that archaeologists have the responsibility of “practicing and promoting the stewardship of the archaeological record” (Society for American Archaeology 1996). Those who fall under the category of stewards are not solely professional archaeologists, but rather they are “caretakers of and advocates for the archaeological record for the benefit of all people” (Society for American Archaeology 1996). The fourth principle, public education and outreach, insists that “archaeologists should reach out to, and participate in cooperative efforts with others interested in the archaeological record with the aim of improving the preservation, protection, and interpretation of the archaeological record” (Society for American Archaeology 1996).

If we are to abide by this code, then it seems some form of the nebulous “community archaeology” must take an important spot in archaeological work. This fact tends to be overlooked in the field, and interacting with the public is frequently seen as a hassle or an annoyance. I have heard countless colleagues refer to the broader impacts sections on grant proposals as something they “have to do” or something they will just “make up.” Somehow, we as a field have to get past this toxic way of thinking and realize that without the public we are so frequently unwilling to serve, we would not be able to conduct our research. They fund us, they encourage us, and they inspire us.

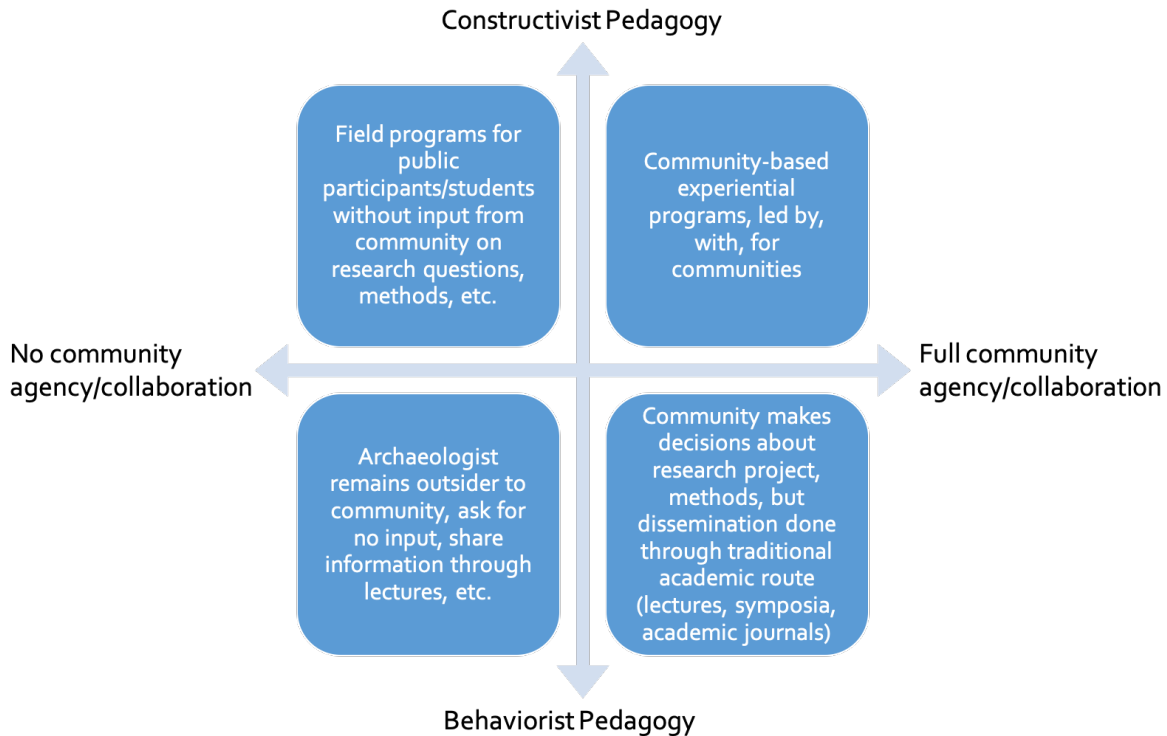
There are, of course, many shades of “community archaeology.” This term can cover all manner of programs and can be conceptualized along a continuum that stretches from sheer mandated consultation (primarily in Indigenous communities) to full collaboration (Colwell and Ferguson 2008). The two extremes of this spectrum could also be considered in two distinct terms: *outreach* and *engagement*.

Both of these terms indicate at least a minimum effort to involve the public in archaeological research, but their difference lies in the agency of the community involved. *Outreach* tends to have a more passive implication. In public or community outreach, the archaeologist tends to be the one reaching out to the community. In many cases, this means the research program has already been established by the archaeologist or the institution the archaeologist is representing, and the community benefits by learning the results of the program from the archaeologist themselves. *Engagement*, in contrast, is a more action-focused paradigm. When an archaeologist works on *engaging* with a community, they invite the public’s participation from step one of the research project, which means community members get a say in the research question, methods, and how the results will be shared after the project comes to

an end. These two forms of public involvement are not mutually exclusive; they are merely the two ends of a spectrum filled with complexities and individual expressions of public archaeology.

There is a similar methodological spectrum in pedagogical theory in the field of education. Where in archaeology there is *outreach*, in education there is the behaviorist approach, and where there is *engagement*, there is the constructivist approach (Scheurman 1998). The behaviorist pedagogical approach takes the “mind as a vessel” model to knowledge acquisition and tends to favor more passive teaching methods, while the constructivist approach believes knowledge is *made*, and therefore should be created through experiential, hands-on learning. These theories will be addressed in much more detail in Chapter 3.

There is a unique overlap between these two methodological spectra. When archaeology joins forces with education, students (of all ages) are given the chance to both learn about the past through the methods of archaeological research *and* learn critical thinking and cultural awareness skills. At the same time, when the *engagement* variety of community archaeology blends with constructivist pedagogies, archaeologists are given the chance to learn from the community and from the students participating in the archaeological program. This opens the field to numerous liberating practices. Figure 1 below depicts the overlap between these two continuums and briefly describes examples of archaeological programs on this two-axes matrix. The implications of this overlap will be further discussed later in this thesis.



**Figure 1.1. The collaborative and pedagogical continua and their implications for archaeological research.**

Despite the obvious benefits, there is still reluctance to incorporate the public into archaeology. This may be in part due to the fact that working toward a community-based archaeology is not seen as a genuine *research concern* in archaeology. In 2014, Kintigh et al. conducted a survey to identify a set of the most important “grand challenges for archaeology.” While many of the responses they garnered pertained to methodological deficiencies, these responses were excluded from the final list (Kintigh et al. 2014:7). Instead, the list includes 25 theoretical, scientific questions we should be addressing. These fit into the following five categories: “(1) Emergence, Communities, and Complexity; (2) Resilience, Persistence, and Collapse; (3) Movement, Mobility, and Migration; (4) Cognition, Behavior, and Identity; and (5) Human-Environment Interactions” (pg. 8). These are all very valuable topics to explore, but why are methodological challenges – including those of interacting with the public – not as

important? As reviewer Charles Cobb argues in his 2014 response to the article, these “grand challenges” are fine for what they are, but they do not push nearly far enough to encompass all of the issues pressing archaeology today – most notably in the political and collaborative arena (Cobb 2014; McAnany and Rowe 2015). Perhaps the study by Kintigh and colleagues wasn’t the place to discuss these broader methodological challenges, but it is a topic that needs to be discussed.

Part of the importance of a move toward a community-based archaeology is that it aids in an effort to decolonize the field – something that is well past due. It is no secret that archaeology’s past is filled with uncomfortable colonial histories and motives and incorrigible power imbalances, but now is the time to start making amends for past mistakes. Many scholars, in several edited volumes (for example, Atalay 2012; Atalay et al. 2014; Colwell-Chanthaphonh and Ferguson 2008) have called for an Indigenous, community-based archaeology – not as a new niche, but as an entire transformation of the field. Our responsibility to our many publics includes (and should prioritize) the Indigenous communities whose heritage and ancestry we so often study. Additionally, opening research to *all* of the communities impacted by our work – local and descendant – provides a fantastic opportunity for those groups to come together in a cross-cultural experience. Granted, this may lead to difficulties in weighing opposing desires and needs of the various groups, but the chance to bring together communities that share heritage simply by occupying the same space (no matter how problematic that might be) can and will open up important dialogues.

This serious need for change in the field then begs the question, *how do we make it happen?* It is worthwhile to make an effort with the existing generation of archaeologists – it isn’t always true that you “can’t teach an old dog new tricks” – but perhaps the upcoming

generation is the most fruitful place to plant the seed. If we change the way we teach archaeology, then we can change the way it's done.

The goal of this thesis, then, is threefold: first, to examine the theoretical standing of the field in terms of collaborative, Indigenous archaeology and their overlaps with archaeological education; second, to analyze the state of youth field programs to determine their usefulness and find the best practices for such programs; and finally, to bring forth a set of methods to successfully combine Indigenous and community-based archaeologies within an educational field program for kids. In the first chapter of this thesis, I explore the current state of the field, and how communities – both descendant and local – have been incorporated into archaeological research, and how the field might improve on this endeavor. Next, I examine the current relationship between education and archaeology. The goal here is to understand how archaeology might be used to enhance current educational practices in both social studies and science subjects, both in the classroom and in the field. Finally, I present a study of former archaeological education program participants and coordinators in an effort to determine how these programs impacted the field and the students who participated in them, and what the best practices are for conducting such a program in a collaborative, community-based framework.

## CHAPTER 2: AN EXAMINATION OF THE THEORETICAL STATE OF COMMUNITY-BASED AND INDIGENOUS ARCHAEOLOGIES

### *Community Archaeology: Its Many Names and Forms*

The idea of a community archaeology is not new, but it has gone through an abundance of name changes and definitions. *Community archaeology*, *public archaeology*, *collaborative archaeology*, and *community-based participatory archaeological research* are all terms that encompass the varying expressions of an archaeology that engages with and/or works with the community or communities within which the research is based. There are various levels of involvement inherent to all of these concepts, but at their core, the basic principle is the same: to move the center of archaeological research *away* from the Ivory Tower of academia and into the lives of the everyday people impacted by these studies.

As early as the 1970s, archaeologists were toying with the concept of a “public archaeology.” Charles McGimsey made a strong argument for this type of archaeology, citing it as an essential component of the field. In his 1972 book on the topic, he wrote that archaeologists must “assume a role of positive leadership and public education” if we are to expect help in cultural preservation from untrained but interested citizens (McGimsey 1972:4). He went so far as to say that access to knowledge of the past is a human right, and as such, it is the archaeologist’s responsibility to inform the public of that knowledge and share in the process of rediscovering it (McGimsey 1972). McGimsey was still on this valiant quest in 2003, when he argued that public outreach is one of the four pillars of archaeology. Here he argued that because the public *funds* archaeological research, we owe it to them to share our studies and ensure that



the information they receive is accurate and not coming from fringe, sensationalist media sources (McGimsey 2003). Essentially, public outreach is a critical component of archaeological endeavors because a great deal of research is funded by the public, and in order to continue garnering support from that public, we must keep them informed and interested.

By the early 2000s, public archaeology had gotten a bit of a makeover. Scholars began going *beyond* the idea of simply informing the public and began thinking about *engaging* the public throughout the entire process. These were the first sprouts of *community archaeology*. Primarily budding in Australia and New Zealand, the idea of community archaeology focuses on the concept of community involvement from the very beginning – from producing the research question, to carrying out the project, to publishing and disseminating results (Marshall 2002). Community-based research is change-oriented, and engages both researcher and community in projects that address locally identified needs (Strand et al. 2003).

It is important to take a moment here to define what I truly mean by “community.” Archaeologists interact with and are responsible to numerous stakeholders, all of whom are engaged at various levels and have differing desires and needs. While all of these groups could be defined as communities, this thesis will focus on groups that are most directly impacted by and invested in the research, leaving out academic institutions, peer groups, and those types of more academically-focused groups from the definition of “community.” Marshall (2002) identifies two main types of communities: local and descendant. Sometimes those two types may overlap, and at other times there may be multiple renditions of each. In many post-colonial situations, as in my own study area, the descendant community is totally detached from their ancestral homeland, but still remain acutely interested in the history there, while the local community are heritage-outsiders – and often descendant of the colonizers who removed the

Indigenous groups in the first place. This and many other issues only help to muddy the waters of a community-based archaeology.

The benefits of community-based research are plenty. In addition to correcting archaeology's colonialist tendencies to swoop and conquer the history of a place, this paradigm allows for greater educational opportunities, both for the communities in which we are working and for budding archaeologists. As community outreach became a staple of many American colleges and universities in the 1990s and early 2000s, it became obvious that the communities surrounding these institutions were just as much in need of outreach and collaboration as far-off places. This, combined with a call for more experiential learning for students, led to community-based research programs in educational settings (Strand et al. 2003). These kinds of programs, akin to service learning, which has been around for nearly a century (Baugher 2009; Eyler & Giles 1999; Mooney & Edwards 2001; Nassaney 2009), have many advantages over standard in-class, reading-based educational paradigms. Students are able to better understand the community's needs, which also means becoming more familiar with the politics and social underpinnings of the area; they gain critical thinking skills; and they generally become more civically literate (Eyler & Giles 1999; Mooney & Edwards 2001). These advantages would greatly benefit archaeology students, as all of these skills are desperately needed to do ethical, responsible archaeology.

Now that I have given a general idea of what community archaeology is, it is important to trace its roots and influences and understand how it has grown and transformed before digging into the methods and theory behind the approach. The following section will take a chronological look at the theoretical development of a community-based approach.

### *Defining Community/Collaborative Archaeology and Exploring Its Roots*

The earliest kernel of community-based research was action research, or more specifically, Participatory Action Research (PAR), a paradigm that is still very much integrated into community-based approaches. In an attempt to find a “science for the common people,” Fals-Borda produced an early version of action research in 1980, when he laid out core methods for research that flowed “from the masses to the masses” (Fals-Borda 1980:23). The five methods he lays out address many of the dynamic issues inherent to conducting this kind of science – the need to be forthright with the community (“authenticity and commitment”), avoiding feeding dangerous ideologies (“anti-dogmatism”), effectively communicating research and results with the affected publics (“systematic restitution”), effectively communicating research and results with the broader academic community (“feedback to organic intellectuals”), and finally, the necessity of constant self-reflection (“action-reflection rhythm”: Fals-Borda 1980:20-27).

The essential take-away from Fals-Borda’s work is the notion of democratizing knowledge. He gets at this from a Marxist framework, viewing scientists and researchers as the bourgeoisie and the impacted communities as the proletariat. The key to overturning this power dynamic, then, is to follow this action research paradigm in which we are open and honest about who we are and what our interests are, we communicate our wants and needs to the community and listen to their own, and we continue to inform our own academic audiences of the work that can be done in partnership with non-professional communities. Perhaps the most important factor in working efficiently and honestly with a community is the manner in which we communicate and reach research decisions. Fals-Borda lists four primary rules for these interactions, which fall under his third method, “systematic restitution.”

First, the “communication differential” calls for scientists to be sure to communicate their results at an appropriate level for the audience (Fals-Borda 1980:23). Sonya Atalay has demonstrated this type of communication, called “Level 1 communication” (Fals-Borda 1980:23), through her work at Çatalhöyük, where she worked with the community to create children’s comics to explain the archaeology of the site (Atalay 2012:233-235). In addition to finding the proper mode of communication, using the correct language is essential to effective communication. Fals-Borda calls this “simplicity of communication” (pg. 24); researchers should use plain, non-jargoned language when presenting ideas to the public. Next, research decisions and goal-setting should always take place in collaboration with the community – a process Fals-Borda calls “self investigation and control” (pg. 24). Finally, his last rule addresses the need for community members to be directly involved in the creation of knowledge with a process he calls “technical popularization” (pg. 24). Here, it is the researcher’s responsibility to find the simplest ways to conduct their research and empower community members to do it themselves by teaching proper methods.

The democratization of knowledge production is not just essential to remove scholars from their bourgeois pedestals; it is simply a better way to understand the world. As Whyte writes, “Science is not achieved by distancing oneself from the world; as generations of scientists know, the greatest conceptual and methodological challenges come from engagement with the world” (Whyte 1991:21). Working with and in communities provides archaeologists with a chance to recognize current social patterns and gain inspiration for research questions from the community’s wants, needs, and interests. In PAR, scientists are able to construct research frameworks in coordination with the community itself, allowing for projects that address problems within the community and, in archaeology’s case, seek to answer some question or

questions about the past. In this way, researcher and community member become co-learners, each learning something from the other, and through this process, the community becomes empowered and allowed to take charge of their own past and their own futures (Elden and Levin 1991).

Out of these PAR roots sprang the general concept of collaborative archaeology, which can be best described not in dichotomous or rigid terms, but as a continuum (Colwell-Chanthaphonh and Ferguson 2008). There are all sorts of forms of collaboration along this spectrum, ranging from mandated consultation through legislative programs like NAGPRA (Native American Graves Protection and Repatriation Act) to full on community-based participatory research (CBPR), where the research is designed and carried out by the community itself, and community members are seen as partners, not just recipients of some previously acquired knowledge. As the heavyweight of the collaborative spectrum, CBPR combines the old adages of PAR and a heavy community presence from start to finish to produce a community-driven, community-run research paradigm. So-called “collaborative archaeology,” then, takes many shapes and sizes, but for the most part, interested scholars have called for a shift away from the mere, mandated consultation end of the spectrum and further toward the engaged community-based participatory research end. In the end, this push toward responsible collaboration is about archaeological ethics; it is our duty to move beyond our colonial roots and embrace ways of knowing from other cultures and communities by working hand-in-hand with community partners in knowledge production.

## *Indigenous Archaeology and Its Place in Community-Based Paradigms*

The need for an archaeological focus on respecting Indigenous peoples' wishes and their sovereignty has been staring archaeology in the face since its inception. Archaeology holds a blatantly colonialist past, starting as a field of wealthy aristocrats collecting valuable memorabilia from past societies as a tribute to their own wealth. The field can be held responsible in many ways for "othering" non-western cultures, placing a greater emphasis on European arts and cultures and mocking others as *primitive* or *savage* (for a history of these indiscretions, see Trigger 2008). Most archaeologists and anthropologists will cringe while reading Vine Deloria, Jr.'s stinging criticism of "anthropologists and other friends" in his landmark text, *Custer Died for Your Sins* (1969:78-100). Deloria paints a clear picture for us of the harm brought to Indian communities as they increasingly became the subject of anthropological study. This manifesto was written nearly 50 years ago, yet makes it clear that archaeology has long been due a dramatic shake up in the way we conduct business. This, taken together with the growing civil rights movements, like the American Indian Movement (AIM), demonstrated decades ago that the way archaeologists have interacted with Native communities – or rather, they way archaeologists have *avoided* interaction with Native communities – is not only bad archaeological practice, but it is immoral and unethical. Continued as it was, archaeology was only helping erase and claim for the West the history and heritage of Indigenous peoples.

This problem is not simply a North American problem; archaeology has negatively affected Native groups all over the world. Notions of an Indigenous archaeology – an archaeology by, with, and for First Nations communities – developed early on in Australia, where relations between researchers and the Aboriginal peoples they studied were volatile. This

new movement in archaeology called for more constructive collaboration between archaeologists and Aboriginal peoples and less assumed ownership of the past on the part of archaeologists. These Indigenous critiques of the field have led to much more sensitive and successful practices in Australia and New Zealand, where archaeologists have been working hard for over a decade now to forge respectful partnerships with the communities they study (Greer et al. 2002; Smith and Jackson 2008).

There are several key components that make Indigenous archaeology properly function to be more inclusive, respectful, and ethical, as identified by Smith and Jackson (2008). Many of these overlap with the tenets of CBPR, discussed more in-depth below. First, it is essential that the researcher acknowledge and accept the differences that may be found in knowledge systems; this may cause difficulties in some ways, as an archaeologist's conceptualization of knowledge may be directly opposite from an Indigenous viewpoint. Second, the archaeologist must learn, understand, and respect local social and political systems. Third, whoever is in charge of the research crew must take responsibility for everyone she/he brings into the field – and therefore is also responsible for teaching the crew how to properly behave. Fourth, the researcher must remain flexible; it would be unwise to come into a project with a single specific question or goal in mind, because the point of this kind of archaeology is to work with the community to discover what *they* want to learn and how they want to learn it. The researcher must always remain flexible in their research goals; while their goals and questions might overlap with or even guide the community's own goals, it is equally likely that the two parties will have totally different ideas, meaning the researcher has to be able to loosen his or her grasp on the research agenda. Similarly, the researcher must share any and all benefits with the community, which includes publishing rights. Finally, when entering into this kind of partnership, the archaeologist must

think long-term; how will the relationship affect the community now and in the future? Greer et al. add that community-based Indigenous research must be interactive rather than reactive. This means responding to what the community wants and needs, and making the effort to allow for as much engagement as possible by doing such things as conducting research in the native language and empowering the community to take charge of their own past (Greer et al. 2002).

All of these principles are totally transferrable to Indigenous archaeology in the States, which has flourished in recent years (Nicholas 2010, 2014). It is important here, as in every other post-colonial region, that archaeologists drop the notion that they alone are the primary stewards of the past and recognize the wants and needs of the Indigenous people they study (Bendremer et al. 2008; Meskell and Van Damme 2008). Of course, the installation of NAGPRA in 1990 steered American archaeology in the right direction, but there is much more work to be done. As with the community-based archaeology described above, Indigenous archaeology needs to become standard practice, not another disciplinary niche; archaeologists working with Indigenous pasts need to make respect for descendant populations their first priority (Nicholas 2010).

Despite the fact that Indigenous archaeology is often considered distinct from CBPR, an Indigenous-minded archaeology fits well within the parameters of community-based archaeology. In fact, they are not really at all separable; the only difference is that the community involved in Indigenous archaeologies are direct descendants of native peoples. This again means the call for a truly collaborative practice is essential to the field's future success. Again, collaboration does not mean consultation; it means a true, reciprocal partnership in which both researcher and Indigenous community share equal power and are active in decision-making and guiding research methods and directions. When partnering with Indigenous peoples,



archaeologists have a wonderful opportunity to learn different conceptualizations of knowledge, time, and the past, and these different frameworks can serve to truly benefit archaeology if only we are willing to learn (Kuwanwisiwma 2008).

For the most part, CBPR projects are situated within Indigenous communities (for example, see Nicholas et al. 2008; Greer et al. 2002; Kuwanwisiwma 2008; Meskell & Van Damme 2008; Atalay 2012; McAnany 2014; Parks and McAnany 2011). The goal of all of these projects, ranging from First Nations field schools in British Columbia (Nicholas et al. 2008) to cultural heritage rediscovery in the Yucatan (McAnany 2014; Parks and McAnany 2011), was to bring archaeology into the lives of the descendants of those we study, and to empower these descendant communities to take control of their own pasts, their own heritage.

The intersection between descendant and local communities creates an interesting – albeit potentially stressful – situation for community-based archaeology. Of course, as mentioned above, it is necessary to define *community*. Chirikure et al. provide a succinct definition of community that can encompass Marshall’s two types (local and descendant): community is “a body of people inhabiting the same locality” (Chirikure et al. 2008:468). Commonly, in North America and other colonized regions of the world, the “body of people inhabiting the same locality” often have different – and conflicting – pasts. Community-based archaeology has the responsibility of finding a balance between these two communities, even when the descendant community no longer dwells within its historically documented – and rightful – homeland. The archaeologist must work to find benefits for both local and descendant populations, but also provide an opportunity for the non-descendant community to learn about the descendant population’s claim to the place.

## *Principles of Community-Based, Collaborative Archaeology*

This move toward a more collaborative, community-minded, politically oriented archaeology should not be seen as just another niche brand of archaeology (Atalay 2014; Clauss 2014; McAnany 2014; McAnany and Rowe 2015; Nicholas 2010). The entire field of archaeology – its theories, its methods, its questions – needs to be completely transformed in a way that makes these principles of community, activism, and post-colonialism standard practice for every archaeologist in every project (Atalay 2014; McAnany 2014; McAnany and Rowe 2015). While it may be called by many different names, the true goal of CBPR, public, or Indigenous archaeology is to transform the field into a more useful practice. It really is, as Lamphere (2004) argues, a waste of time arguing over definitions and terminologies within this new vision of archaeology, because it is an “umbrella effort,” all after the same goal: dynamic and productive relationships with the communities in which we work and study, and an educated public that supports, defends, and participates in archaeology. It is essential for the field’s continued vitality that we begin to involve and aid the public who supports us, and that we work to improve our relationship with the descendants of those we study. Without moving toward this more inclusive, goal-oriented paradigm, archaeology will lose its relevance, unnecessarily and unfortunately in a time when the world critically needs something to bind us together. To dispense with the terminology tango, for the remainder of this thesis I refer to this type of transformed archaeology interchangeably as “community-based” or “collaborative” archaeology or generally as “CBPR.”

In order to truly begin to shift the field in this collaborative direction, we must settle on some new core tenets of the practice. There has been some general consensus on what this community-based archaeology should look like. The most basic, core tenets include 1) a

researcher-community partnership; 2) democratization of knowledge; 3) achievement of social change and/or social justice; and 4) mutual benefit (Atalay 2012; Atalay et al. 2014; Brighton 2011; Colwell-Chanthaphonh and Ferguson 2008; Ferris and Welch 2014; Kuwanwisiwma 2008; Lamphere 2004; Little and Shackel 2014; Marshall 2002; McAnany 2014; McAnany and Rowe 2015; Mullins 2011; Nicholas 2014; Smith and Jackson 2008; Strand et al. 2003; Stottman 2014; Watkins et al. 2000).

### *1) Researcher-Community Partnership*

This first tenet of a CBPR archaeology makes up the foundation of the paradigm. The entire premise of CBPR is that the researcher enters into a partnership with the community to address archaeological research questions that interest both researcher and community members, while simultaneously doing so in a way that provides some social benefit to the public. The key term here is *partnership*. It is not a one-sided relationship in which the researcher tells the community what will be researched and how; nor is it a relationship in which the researcher goes into a community and does the work on her own, only later dumping the knowledge she learned onto the community through a public talk or publication. It is in fact an equal partnership that involves a great deal of give and take from both sides. This type of partnership means that the research and community members are all co-learners; the archaeologist can share with the community *our* methods of knowledge production, and the community can open us up to new ways of knowing (Atalay 2012; McAnany 2014). The “community-based” part of CBPR means the research itself is not only physically/geographically based within the community, but the research comes *out of* the community. The community is engaged from the very beginning, and is involved in conversations and decisions about research questions and goals, methodologies,

and the dissemination of results at the end of the project. Through every step of the way, the researcher and the community hold equal footing and get equal say in the process (Strand et al. 2003). CBPR moves beyond the idea of *outreach* and fully embraces *engagement*.

This dynamic is especially important when the community in question is an Indigenous one. By creating an equal partnership, the researcher is working toward reversing traditional colonizer/colonized power dynamics, so painfully established by generations of archaeologists who, unwittingly or not, reinforced colonial regimes of power and imposition (Brighton 2011; Nicholas 2014). Giving equal power to non-professional partners means acknowledging different ways of knowing and empowering community members to take control of their own stories and get what they want out of archaeology without being coerced or convinced to go about things in one way or another. Building a relationship with these communities takes a great deal of trust, and that means being able to truly *listen* to our partners to understand what they want out of the projects we coordinate with them, and how they want to achieve their goals (Little and Shackel 2014; Pyburn 2009). As Sonya Atalay so eloquently wrote, archaeological CBPR programs “start from a place of *asking* rather than a mind-set of *knowing*” (Atalay 2012:189; emphasis added). This means putting aside research agendas and *listening* to what communities already know and what they want to find out. It is no secret that archaeologists can often be reluctant to hand over the power we have accrued over the archaeological record (Chirikure et al. 2008), but the CBPR paradigm asks us to put aside our academic egos and become humble learners once again.

## 2) *Democratization of Knowledge*

The second major goal of community-based archaeology is to achieve knowledge democratization. If we are going to enter into meaningful partnerships with communities – both

Indigenous and non-Indigenous – we have to be open to accepting other methods of understanding the world around us (Atalay 2012; Atalay et al. 2014; Nicholas 2014; Strand et al. 2003). This means being open to oral traditions and stories we might have labeled as “myths” in the past. It means being flexible in how we conduct our research and understanding that Western science is not the end-all, be-all of knowledge production. This element also feeds into the empowerment of communities. By being able to decide what methods are used – or *not* used – to reconstruct the past, communities wield the power to tell *their* story *their* way.

When partnering with Indigenous peoples, this process is essential to building trust and demonstrating respect. It is no secret that archaeologists have a painful history with Aboriginal peoples. In so many ways, our scholarly ancestors have aided in the justification of racism and the construction of stereotypes. Now that we as a discipline have become, for lack of a better term, far more humane, we have the opportunity to begin to correct our wrongdoings. Of course, no action we take can ever undo the past, and we would be absolutely remiss to assume that anything we do could completely gain the trust of the peoples we have harmed in the past. George Nicholas, an archaeologist quite familiar with the process of conducting a responsible and ethical Indigenous archaeology, has written about how archaeologists can come to a place of reconciliation with Native peoples. “Reconciliation has to be more than just saying ‘sorry,’” he writes. “Instead it requires that we change how we do things” (Nicholas 2014:150). We can start changing how we do things and start working on creating a more responsible and ethical archaeology than that of the past by opening up our methods to incorporate and utilize a wide array of knowledge production tools.

### *3) Achievement of Social Change and/or Social Justice*

Archaeology is an inherently political process (Clauss 2014; Ferris and Welch 2014; Mullins 2010; Pyburn 2009; Pyburn 2014; Rylko-Bauer et al. 2006; Stottman 2014; Watkins et al. 2000). Knowledge of the past carries tremendous power, and the process of uncovering it can often strike chords of tension or harmony. This power is intensified when archaeological projects are carried out with, for, and by communities. When we are welcomed into a community, we have the unique opportunity to do archaeology for a cause – “archaeology for activism” rather than “activism for archaeology” (Clauss 2014:35). We can use our trade to solve real world problems, whether the answer lies in the results of the archaeology or the process itself. In communities with multi-layered pasts, archaeology can help fight stereotypes and institutionalized racism. In regions that have poor educational opportunities, archaeology can help teach essential life skills, like critical thinking and civic literacy.

In a setting like my hometown of Portsmouth, Ohio, archaeology has the potential to address many community issues. First, the area’s schools do not have a heavy emphasis on STEM education. Students often shy away from lucrative careers in STEM-related fields because they feel that someone from their part of the world could never be smart enough for that. Introducing the community to a STEM field that has roots in the humanities is a great way to familiarize both students and teachers with a STEM career, and show students that it is not an out-of-reach goal. Second, the community knows very little of the Indigenous peoples who occupied the region long before white settlement. It is safe to say that most children, at the very least, do not even realize that American Indians are living, breathing people today and not simply historic figures. Learning the archaeology of the area will demonstrate the complexities of white and Indigenous relationships through history, which are not often taught with historical accuracy

in schools, and help bring awareness to American Indian life today. Third, the community desperately needs some sort of communal project to focus efforts on. The region suffers from a horrible drug abuse issue, and needs a project that will get folks active and involved in the community rather than getting into trouble on the streets. Finally, citizens in the area have steadily lost interest in their own community; they are disappointed by the constant economic struggles and the seemingly endless degradation of their town. Learning the history of the region – which is rich and long-spanning – could reinvigorate the town's liveliness and interest in their own past.

#### *4) Mutual Benefit*

In the same vein as the last principle, the final tenet of this new, transformed archaeology is that the work must provide benefit to both the archaeologist and the community. This especially works into the principle of partnership with the community; in order to ensure that the project is beneficial to both archaeologist and partner, the two must work together to develop research goals that will address problems relevant to both groups. Working together to find a project that is mutually beneficial makes clear that the project does not belong only to the archaeologist, but is in fact a shared endeavor. This also means that the publications that follow the project should impact both archaeologist and community; more than likely, a typical academic article in a journal that the wider public does not read won't be the best solution, even though this is still what is mandated in the archaeological profession for a successful career. So, as mentioned in the previous tenet, this new style of archaeology should be both academically sound and done in the name of activism.

One criticism that is frequently leveled at community-based archaeology is that in working with non-professionals and attempting to find solutions to societal issues of today, we sacrifice some amount of scientific rigor in exchange for relevance (for example, Argyris and Schön 1991). This is simply not true; there is no need to relax the rigor of any project in order to incorporate a community and/or a social issue into its context (Atalay et al. 2014; McAnany 2014). Perhaps one of the sticking points of this argument is a disagreement over what can constitute as “science” – and who has the right to produce knowledge. In arguing for an activist archaeology, Sonya Atalay asserts that activism requires an adjustment of “power (im)balances” and a reclaiming of positivism. The long history of colonialism tied intimately with archaeology has led to the territorializing of “science;” Atalay calls for archaeologists, through their activism, to take back the power of positivism and give it to those with other ways of knowing, creating a more inclusive, well-rounded science. As she points out, “...activist scholarship is not an argument against truth or for an anything-goes relativism...But it is an argument for seeing science as a historical process” (Atalay 2014:55). Thus, activist and community-based archaeology can be – and *is* – scientifically rigorous, but in a more equal and reciprocal manner.

The previous sections have laid out the core tenets of community-based, collaborative, Indigenous-minded archaeology. This kind of archaeology is, of course, not always a bed of roses, and in fact comes with far more risks, costs, and intricacies than non-collaborative work. On top of the questions of funding, academic support, and community needs, archaeologists have to consider how the overall question of heritage might create challenges for CBPR projects. In the next section, I consider these ideas – who does the past belong to, and why does it matter?



## *Questions of Heritage*

Any kind of archaeology will always bring up questions of heritage – particularly when it is done *with* and *by* a community. Heritage is a messy thing, and frustratingly difficult to define as its meaning is typically dependent on who it belongs to (Little and Shackel 2014). The past means something different to everyone; some aspects are important to remember, and others are important to forget. The past can define a culture, a family, or an individual in ways that the present often cannot. “Heritage” is often seen as something shared by many, or indeed sometimes by all of humanity, as UNESCO’s World Heritage Sites suggest. But with ideas of heritage also come notions of power, dominance, and control, often in favor of those who do not have any true claim to specific instances of heritage. Because of these highly contentious variables, defining heritage is an arduous task. Little and Shackel (2014) offered their own definition generic enough to account for all of the moving pieces: heritage is “whatever matters to people today that provides some connection between past and present” (Little and Shackel 2014:39).

This definition does not mean that the concept of *heritage* is necessarily inherent to all societies or all peoples across time. In fact, some suggest that heritage is actually a constructed concept, a cultural practice, brought about by archaeologists and institutions in an effort to construct meanings and values of the past (Meskell 2005; Smith 2006). While this is perhaps a pessimistic look at how archaeologists envision people’s connection with the past, it does not negate the fact that heritage, ancestry, and tradition are all very important concepts of many cultures and kin groups. Regardless, if heritage is such a complex idea, and one potentially laced with heavy overtones of Western ideals and values, how should archaeologists behave when studying someone else’s heritage, history, or past? Here, the concepts of Indigenous archaeology

come into play. One consideration that has come up in the topic of heritage and collaboration is that of Indigenous intellectual property rights over the past (Nicholas & Bannister 2004). This view challenges the idea of ownership over the past, and considers the legal rights of Indigenous peoples in relation to both the tangible and intangible remnants of their heritage.

When interacting with Native histories, whether considering legal property rights, creating archaeological programs in Indigenous communities, or finding ways to reconcile archaeology's colonial past, there is no way to conduct research outside of a collaborative approach, for archaeology researching others' heritage "must be collaborative or nothing at all" (Atalay 2008:133). These principles have been put into action by many scholars in the field of archaeology already. The following section examines some of these case studies and their benefits.

### *Examples of a Transformed Archaeology in Practice*

There is no shortage of working examples of the kind of transformed archaeology so many scholars are championing. Most community-based projects started with a simple insistence on doing archaeology ethically and responsibly – and that meant partnering with the communities whose past they were studying. These projects have paved the way for standardizing community-based, inclusive, ethical archaeology, and have made it possible for young archaeologists like me to start off on this transformed path.

One example of these foundational projects is the Maya Area Cultural Heritage Initiative (MACHI/InHerit: Indigenous Passed to Present) at UNC-Chapel Hill (McAnany 2014, 2016; Parks and McAnany 2011). This project, done in partnership with the Indigenous peoples of the Maya region, aims to help local communities regain control of their past, present, and future

through school enrichment programs, public archaeological workshops and training, and conservation programs (McAnany 2014, 2016; Parks and McAnany 2011). A key component in this program is education – both of students and adults. Through elementary school programs, like workbooks that combine elements of cultural heritage and present-day identity, and training programs to familiarize the community with archaeological tools like GPS mapping, the project has been able to give local peoples the tools they need to preserve their heritage, and has inspired a passion for and an ownership of the past (McAnany 2014, 2016). The community has not been the only beneficiary of this project; it has also given archaeologists a chance to “change the terms of engagement” with communities, and provides an example of how effective community-based paradigms can be (McAnany 2014:174).

Sonya Atalay has also conducted countless community-based programs that have demonstrated the true need for the field’s transformation. Her efforts began at the renowned Çatalhöyük site in Turkey. There, she worked with the local population from six nearby towns to develop a community-based research paradigm. Although her initial goal was to work with the community on research design and question development, the collaboration took on many other forms, including artistic projects, increased local involvement in knowledge production, and unique methods of knowledge dissemination (i.e. comic books about the site; Atalay 2012). From there, she moved on to North American projects with Indigenous communities, which ranged on the collaborative spectrum from full blown research partnerships to repatriation claims in which Atalay served only as the archaeological consultant in carrying out the community’s wishes (Atalay 2012). The variety in these projects demonstrates the flexibility that comes with community-based research. Truly, what the collaboration and the project itself looks like is entirely dependent on the goals of the community.

Community archaeology can take shape outside of the field and can serve to illustrate how collaboration should be done in the future. In coordinating the Dynamics of Inclusion in Public Archaeology Workshop in New York City, Patrice Jeppson and her colleagues took the opportunity to do something archaeologists have not done in the past: *listen*. They listened to the public's opinions on the African Burial Ground National Monument in New York and gave non-archaeologists a chance to present their knowledge on the place's heritage and its meaning to the community. Jeppson found that an archaeology that engages the public provides another outlet for community engagement; in other words, public archaeology is "a small part of a larger process" (Jeppson 2011:653).

Other community-based, Indigenous archaeology projects take on a more educational role. Those will be discussed later on. The moral of the story here is that the kind of "transformed archaeology" that Atalay, McAnany, and so many others have argued for is one that combines what would otherwise be seen as disciplinary "niches" into one archaeological practice that is responsible, ethical, and inclusive. It is an archaeology that incorporates the publics that fund the research we do, one that asks rather than tells descendant populations how their past should be studied, and one that does not keep its results hidden away in an academic journal but instead conveys research results to the public in ways everyone can understand. It is the only archaeology that will be sustainable for future generations. It is, simply, a new archaeology. But to get there, there must be a significant education component – both for the communities involved and for the archaeologists.

## CHAPTER 3: ARCHAEOLOGY & EDUCATION

### *Introduction*

Education plays a critical role in any research field, and archaeology is no exception. In order to inspire the next generation of archaeologists and concerned citizens, archaeology needs to seep into pre-college education. Getting students interested early on might help prevent common misconceptions, and might entice some to follow a career in the field. Additionally, archaeological training needs to embrace the fact that archaeologists typically find themselves at some point or another in an instructional role, whether as a university professor or as a summer camp leader. This chapter focuses on the ways in which archaeology can find a home within pre-college education, and the ways in which archaeological education programs can fit within a community-based archaeological framework. First, I examine the areas of education where archaeology can aid in student learning. Then, I give an overview of some pedagogical theory and how it relates to archaeological education programs. Finally, I examine the benefits of coordinating archaeological education programs through community-based participatory research.

### *How do we teach History? Why does it matter?*

History matters. But that's not news to archaeologists; we are all well aware of how the past can shape the future, how it helps create identities (both individually and collectively), and how it can be shaped and molded by those in power (Evans 2004; Davis 2005. Jeppson 2012;

Levstik 2000; Nash et al. 1997; Rosenzweig 2000). Social studies and history – history here meaning all of the events of the past, whether written or unwritten – deeply reflect a society’s values and cultural upbringings, which frequently makes these subjects targets of political unrest (Evans 2004; Jeppson 2012; Nash et al. 1997). Which parts of history are taught in schools reflect what a nation sees – or wants to see – in itself. This can often lead to major gaps in curricula. When American “history” starts with Christopher Columbus and leaves out the millennia of culture and civilization that came before European colonization it can lead to confusion or misconceptions in young minds. Archaeology can help change these misconceptions.

The parts of history that are frequently left out of the narrative – the stories of marginalized members of society, like women or immigrants, and the stories of unwritten history, which encompasses thousands of years of human history in North America alone – get cast aside as less important than that of the mainstream. Students are done a great disservice by not learning these histories, particularly those students who come from similar backgrounds as those whose stories are not being told in history books (Davis 2005). By not learning about these important moments in history, students fail to conceptualize the importance of *all* members of society and *all* cultures throughout time. Groups who tend to be left out of the written historical narrative are not always invisible in the archaeological record, which makes archaeology a powerful tool for teaching tough concepts like racism, sexism, and classism.

Nevertheless, what students are taught in the classroom is often strongly influenced by national and local governments; in the U.S., there is a set of national and state standards shaping what is taught in every classroom. These standards, which limit the range of topics and themes taught in the classroom, have led to a problematic compartmentalizing of subjects. Students are

taught math in a silo outside of science; science in a silo outside of social studies; and social studies in a silo outside of language arts. This doesn't exactly reflect the way the world works, and archaeology is a perfect example of that. Archaeology is a discipline that demands interdisciplinary work. To answer a single research question, archaeologists may rely not only on the standard scientific method to develop and carry out a research plan, but also on geometry to determine excavation plans; on chemistry to determine the source location of specific artifacts; on artistic analysis to understand deeper meanings of works of art; and on writing skills to disseminate the results to the public. Davis (2000) argues that while archaeology can fit in neatly with Social Studies standards in the U.S., archaeologists should be wary of bowing to this disjunction between subjects and attempt to cross interdisciplinary boundaries.

So, how exactly does archaeology fit into an educational standards system? Its uniquely multi-disciplinary nature makes it a valuable resource for integrating learning across different subject areas. But beyond that, its specifically hands-on methodology makes it a perfect vehicle for promoting critical thinking and problem-solving skills, which is desperately needed in the field of education (Enloe 1991).

### *Interest in an Archaeological Education – Educating the Public, Starting with the Youth*

There is certainly no lack of enthusiasm for archaeology and history among the general public. In 1994, education researchers Roy Rosenzweig and Dave Thelen conducted a national telephone survey in which they asked Americans how they use and understand the past (Rosenzweig 2000). Their findings indicate that the past really *does* matter to Americans, particularly when they can find a direct connection to their present lives. Family histories, genealogy, and group histories proved to be most important to a majority of respondents, which

suggests that as long as history can be seen as *relevant*, the public will find it at least somewhat interesting (Rosenzweig 2000).

More recently, the Society for American Archaeology conducted a nation-wide survey through Ipsos on American perceptions of archaeology (2018). The findings are telling. Overall, a majority of Americans are at least somewhat familiar with archaeology (65%), and those who *are* familiar are more likely to be interested in the field and believe that archaeological work is important and worth funding. Over a quarter of those surveyed reported being somewhat interested in archaeology, with only 22% not at all interested. But what is perhaps more relevant to *this* study is the percentage of Americans who believe archaeology should be included in the core curriculum for schools at some stage – some 87%. What this survey demonstrates is that the archaeological past *is* important to Americans, and what’s more, they are eager to see the discipline introduced at the pre-college level.

While working at Hopewell Culture National Historical Park, I have seen firsthand how the public responds to what we do; they are always full of lively questions, and the kids are fascinated with the idea of digging up old stuff. Beyond that, though, children are very receptive to learning the archaeological process, and when given the opportunity to learn, they truly do understand what we do. In 1990, the Society for American Archaeology created the Public Education Committee (PEC) to “proactively promote and support efforts that engage broad segments of the public in the who, what, when, where, why, and how of archaeology” (Messenger 1990:1). The PEC argues that archaeologists need to be involved in public education early on, or else students will turn to more sensationalized accounts of the past, as we see every day with all of the pseudoscientific displays in popular media, such as the History Channel (Sabloff 1991). Archaeologists can work to give students the education they *deserve* so that they



can develop an understanding of the field that is not based on misinformation. That of course applies to individuals of all ages, but grown-ups are harder to pull away from misconceptions, as they've been instilled for a far longer period of time (Messenger 1990).

Given the wide-open space in the methodology of social studies education for something that is interactive and multi-faceted, it seems that both archaeology and education could benefit from closer collaboration. The benefits aren't only limited to social studies and history, either. Science classrooms can also reap the rewards of learning the archaeological process, both in and outside of the classroom; archaeology demonstrates a different *kind* of science, one that still follows the scientific methods taught in the classroom, but incorporates the ideas and principles learned in social studies, math, and language arts classes. In the section that follows, I briefly examine some of the foundations of pedagogical theory and explore how archaeology might fit within an educational framework.

### *Methods of Archaeology Education*

In order to fully understand how archaeology might fit into a public education setting, it is important to first explore the foundations of pedagogical theory and understand how students learn. The major dichotomy in theories of learning exists between behaviorist and constructivist approaches. These theoretical frameworks differ primarily in their very different conceptualizations of how knowledge is gained: in a behaviorist point of view, knowledge is something that exists independent of human thought or action; it is something that simply exists, and can be poured into the empty vessels that are students' minds. In a constructivist view, knowledge is something that is created by individuals and is entirely dependent on past experiences and present contexts or realities (Bartoy 2012; Scheurman 1998). Following the

notion that “history is made” (Davis 2005:1), I explore methodologies that fall under the purview of constructivist theories of knowledge.

Overall, constructivism holds that knowledge is created and continually shaped and molded by culture, as well as personally and collectively held values and experiences (Davis 2005). This approach views learning as a process derived from inquiry and critical thinking, where students piece together an understanding of the world through problem solving and connecting the dots (Scheurman 1998). There are generally two positions on constructivism – social and cognitive. Cognitive constructivism, attributed to Jean Piaget, relates to the movement from disequilibrium in understanding – when students are confronted with ideas contrary to those they already have on a topic – to equilibrium through cognitive learning (mainly, inquiry, critical thinking, and problem solving, leading to a *new* understanding of the topic), (Davis 2005). Social constructivism builds on these ideas but adds an emphasis on the process of communal knowledge production, in which groups produce knowledge together to create a public understanding of occurrences (Davis 2005). To reiterate, constructivism is the theory that knowledge is made in a way that reflects societal beliefs, values, and culture.

These notions of knowledge and knowledge production are not foreign to anthropologists; the entire post-modern movement rests on these ideas (see, for example, Haraway 1988’s thoughts on “situated knowledge”). Naturally, these two conceptions of knowledge production have very real impacts on how teachers teach. The behaviorist approach favors the read-and-test method that so many American schools implement – an approach that is not very stimulating or challenging to most students. Meanwhile, the constructivist approach makes room for teaching in a very hands-on, interactive manner that encourages students to use critical thinking and problem-solving skills to construct knowledge – and this is where

archaeology becomes useful. It is important to point out that neither of these pedagogical frameworks should be used exclusively; there is hardly a situation in which a teacher could impart knowledge without some elements of the behaviorist paradigm, but it is essential to incorporate constructivist approaches to keep students actively engaged, and to encourage better critical thinking skills (Bartoy 2012; Scheurman 1998).

Latching on to that interactive, engaged teaching approach can be difficult without the proper tools or appropriately engaging contexts. Archaeology is one such context in which teachers can bring “boring” subjects to life. Bringing archaeology into the classroom – or bringing the classroom into the field – can achieve two major goals: 1) it can educate the public and, most importantly, youth, about the archaeological process and about the archaeology of a particular community, and 2) it can serve as an educational context for student learning that will impact subjects beyond social studies.

The first goal may seem somewhat self-serving. Archaeologists obviously want to teach people what they do and what the past was like in a particular area. But doing so serves students well beyond the realm of simply understanding how archaeology works. By learning what’s in their backyards and learning the process through which we know what we know about the past, students will gain a better appreciation of history, preservation issues, and of humanity. Arguably, there is something uniting about understanding the past around the world; seeing how history has unfolded makes us feel somehow a little more human. That feeling is not out of reach for young students. They are just as capable of understanding these global connections and seeing how history shows us that humans are humans no matter their skin color, religion, or heritage. Educating students on our shared past may help to create a generation of kind,

compassionate individuals who not only care about their past, but also about their present and future.

The second goal – archaeology as a context for interdisciplinary education – attains many of the same things as the first, but in a more concrete, educational way. Students can learn far more than the archaeological process through archaeological activities. When they are put to the task of piecing together bits of information and understanding how to make educated inferences based on evidence, they are learning essential critical thinking skills – and they are also learning the scientific method, which they can apply in a variety of different settings. They learn math skills when asked to perform the technical tasks of archaeology, like setting up a unit or measuring depth. They gain writing skills when asked to write about their experiences in archaeology. But beyond that, they learn difficult concepts like cultural relativism, which can help them understand and identify social and moral issues like racism or sexism. This may create better citizens and, overall, more understanding people (Pyburn 2000). In this way, we can teach *through* archaeology rather than simply *about* it (Bartoy 2012).

In order to achieve these goals, we have to be very mindful of *how* we teach archaeology. It would be quite easy to fall into the read-and-test trap that has already been set for education if we treat elementary students the way we treat each other: create a slideshow, talk for 45 minutes straight, and ask for questions at the end. But that simply won't do for captivating the minds of young students. We shouldn't expect ourselves to be fantastic teachers without first being taught ourselves; the education that *archaeologists* are put through should teach archaeologists to be teachers – and that does not mean just university professors (White 2000). I would argue that the training system for archaeologists needs to be reworked so that teaching and collaborative skills are cultivated from the get-go. If university programs provided an outlet for conducting – or even

simply working on already established – community-based and/or educational projects, students would be able to learn experientially how to interact with the public and how to properly educate interested parties (Atalay 2008; Watkins et al. 2000). Such training would not only instill best practices for partnering with communities and teaching effectively, but also help students of archaeology open up to utilizing multiple ways of knowing and familiarize them with some widely-known knowledge production methods of Indigenous peoples, for example. But there is only so much we can expect to master; after all, not every archaeologist is going to be able to get a degree in education *and* archaeology. This is where it becomes important in community archaeology to partner with teachers and other educators to fill in the gaps in our educational knowledge.

### *Real World Cases: Archaeology In and Out of the Classroom*

There are some obvious advantages to certain educational settings in which archaeology is taught. If given the chance to teach a group of students at an archaeological site, the odds of keeping the students engaged and actively interested are much higher. Archaeological parks, like so many of our nation's National and State Parks, provide students with an opportunity to learn firsthand what archaeology looks like, and how the people of the past lived. Parks, or any kind of public archaeology sites, also endow archaeologists with a much larger toolbox than a classroom setting – this is an opportunity to get kids involved in *real* archaeology, teach concepts and lessons in motion (through walking tours and other interpretive programs, for example), and, perhaps most importantly, get students outside of their traditional academic setting (Colomer 2005; Kwas 2000). Another out-of-classroom activity that provides a unique, uninterrupted platform for archaeological education is an Archaeology Day event. These can be held at parks,

museums, schools, or community centers, and offer both students and parents a way to learn hands-on how archaeology works (White 2000).

Naturally, not all archaeology education will take place in the field. Many archaeologists may have the opportunity to visit a classroom or a group of students indoors (for instance, a Girl Scout meeting in a community center). This can be a challenge for a number of reasons; first, we may be working on a very constrained time limit (at many schools, one period is only 45 minutes), and second, we may be working in a very confined space. Carol Ellick (2000) provides useful tips on how to introduce archaeology to a group of students in these less than ideal settings. Overall, the most important factor in successfully teaching archaeology in a classroom is to know in advance what the audience is like (age, backgrounds) and what major concepts the students are expected to learn. Presenting only 3-5 major concepts will produce the best results, as the students will not be overwhelmed with new information and the archaeologist will not be overwhelmed with the number of activities she/he is trying to conduct. These major concepts often have to contend with students' preconceptions; for instance, many students may think archaeologists study dinosaurs, or that the past always took place somewhere far away from their own homes. It is important to combat these ideas not by simply telling the students they are wrong, but by positively enforcing the truth. Ellick (2000) provides ideas for many creative activities that will get the kids doing archaeology right in their classrooms, like bringing mock dig kits and demonstrating how irresponsible looting can compromise interpretation of the past by showing how the archaeological record is built up and affected over time. Finally, the visiting archaeologist can leave the teacher with a packet of useful resources to follow up with after the lesson is over (Ellick 2000).

One example of a hybrid of these two archaeology educational settings – the classroom and the field – comes from the Upper Peninsula of Michigan. Jessica Sutherland conducted youth archaeology programs with UP elementary schools, some of which took place in the classroom while others were in the field. She held in-school sessions involving mock digs and activities similar to those that Ellick suggests. In the summer, she offered camps for students in which they learned the process of archaeology in a hands-on setting. Throughout the program, Sutherland maintained the goal of acting as a facilitator rather than a teacher, and allowed the students to draw their own conclusions based on the activities (Sutherland 2016).

Similarly, Hopewell Culture National Historical Park created an integrated curriculum for grades 3-5 that outlines activities tailored to teach the past both in the classroom setting and at the park. The guidebook provides reading materials, suggested activities, and learning objectives that follow four themes: “charting the course” (an introduction to Ohio’s prehistory with a text passage and follow-up discussion questions for the classroom); “clues to the past” (introducing material culture and concepts of time, specifically in terms of Ohio’s prehistory); “tracing the past” (activities to understand and practice the process of archaeology, including a “peanut butter and jelly excavation” in which students build a peanut butter, or chocolate frosting, for those allergic to peanuts, and jelly sandwich with each layer representing a cultural event and then “excavate” their site to see how stratigraphy and time deposition works); and finally, “remembering the past” (procedures to explain the importance of the past and why/how it should be preserved, focusing specifically on how the material culture found at the park is preserved and protected). This handbook, readily available to teachers who want to visit the park or who have participated in the park’s Teacher Workshop in Archaeology, creates a bridge between archaeologists working at the park and student learning both in the classroom and on site.

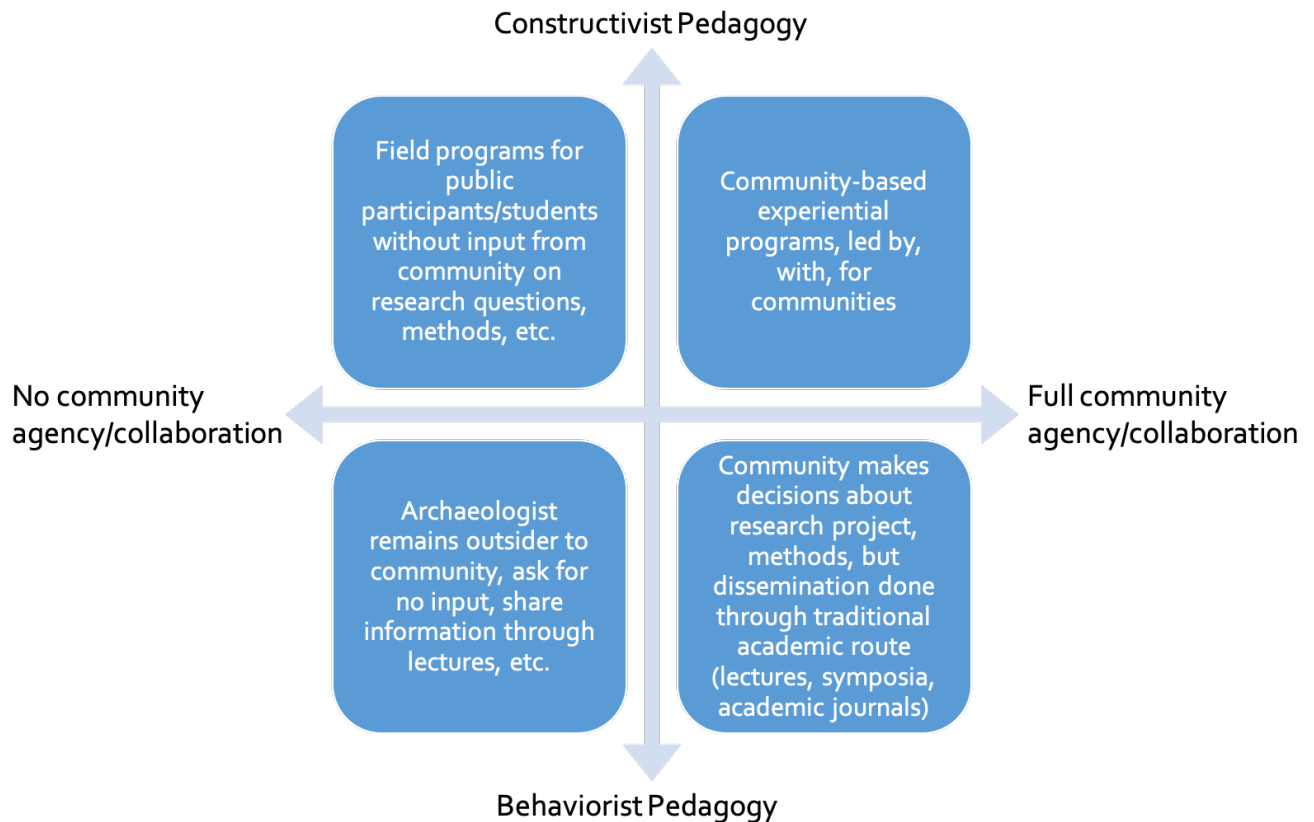
Additionally, Hopewell Culture NHP offers an annual introductory archaeology course for a program called Kids in College, which will be discussed at length in Chapter 5.

There are dozens of other examples of sites and institutions that provide these types of educational programs: Crow Canyon Archaeological Center, for example, offers summer camps and day programs that employ the archaeological educational procedures described above. Their programs combine classroom style lessons, site tours, hands-on activities (including mock digs and artifact categorization), and opportunities for reflection (Davis 2005). Heath (1997) writes that Crow Canyon's key to success can be boiled down to four points: the involvement of archaeologists in the education programs; experiential-based learning approaches; quality research goals and methods; and ethical archaeology and teaching. Further, Crow Canyon relies as heavily as possible on the local community – hiring community members, using community-made resources, and focusing on local history (Heath 1997).

### *The Collaboration-Education Continuum*

Just as there is a continuum for collaborative archaeology (as discussed by Colwell and Ferguson 2008), there is an overlapping continuum of pedagogical approaches. When these two spectra are combined into one matrix, we can begin to see how the questions of pedagogy and community agency interact with one another, and how they can inform public archaeology programs. This overlap is conceptualized in Figure 3.1 below.





*Figure 3.1. The collaboration/pedagogical continuum overlap and its implications for archaeological research and education*

The two axes of this collaborative-education model present the agency of the community in the design and duration of an archaeological project (essentially, the collaborative continuum Colwell and Ferguson describe) juxtaposed onto the pedagogical continuum between the two extreme camps: constructivist and behaviorist, discussed earlier in this chapter. Archaeological education programs fall on all levels of this spectrum – including all of the real-world examples discussed above. On one extreme, archaeological programs can offer absolutely no agency to the community in which a program is carried out. When these educational programs are offered through a behaviorist lens (imagining students as vessels into which knowledge can be poured), the archaeologist remains an outsider to the community at large yet continues to call all the shots, and students (or the public) are taught by passive knowledge acquisition – through lectures,

books, etc. This is truly the traditional method of archaeological education, and is essentially how post-secondary archaeology students are taught in many cases. On the opposite pedagogical extreme, archaeologists remain outsiders to the community and sole decision-makers, but students are taught in an experiential manner. An example of such a program could be a traditional field school, often directed at college students who are not members of the community in which the research is being carried out.

On the opposite end of the spectrum, archaeologists share their power and listen to community voices regarding decisions about research questions, design, and dissemination of results. For community-based programs that provide education in a behaviorist paradigm, students are taught once again in a passive manner, but this time community members are driving the dissemination. One example of this sort of program would be a community-organized lecture circuit or symposium, like that carried out by Lisa Overholtzer in Mexico (2015). In a constructivist, community-based approach, the community is involved from start to finish in research design and methods, and students are taught in a hands-on manner, for instance through a field school set in *their* community.

There are endless in-between examples for educational programs along this spectrum; some may combine behaviorist and constructivist pedagogical approaches, while others may give some autonomy to the community, but not total control over project design. However, there is a clear absence of the last type of program described – the constructivist, community-based education program. There is certainly room for these programs in the field of archaeology, but we must look once again to some principles of community-based research to understand where these programs fit in.

Service learning, a concept that has been around for over a century, has potential to combine student volunteering, experiential learning, and hands-on archaeological practice (Baugher 2009; Eyler and Giles 1999; Mooney and Edwards 2001; Nassaney 2009). Service learning programs place emphasis on the context of learning and create a learning environment in which students can both learn content (in this case, archaeological methods) *and* practical, real-world skills gained from active engagement with communities and working on real-life problem solving (Nassaney 2009). Placed within an archaeological setting, as a field school, for example, this educational paradigm gives students a chance to fully participate in the field of archaeology and learn through *doing*. When combined with the CBPR goals of community engagement and activism, these types of programs get students more involved with their communities, and provide a better sense of community needs politically, socially, and ethically. In doing community-minded, service-based learning, students can gain critical thinking skills, civic literacy, and a sense of responsibility to their communities (Mooney and Edwards 2001; Pyburn 2000). These types of archaeological programs are suited both to students outside of the archaeological discipline (i.e. younger, pre-college students) and for post-secondary students being trained in archaeology – but their adaptation means potentially changing how archaeologists are trained (Baugher 2009; Nassaney 2009).

One recent example of research on this link between civic engagement and community archaeological experience is that of Jay VanderVeen at Indiana University-South Bend. Through a survey of 93 students and alumni from the Indiana University system, VanderVeen found that those who participated in a local field program were more likely to report a higher aptitude for engaging in civic action and were also more likely to identify as “politically aware”

(VanderVeen 2018). This demonstrates the tangible power of community-based archaeology combined with archaeological education.

The service learning concept is also a perfect opportunity to incorporate Indigenous archaeology with archaeology education. Indigenous archaeology, defined in the previous chapter as a collaborative, power-shifting archaeology done by, with, and for Indigenous peoples, has been considered through a primarily theoretical lens, not an educational one. There is no need to separate the two, however, and many scholars have called for an integrative Indigenous archaeology education (Silliman 2008). Educational archaeology programs, especially field schools, need to include Indigenous students, and these programs need to incorporate the methods called forth by proponents of Indigenous archaeology. These field schools may be the manner through which we can change archaeology and better prepare students for future careers in or collaborations with archaeology (Lightfoot 2008).

It is critical that these programs – field schools, summer camps, day programs, and so on – begin to involve Native American tribal members, not with the goal of teaching them how to “properly” do archaeology, but with the hopes of creating a dialectical experience in which thoughts and ideas can be passed back and forth. In the landmark educational text, *Pedagogy of the Oppressed*, Paolo Freire remarked that an educational framework tailored to historically oppressed peoples needs to be created *with* the oppressed, not *for* them in a manner that simply instills the pre-established power dynamics (Freire 1970). When applied to archaeology, this concept becomes the exact brand of transformed archaeology described throughout this thesis. This is not to say that directing educational archaeology programs toward tribal students will not be a challenge; George Nicholas has provided the perfect example of how teaching archaeology to First Nations students presents a pedagogical challenge for non-native American

archaeologists. In his field schools and in his tenure as a professor in Kamloops, British Columbia, Nicholas realized early on that he could not teach these students *his* archaeology, but instead had to incorporate their knowledge systems, their cultural norms, and their beliefs into his teaching method (Nicholas 2008, 2010, 2014).

One of the best methods for introducing native students to the field of archaeology is a tried and true archaeological field school. These programs offer opportunities for both Indigenous and non-Indigenous students to get involved in the field and to learn from each other about far more than archaeology (Lightfoot 2008; Silliman and Dring 2008). When done correctly, field schools give tribal students the opportunity to learn the process in a comfortable manner (though the notion of a “comfortable” archaeology can vary by tribe), and instills in both Indigenous and non-native students the ethics of archaeology (Kerber 2008; Mills et al. 2008). In some cases, field schools have taken on complex political issues, as Jack Rossen’s New York field school did (Rossen 2008). There, anti-native rights activists challenged Rossen’s goals of helping Cayuga students embrace their heritage. In this way, archaeologists and students can be embroiled in political controversy and linked to activism, something that can be of educational benefit to field school participants as well. In Rossen’s case, the students (Native and non-native) grasped the importance of the political tension in the area and become more involved in the activist side of Native American affairs after their time in the field (Rossen 2008).

It is clear then that community-based field schools can play an important role in archaeological education *and* in constructing a transformed collaborative archaeology. How should we conduct these field schools? What educational elements are most effective, and what activities are ineffective? The following chapter presents a study devoted to answering these and other questions based on experiences of real-life field school participants and organizers.

## CHAPTER 4: A SURVEY OF HIGH SCHOOL FIELD SCHOOLS AND THEIR OUTCOMES

### *Introduction*

High school field schools take place all over the country in many varied forms, but at their core, their goals are the same: educate secondary students on the methods and uses of archaeology and create a generation of well-informed archaeology advocates. They provide younger students a chance to get their hands dirty (quite literally) in a field they may not otherwise be exposed to before starting at the university level. Specifically, I had three main questions about the place of these programs in the field of archaeology. They are: 1) How do pre-college archaeology education experiences affect students' *understanding* of archaeology and preservation? 2) How do pre-college archaeology education experiences affect students' *social concern* for archaeology and preservation? And, 3) How do pre-college archaeology experiences affect the field of archaeology as a whole?

As one should expect, I came into this project with some preconceptions about these types of experiences. Due in large part to the fact that I was a participant in one of these pre-college experiences, I believed from the beginning that these programs are essential for shaping young individuals' opinions of archaeology, and that these programs can be highly influential in the field of archaeology as a whole. I also held the belief – which has only been underscored by this research – that archaeology can help shape a more informed and active citizenry (these beliefs were also strongly influenced by literature reviewed in previous chapters). With this perspective in mind, I wanted to determine how these programs are perceived by others who

engage in them through an online survey of former field school (and other secondary archaeological education programs) participants and coordinators. As an added bonus, with future projects in mind, I hoped to assess some of the best (and worst) practices for these types of programs.

### *Methods*

The scope of questions I wanted to address with this survey cover both qualitative and quantitative data, making a simple multi-question type survey the best option. The surveys were created using Qualtrics – one for program participants and one for program coordinators (including directors, organizers, interns, and assistants) – and contain multiple choice, multiple selection, and write-in responses. Each survey contained questions pertaining to the program's setup and methods as well as participants' experience during and after the program. Specifically, the questionnaires focused on how the programs affected the participants' opinion of archaeology both before and after attendance, and how effective the programs were at communicating archaeological theories and methods.

Several prominent educational organizations were targeted in distributing the surveys. The Center for American Archeology in Kampsville, Illinois; the Fairfield Foundation in Gloucester, Virginia; and Crow Canyon in Cortez, Colorado were approached for help in passing around the surveys. When I conceptualized this project, I had hoped that by contacting each of these organizations, they might give me access to complete lists of their former participants or send the link to the survey to those lists of participants to avoid privacy issues. There was some resistance to this idea – perhaps it was a privacy interest, or perhaps those records were not available to the current coordinators of these programs, with the exception of Crow Canyon. In

the end, I relied mainly on social media (Facebook and Twitter, specifically) and email as the dispersal tool. This allowed for program organizers to pass along the survey without compromising anyone's privacy, but did unfortunately lead to some likely biases in the results. Because many of these surveys were broadcast in places that require at least a minimal sustained interest in the program or the organization (i.e. "liking" the organization on Facebook or "following" them on Twitter), it is wise to assume that my sample was at least somewhat biased toward individuals who hold some interest in archaeology still. Crow Canyon, however, was able to disseminate the surveys to a mass listserv of former participants, and therefore counterbalanced this bias to some degree. This is not to say that the results are invalid; the surveys still approach questions of methodology and strengths/weaknesses in these types of programs, which is valuable information for the proper continuation of effective educational programs. In the future, I would like to redistribute the surveys to collect more responses, and try again to get lists of former participants to create a less biased sample.

The following provides the list of survey questions and their relevance to the research questions mentioned above. First, I discuss the participant surveys, followed by the coordinator surveys.

### *Question Set 1: Demographics*

The first set of questions on the surveys were meant to establish some defining variables of the respondents. Each participant was "defined" by four variables: 1) the archaeological program they participated in; 2) the students' age during participation; 3) their interest in archaeology before participation; and 4) whether the students were members of the community



in which the program took place. Each of these variables gave me the chance to consider demographic impacts on the effects of the programs after the fact.

*Question Set 2: Effect of Pre-College Programs on Students' Understanding of Archaeology*

The second group of questions pertained specifically to how well these programs helped students *understand* the mechanics and methods of archaeology. These questions spoke directly to the educational effectiveness of each program, and also sought to determine the best practices for such programs based on student preferences. The questions were as follows:

1. *On a scale from 1-10 (1 being not at all informative, 10 being extremely informative), how informative was this program on the field of archaeology and its importance?*

This question provided the respondents with their first opportunity to evaluate their experience in their respective programs in terms of the overall ability of these programs to educate and inform students on the methods of archaeology, and the importance of conservation and preservation of the past.

2. *Which types of activities were most memorable/educationally effective for you?*

This question asked participants to select all of the activities they considered most memorable or educationally effective. I wanted to hear from participants themselves what tools and activities felt most useful in order to judge what the best practices are for these types of programs. Respondents chose as many options as were appropriate from a list that included “hands-on excavation,” “experimental activities (pottery making, flint-

knapping, spear-throwing, etc.),” “classroom lectures,” “field trips,” “readings/discussions,” and “other (specify).”

3. *Which types of activities were least memorable/educationally effective for you?*

As the foil to the previous question, this asked participants to select all of the activities that were *least* memorable or educationally effective. In contrast to the previous question, the purpose of this question was to assess what activities and learning tools did *not* work for these types of programs in order to avoid using them (or at least limit them) in future programs. Respondents were given the exact same options as before.

4. *Briefly describe your experience in the program. Highlight your workload, daily routines, and the activities that were most interesting or unique.*

Here, respondents had the opportunity to write freely about their experiences. The goal was to get an idea of participants’ overall experience in the programs; what were their daily routines like? What activities were most common? What did they *not* do?

*Question Set 3: Effect of Pre-College Programs on Students’ Social Concern for Archaeology*

The next group of questions were meant to address how participation in these educational programs affected the students’ *social concern* for archaeology, preservation, and the past in general. How did it make them feel about the concept of heritage? Were they more or less likely to become advocates for conservation? The questions were as follows:

1. *Did your participation in this program affect your opinion of the usefulness of archaeology and conservation in any way (either positively or negatively)?*

This question attempts to assess these types of programs' success in creating an educated citizenry and a public that is involved in preservation efforts and solid archaeological practices. Respondents were given three answer choices: "yes, positively," yes, negatively," and "no, not at all." There was also a text comment option for those wanting to further explain their answer.

2. *Please describe how your participation in this program impacted you in terms of your opinion on the necessity of archaeology and conservation.*

This question is again an open-ended reiteration of the previous multiple-choice question. The idea here was to understand if or how these programs affected participants' opinion of archaeology and the importance of conservation, particularly whether they become more or less devoted to preservation and protection of the past.

3. *How would you rate your interest in archaeology after participating in the program?*

As a follow-up to an earlier demographic question, this question asks the respondents how their interest in archaeology changed after the program's end. They were given the answer choices "very interested," "somewhat interested," "not at all interested", just as they were in the initial demographic question.

4. *Did this program spark any interest in the archaeology/history of your own community? Why or why not?*

This question seeks to flesh out the relationship between pre-college educational programs and community-based archaeology. The answer choices were a simple “yes” or “no,” with space for text comments.

#### *Question Set 4: Effect of Pre-College Programs on the Field of Archaeology*

The next set of questions attempted to tackle the question of how these types of programs impact the professional growth and public support of the field of archaeology as a whole. My initial hypothesis was that these programs frequently turned out new archaeologists, just as my program had done with me. The questions, therefore, were as follows:

1. *Do you currently hold a job in the field of archaeology? (Feel free to specify what type of job if ‘yes.’)*

The goal of this question was to determine how many pre-college archaeological program participants ended up following through with a career in archaeology. This was a simple “yes” or “no” question, with the added option of “working towards a degree in archaeology/anthropology” to account for the current students taking the surveys.

2. *Did your participation in this program affect your career choice in any way (either positively or negatively)?*

As a follow-up to the previous question, this question asks specifically if the respondents’ participation in the program had any impact – either negative or positive – on their current career. The hope here was to determine whether these types of programs actually turn out a significant number of professional archaeologists. Respondents were given five

answer choices: “yes; extremely positive,” “yes; moderately positive,” “yes; extremely negative,” “yes; moderately negative,” or “no, not at all.” They were also given the option to explain their answers in text comments.

3. *Did your participation in this program make you any more or less confident in your STEM (Science, technology, engineering, mathematics) skills? Feel free to explain your answer.*

While not directly related to the overarching theme of pre-college archaeological programs’ impact on participants’ views of archaeology and their career choices, I included this question in order to see how archaeological education is making an impact on students’ STEM skills. If archaeology is to be integrated into science education, then it is important to see how it ranks on its own in terms of strengthening and teaching these STEM skills. This question provided three answer choices: “yes; more confident,” “yes; less confident,” and “no; it had no impact on my STEM skills.” Respondents also had the option to explain their answer in a text comment.

4. *Please describe how your participation in this program impacted you in terms of your educational interests and career aspirations.*

Here respondents were able to write openly about how the program impacted their career choices. Like the earlier multiple-choice question, this was an opportunity to see how – if at all – these programs directed participants’ career choices, specifically whether they were inspired to follow an archaeological career path or if they were deterred from it.

5. *How would you rate your interest in archaeology after participating in the program?*

While this question was not repeated twice on the survey, it did fill two purposes:

assessing how these programs impacted the students' view of archaeology for the sake of understanding how participation changes the minds of students, and also for the sake of determining whether the field as a whole becomes more visible/better understood through these types of programs.

*Question Set 5: Final Thoughts/Advice from Participants*

The last few questions were open-ended opportunities for survey-takers to have their final say. I wanted to make sure there was enough space for participants to voice their opinions firmly and freely, so as to not make assumptions about the effectiveness of these programs without verbatim assurances. The questions were as follows:

1. *Would you advise K12 students to participate in a similar program? Feel free to explain your answer.*
2. *Do you have any other remarks on K12 programs in archaeology or their importance (or hindrance) to the field?*

*Coordinator Survey*

The coordinator survey produced very few results, and therefore the following discussion focuses mostly on the participant survey. The questions asked in the coordinator survey, however, were quite similar to the participant survey questions with a few exceptions, which can be found below. This survey was directed toward individuals who held some position of organizational power – directors, coordinators, post-secondary interns, and so on. This survey

had much the same objectives as the participant survey, with the additional question of understanding how perception of these programs' effectiveness differed from participant to coordinator.

### *Question Set 1: Demographics*

The coordinator survey had fewer demographic questions: coordinators were defined by 1) the program they coordinated or worked with; 2) their position in the program ("director", "education coordinator", "lead archaeologist," "intern," and "other (specify)"); and, by association with their program, 3) the age range of participants. Coordinators were also asked to assess the appropriateness of the age range for their program. As a further demographic question for participant diversity, coordinators were asked how effective their programs were at recruiting minority and/or low-income students.

### *Question Set 2: Effect of Pre-College Programs on Students' Understanding of Archaeology*

Just like the participant survey, the coordinator survey sought to address how effective these programs were at educating students on archaeological methods and principles. Coordinators were asked to describe a typical day during the program, as well as the daily schedule. Like the students, they were asked to rank most and least effective activities for the programs and given the same answer choices. Finally, coordinators were asked to assess how much students' understanding of the archaeological method changed through the duration of the program.

*Question Set 3: Effect of Pre-College Programs on Students' Social Concern for Archaeology*

Coordinators were asked, like participants, how their students' interest in archaeology changed during the program. Additionally, they were asked how interested students seemed in the day-to-day activities of the program. It was more challenging to address this particular research question from a coordinator point of view, as they would not have been able to read the minds of their students to fully know how much their appreciation for the field had changed.

*Question Set 4: Effect of Pre-College Programs on the Field of Archaeology*

This set of questions for the coordinators differed quite a bit from that for the participants. Instead of focusing on the participants' eventual career outcomes, coordinators were asked about the ability to conduct scientifically rigorous archaeological research through the guise of these programs. The motivation behind this question set was the persistent argument that community and educational archaeology programs detract from the scientific rigor of archaeological research. The specific questions were as follows:

1. *How much emphasis was placed on the specific research being carried out by the program? How much local archaeology did the students learn?*
2. *To what extent was it possible to achieve archaeological research goals over the duration of this program?*

*Question Set 5: Final Thoughts/Advice from Coordinators*



Finally, coordinators were asked to reflect on the strengths and weaknesses of their programs (through open-ended text responses), and asked for any final remarks on K12 archaeological education programs, their effectiveness, or their impact on the field as a whole.

## *Results*

Because these questions were largely qualitative in nature, there were no complex statistical analyses involved in acquiring the results. Each question was broken down into percentages of responses (when applicable), and the analysis here will rely only on those percentages. The participant survey, meant for those who were students in educational archaeological programs, yielded a total of 56 responses while the coordinator survey, meant for those with leadership responsibilities in educational archaeological programs, yielded only 9 responses. Because of the low turnout on the coordinator survey, the analysis in this discussion will focus mainly on the experiences of program participants. Each of the survey questions are listed below, grouped by the research question they address, with summaries of their responses. When applicable, overlapping participant and coordinator questions are placed together and their results reported simultaneously.

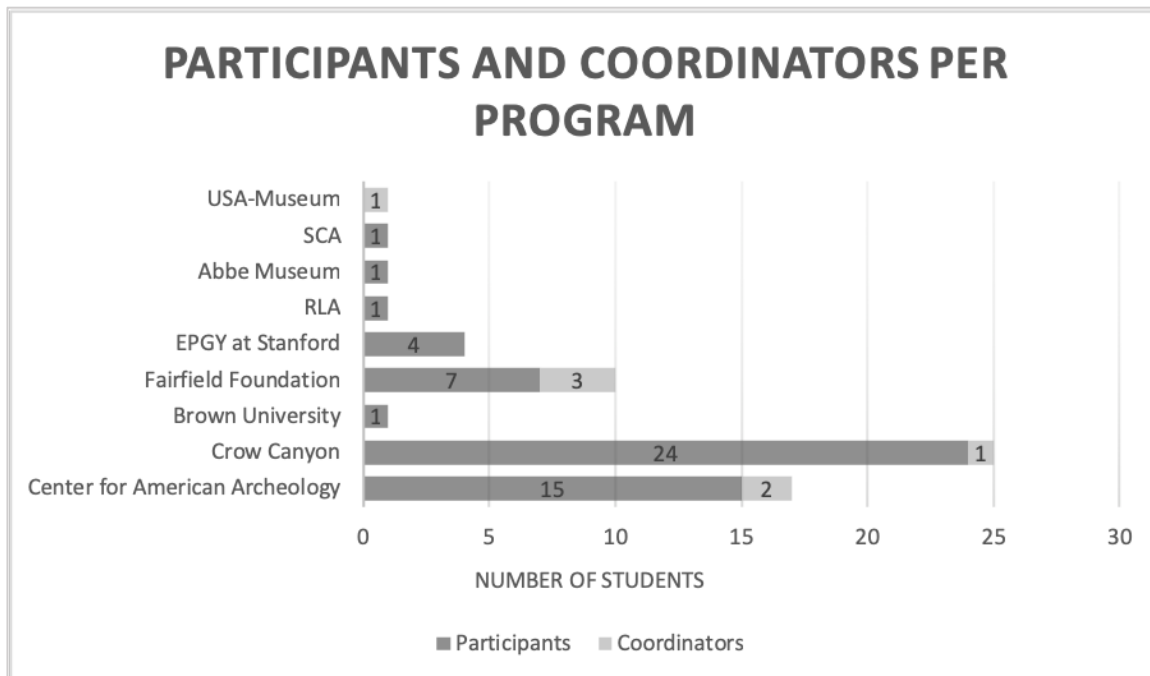
### **1. Demographics**

The respondents to these surveys were defined by four variables: 1) which archaeological program they participated in or coordinated; 2) the age at which they participated in the program; 3) the participants' prior interest in archaeology; and 4) whether they were a member of the community in which the program took place. Coordinators were also asked to provide

information on the participation of students from marginalized backgrounds to assess the diversity of these programs.

#### *Program of Participation/Coordination*

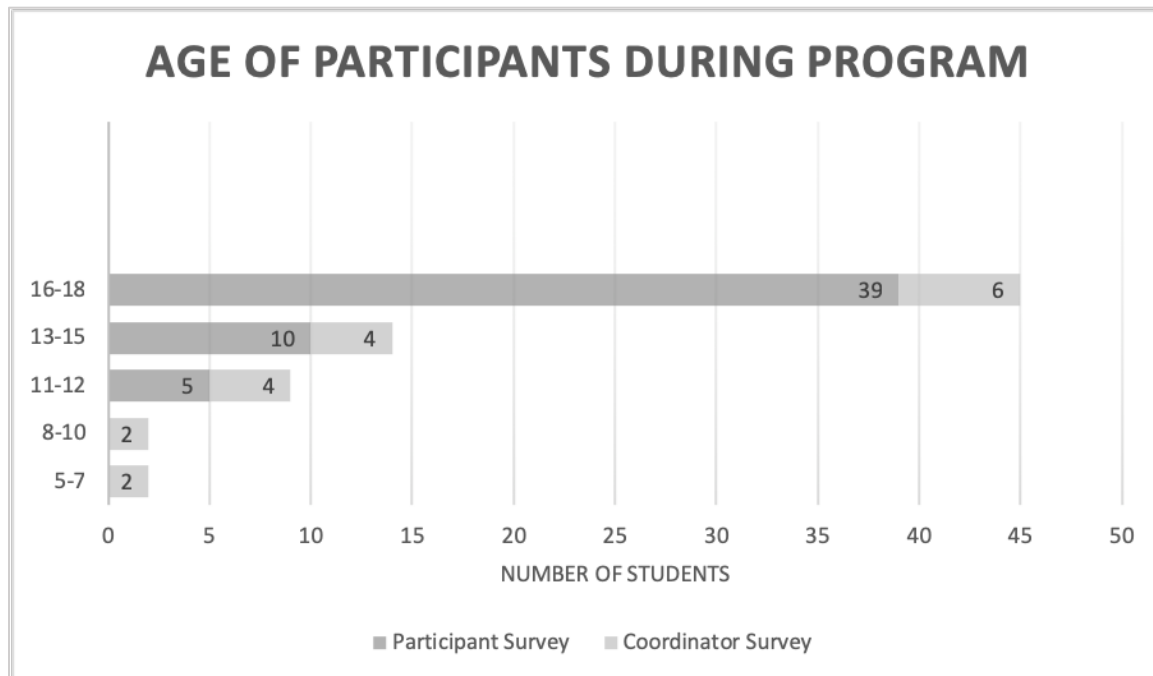
Survey respondents were participants in educational programs run by 8 different organizations: The Center for American Archeology (CAA); Crow Canyon Archaeological Center; Brown University's Pre-College Program; the Fairfield Foundation; Stanford's Education Program for Gifted Youth; the Research Laboratories of Archaeology at the University of North Carolina at Chapel Hill (RLA); the Abbe Museum; and the Student Conservation Association (SCA). The eight coordinator respondents organized programs with the CAA, Crow Canyon, the Fairfield Foundation, and the University of South Alabama (USA) Archaeology Museum. Not all of these programs were formal field schools; many were internship programs, classroom-based programs, and informal apprenticeships with archaeologists. A majority of respondents (44%) were participants of Crow Canyon field programs, with participants from the CAA coming in with the second highest percentage of respondents (28%). Interns at the Fairfield Foundation made up around 13% of respondents, while Stanford's Education Programs for Gifted Youth represents around 5% of survey participants, leaving Brown University's Pre-College Programs, the RLA, the Abbe Museum, and the SCA each representing around 2% of responses. The coordinator survey turned out slightly different results, with 43% coming from the Fairfield Foundation, 29% from the CAA, 14% (just one respondent) from Crow Canyon, and another 14% (one respondent) from the USA Archaeology Museum. See Figure 4.1 for the breakdown of participants and coordinators per program.



*Figure 4.1. Number of participants (left column) and coordinators (right column) per programs represented in the surveys*

### *Age*

Primarily, students participated in these programs from the ages of 16-18 (71% of respondents). Of this 71%, nearly 40% were 17 or older, likely making them seniors in high school. The coordinator surveys turned out a larger range of ages, varying from 5 to 18 years old. Still, the majority of the participants in the coordinators' programs fell into the 16-18-year-old range (33%). There were equal amounts of 11-12-year olds and 13-14-year olds (22% for each category), and for 5-7-year olds and 8-10-year olds (11% each). All coordinators remarked that their respective age ranges were appropriate for their type of program. See Figure 4.2 for the complete breakdown of age of participation.

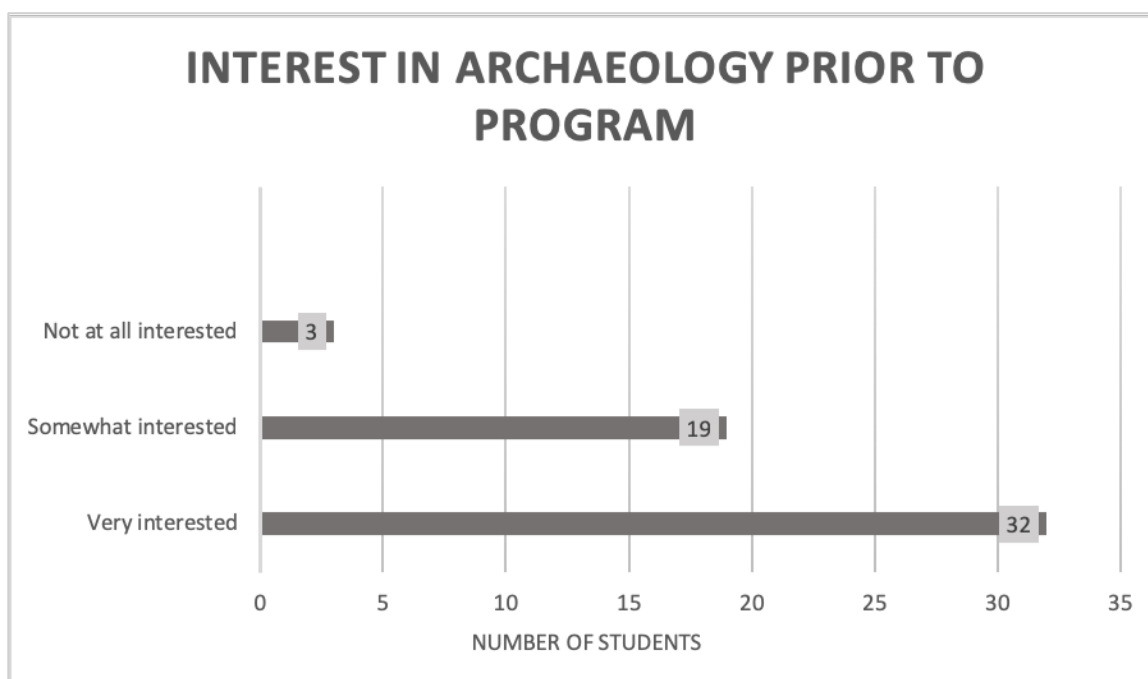


*Figure 4.2. Age of participants during program's duration*

### *Prior Interest*

The primary objective of this survey was to understand these programs' effect on the participants, particularly in terms of their interest in and concern for archaeology and the preservation of the past. To establish how these programs may have changed these impressions, participants were asked to rate their interest in archaeology *before* attending the program so as to set a baseline. The respondents were asked to choose from "very interested," "somewhat interested," and "not at all interested," and were given the option of adding a comment to justify or explain their answer. An overwhelming majority of respondents (94%) indicated that they had some level of interest in archaeology prior to their program; 59% reported being "very interested" and 35% "somewhat interested." Only 5% of participants claimed to have no prior interest at all. In their text responses, many participants indicated having a basic interest in archaeology spurred by media and documentaries and a desire to see what the field was really

like. Some indicated a prior interest in following a career in the field, and wanted to participate in the program to find out if it was really the right career for them. One participant who marked they were “not at all interested” before their program stated that they had no idea that archaeologists worked in North America – perhaps meaning they weren’t interested in the field because they didn’t know it happened in their own backyard. See Figure 4.3 for the complete breakdown of these responses.



*Figure 4.3. Interest in archaeology prior to program participation.*

#### *Participation of Students from Marginalized Backgrounds*

When asked about the participation of students from marginalized backgrounds, all coordinators reported having at least some success at participant diversity in their programs. Most (57%) said they were “somewhat successful” with at least 5% or more of participants coming from a minority or marginalized background. Several of these coordinators indicated that most of their diversity could be attributed to low-income individuals, which was encouraged by

providing fee waivers, scholarships, free lodging, and so on. Others reported having mostly women in the program. Fewer indicated having minority students; a Crow Canyon coordinator did explain that their center has funds specifically for minorities, especially Native American students, but because tuition prices are so high, very few turn out each session. Two respondents answered that their programs were “extremely successful” at including minority and marginalized students, with at least 50% of their students coming from these backgrounds. One respondent explained that during one week of their program, a majority of the students identified as LGBTQ+.

When asked about their recruitment efforts, many of the respondents said there was no specific plan for recruiting, and cited that as an area needing improvement. One respondent explained that keeping the program at no or low-cost is a major goal for the organization, but beyond that there is no outward effort to recruit diverse student populations.

### *Status of Community Membership*

The final demographic marker used to define participants asked how the students related to the community in which the programs took place. 87% reported that they were *not* a member of the organization’s community. Only 3% *were* members of the community, and 9% said the community in which they worked was similar or near to their own.

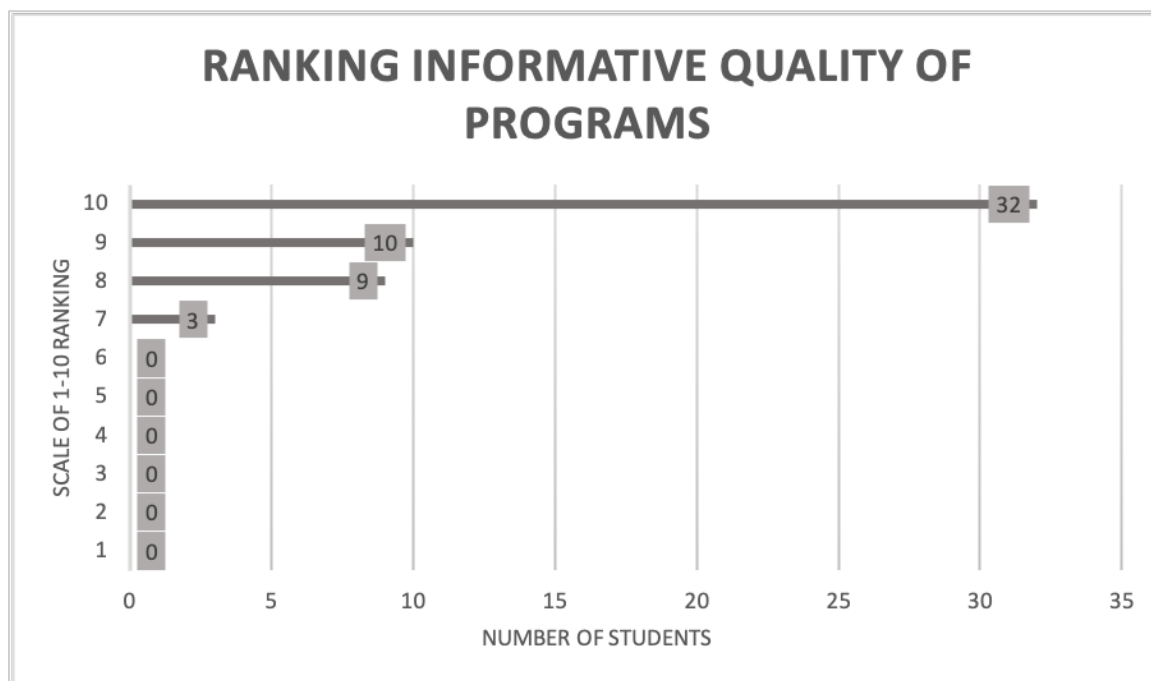
## **2. Effect of Pre-College Programs on Students’ Understanding of Archaeology**

As outlined above, the first research question focused on assessing the educational effectiveness of these programs. The following questions address how these programs impacted

students' understanding of the mechanics of archaeology – the methods, the underlying principles, and their place within the scientific method.

*On a scale from 1-10 (1 being not at all informative, 10 being extremely informative), how informative was this program on the field of archaeology and its importance?*

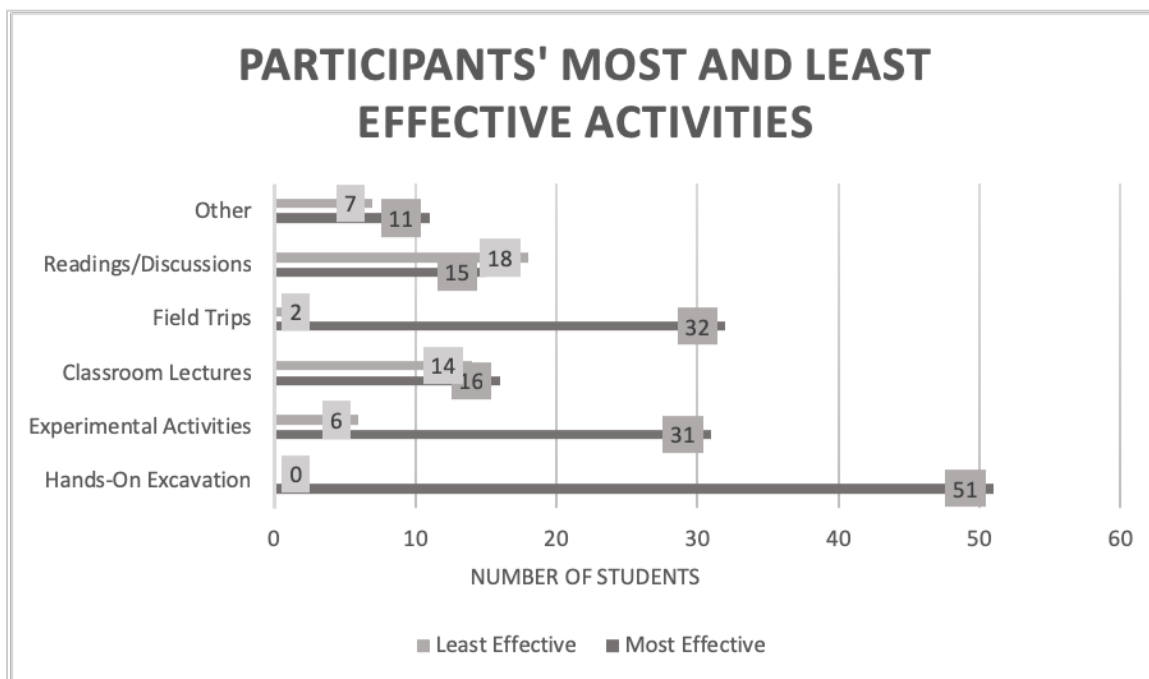
All participants rated their programs' effectiveness at educating the students on the field of archaeology and its importance at 7 or above, with 59% of those rating their programs a 10, 19% giving 9s, 17% an 8, and less than 6% rating their program at a 7. Age had seemingly no effect on how students rated the effectiveness of their programs. High school aged students (14-18 years old) on average gave their programs a 9.3 success rating; the number was exactly the same for primary school students. See Figure 4.4.



**Figure 4.4.** Participant's ranking of programs on effectiveness at conveying importance and methodology of archaeology.

*Which types of activities were most memorable/educationally effective for participants? Which were least memorable/educationally effective for you? / Which types of activities would coordinators do **more** of if given a chance to change their program?*

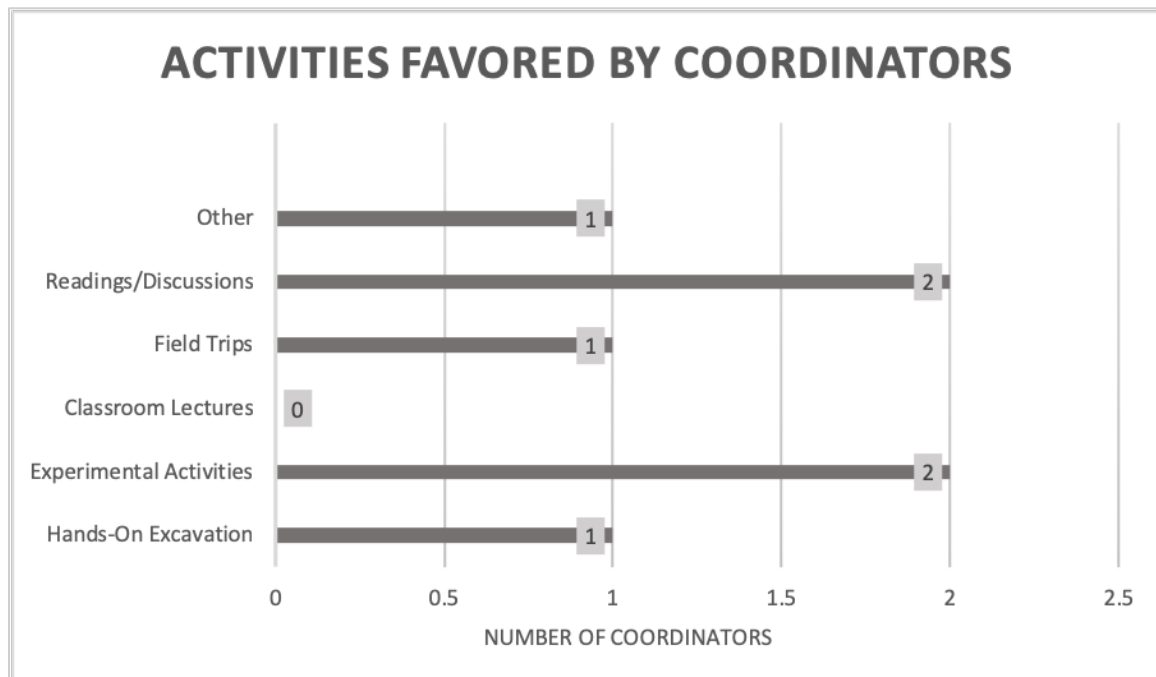
One goal of this survey was to identify best practices for these types of educational archaeological programs based on what participants *and* coordinators highlighted as effective



*Figure 4.5. Participants most and least favorite educational activities.*

learning methods. Respondents of both the participant surveys and the coordinator surveys were asked to identify the most educationally effective/memorable activities from a “select all that apply” list. For participants, hands-on excavation was the most popular tool, followed by field trips, experimental activities (such as pottery-making, flint-knapping, etc.), and classroom lectures. Readings and discussions were the least popular activity for participants, but when coordinators were asked which activities they would do more of if given the chance, readings and discussions were tied for first with experimental activities. See Figure 4.5 for participants’ responses and Figure 4.6 for coordinators’.





*Figure 4.6. Activities favored by coordinators.*

*Briefly describe your experience in the program. Highlight your workload, daily routines, and the activities that were most interesting or unique. / Please describe a typical day for the students during your program. Was the daily schedule and workload appropriate for the students?*

For the most part, participants and coordinators described day-to-day activities that involved hands-on excavation, some classroom and lecture time, some experimental activities (like pottery making, basket-weaving, and flint-knapping), and various levels of lab work. One program (highlighted by both the participant *and* coordinator surveys) focused on a “garbology” activity in which students would sort through (clean) modern garbage and make conclusions about who lived in the house based on their findings. While all respondents remarked that the days were challenging in their programs, and coordinators reported that some students handled

the workload better than others, none seemed to think the workload was overzealous or inappropriate.

*Please list the major strengths and weaknesses of your program (coordinators).*

Coordinators cited many strengths and weaknesses of their programs. In the strengths column, the ability to get hands-on experience was the most common response. Other strengths included networking, critical thinking and discussion, an increased awareness within the community, the ability of students to understand what an archaeologist is and what they do, and, finally, the chance for Native American collaboration. Weaknesses cited included “excessive variety” detracting from the learning experience; not enough “fascinating artifacts to show off”; missing out on some elements of the process of excavation; inability to accommodate everyone who wanted to participate; and a lack of staff meaning an inability to put on follow-up programs.

### **3. Effect of Pre-College Programs on Students’ Social Concern for Archaeology**

The second research question, introduced above, sought to address how students’ *social concern* for archaeology, preservation, and the past changed over the duration of the program. This question was geared toward less of the educational impact and more toward the personal impact. Are these students becoming advocates for preservation? Are they becoming more active in their own communities? The survey questions and results are as follows.

*Did your participation in this program affect your opinion of the usefulness of archaeology and conservation in any way (either positively or negatively)? Please describe how your participation in this program impacted you in terms of your opinion on the necessity of*

*archaeology and conservation. / How do you think students' understanding of and appreciation for the importance of archaeology changed after the program?*

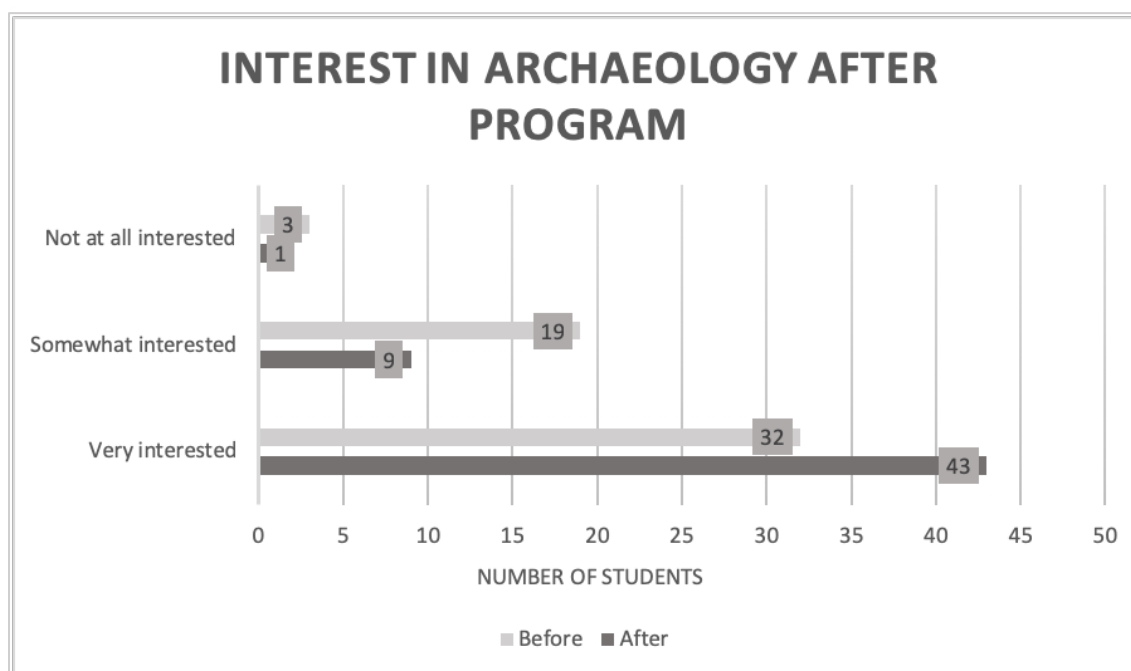
All but two participants surveyed (96%) reported that their opinion of the field of archaeology had been positively influenced by their program. In their text responses, many who reported this positive effect stated they are now advocates of preservation and have a better understanding of the importance of preserving heritage and culture. The only person to report the program having no effect whatsoever noted in their text response that they were “already an archaeology nerd going in,” so they had little room for improvement on their opinion of archaeology’s importance. The only individual who marked that the program had a *negative* impact on their opinion of archaeology had positive responses in all other categories, and did not elaborate on this particular response. In their descriptions of how the program impacted their opinions of archaeology and conservation, nearly all respondents conveyed having already felt that archaeology was at least somewhat important, but were more thoroughly convinced of its importance after the fact. Many reported learning the significance of preservation and protection for the good of modern society, and others were simply pleased to have learned what archaeologists really do and how it impacts our understanding of the past – and present.

When asked the same question, most coordinators (86%) felt that students’ understanding and appreciation for the importance of archaeology was positively influenced by their program.

When asked about students’ interest in the programs during participation, unanimously, coordinators responded that yes, students seemed actively interested in the program – but many qualified that it often depended on the day and the student’s mood, and that it was not always the entire bunch that stayed actively engaged.

*How would you rate your interest in archaeology after participating in the program?*

To compare to the original baseline, participants were later asked to rate their interest in archaeology after participating in their program. The percentage of those with any level of interest in archaeology (the combined percentage of those who marked “somewhat” or “very interested”) increased by about 4% – from 94% to around 98% – but the number of individuals who marked that they were “very interested” increased from 59% to 81%. In their text responses, some indicated that their prolonged interest in the field has led them to seek a career in archaeology while others stated they are interested in doing archaeology as a hobby, but not as a job. There was one individual who marked that they were “not at all interested” in archaeology after the fact; that could be the same person who said they were not interested in archaeology going into it, but their text response to that question says they “deal with it once its [sic] out of the ground,” perhaps suggesting they still have an interest in history, but not necessarily the process of archaeology. See Figure 4.7 for a comparison of the pre- and post-program outcomes for this question.



*Figure 4.7. Interest in archaeology after program participation.*

*Did this program spark any interest in the archaeology/history of your own community? Why or why not?*

When asked whether their participation in the program sparked any interest in the archaeology or history of *their own* community, responses were split nearly down the middle. 52% said they were more interested in their community's archaeology while 48% said they were *not* more interested. This number shifts completely when isolated to participants who were members of the communities in which the programs took place: of those 5 individuals, 3 reported being very interested in their community's archaeology after the fact, while the other 2 marked that they were "somewhat" interested. The percentages for those who were *not* members of the community matched more closely to the overall numbers: of those 47 individuals, 47% reported being more interested in their community after the fact, while 49% reported that they were not more interested (and 2 of these questions were left blank).

In general, those who reported gaining an interest in their own town's archaeology stated archaeology is important to communal identity, and that the work they did in their program led them to do research on the history in their own backyards. Those who were not any more interested in their own community's archaeology primarily suggested their communities were boring or less captivating, or that they were so set on getting *out* of their hometowns that the history there did not seem as interesting as that of far-off destinations (Greece and Rome were mentioned).

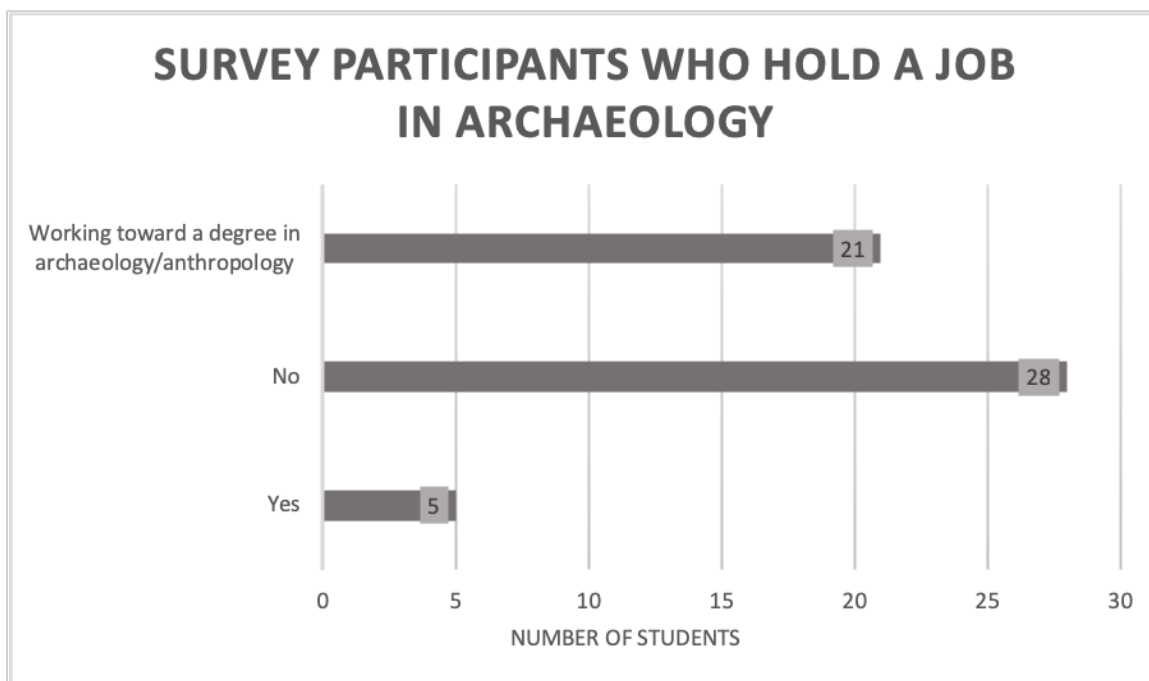
#### **4. Effect of Pre-College Programs on the Field of Archaeology**

The final research question these surveys addressed was the overall impact on the field of archaeology. By "impact," I mean not only the number of future archaeologists the programs

turn out, but also how the field is affected in terms of meeting research goals and conducting scientifically rigorous research through these types of programs. The questions pertaining to this element asked about the impact the programs had on students' career and educational choice, the logistics of the programs' research paradigms, as well the overall contribution to STEM learning these programs had for the participants. The questions and results are as follows.

*Do you currently hold a job in the field of archaeology?*

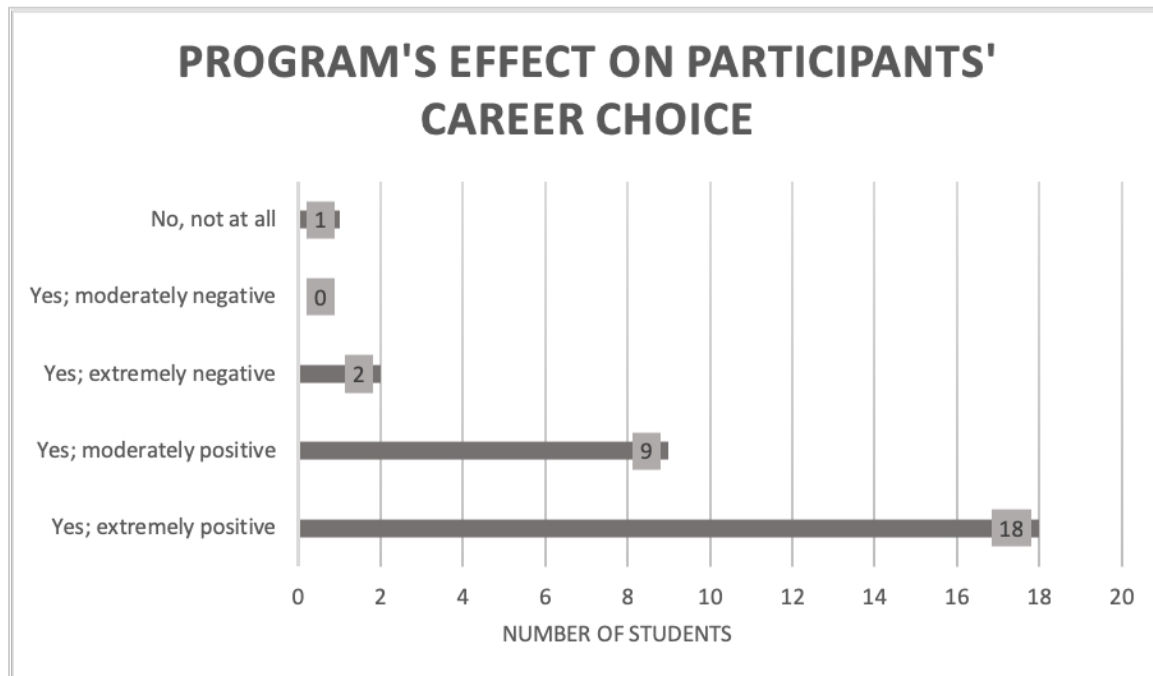
Somewhat surprisingly to me, a majority of respondents (52%) do not currently hold a job in the field of archaeology, 39% are working toward a degree in archaeology and/or anthropology, and 10% are currently in archaeological careers, ranging from graduate research assistants to assistant professors and curators. See Figure 4.7.



*Figure 4.8. Survey participants who currently hold a job in the field of archaeology.*

*Did your participation in this program affect your career choice in any way (either positively or negatively)? Please describe how your participation in this program impacted you in terms of your educational interests and career aspirations.*

Ninety percent of survey takers claimed their respective programs had a positive effect on their career choice, many of whom stated that their experience in the program fueled their interest in the field of archaeology even if they did not ultimately end up with a job in the field. The text responses to the open-ended version of this question shows a flood of individuals who started off with a cautious interest in the career field who were then inspired to study archaeology in school. Many of these respondents also said that these experiences helped them realize they enjoyed non-traditional work settings, physical work, or specific areas of archaeology, like osteology. Some took different educational paths, but were still inspired by their program – one person, for instance, followed a degree in geology rather than archaeology. Six percent of survey respondents, however, claimed the program had a very negative impact on their career choice, but none of these respondents gave an explanation on how or why the program negatively affected them. See Figure 4.9.



*Figure 4.9. Program's effect on participants' career choice.*

*Did your participation in this program make you any more or less confident in your STEM (Science, technology, engineering, mathematics) skills?*

Over half (52%) of former field school students reported that these programs had no effect on their STEM skills, and one individual marked that it actually made them *less* confident with those skills. Forty-eight percent reported becoming more confident in STEM skill after the program. One of the individuals who said the program had no effect on this skillset remarked that they were already very confident in those skills, so there was not much room for improvement. Those who felt they were helped in this area made comments that actually being able to use those skills felt great and allowed them to explore new career possibilities.

*How much emphasis was placed on the specific research being carried out by the program?*

*How much local archaeology did the students learn? / To what extent was it possible to achieve archaeological research goals over the duration of this program?*



Most (71%) coordinators reported a “great deal” of emphasis was placed on the specific research being carried out by the program, meaning the students were aware of the site’s history and specific context of the dig, but were also aware of the broader temporal and cultural context of the region. One respondent commented that this was “often driven home through other activities” like site tours, archival research, and lectures. Another respondent said that though their program often tried to give the students a broader perspective, it was sometimes “lost in translation” due to students’ lack of theoretical and contextual backgrounds, which cannot be expected of children. One individual reported that “some” emphasis was placed on the specific research, and another said that there was no emphasis at all on this aspect, but stated that the program was not designed to teach about a specific site.

When asked about the ability of the program to achieve specific archaeological research goals, all reported being at least somewhat capable, with 29% answering that it was “very possible” and 71% saying it was “somewhat possible.” One of the respondents who marked “very possible” remarked that interns not only helped accomplish major research goals, but were also able to turn the research into their own papers. In the “somewhat possible” category, one commenter responded said that their program had to switch excavation sites in the last week of the program, but students had “made great strides at the first site.” Another responded that catering to participants means “research is slowed and slightly compromised sometimes.” One of these program’s goals was the physical methods of archaeology, not a specific research goal.

## **5. Final Thoughts/Advice from Participants and Coordinators**

The final segment of the survey asked respondents to reflect on their participation in these programs. They were asked whether they would advise others to participate in a similar

program, and for general final remarks about the place of these programs in the field of archaeology.

*Would you advise K12 students to participate in a similar program?*

One way to read the success of an educational program is to assess whether former participants would recommend it to other students. Respondents in this survey overwhelmingly said they would advise future K12 students to participate in something similar; 94% were absolutely sure of that, and just over 5% were a maybe. In their comments, many respondents said that hands-on experiences are essential for learning at younger ages, and that programs like these are critical in career determinations. One respondent left a rather poetic and hopeful remark: “Explore beyond what your high school can offer you. A world is out there. Not everyone has to build a rocket or design a new computer to make a difference.” Another important factor many participants pointed out: these programs let kids know that Indiana Jones was *not* an archaeologist.

*Do you have any other remarks on K12 programs in archaeology or their importance (or hindrance) to the field? / Do you have any final remarks on the best practices for coordinating a K12 program in archaeology or their effect on the field?*

The respondents’ closing remarks covered a wide range of topics. Many reiterated their feelings on the importance of hands-on programs for the learning process, and that physically doing the job you think you might want is key in making career choices. Others emphasized that funding can often be a barrier to these types of programs. Several commented on the benefits these programs bring to the field. One person had a fairly grim outlook on archaeology as a whole, but found hope in the form of educational programs: “Archaeology seems to be going by

the wayside. People aren't as interested in it as they used to be. I think these programs get kids interested and some of them even go on to be archaeologists." Another touched on archaeology's broad applicability to many age groups and educational backgrounds: "You don't have to have a doctorate to be a good archaeologist, or learn something from a dig. If a chance for learning is there, don't waste it; teach. You might inspire the next generation of archaeologists."

### *Discussion*

The results of these surveys provide interesting insights into the effectiveness of these types of educational programs. Overall, the survey suggests that while pre-college archaeological programs do not necessarily create archaeologists, they *do* create an educated public with concern for preserving archaeological heritage. For those who enter the programs already interested in archaeology or even already considering archaeology as a career, these educational experiences help to solidify their aspirations or push them toward the discipline. Sometimes, these experiences are useful in helping participants realize that the field of archaeology is not for them – it's not as exciting as Indiana Jones, and it's far more physically taxing than many realize. Regardless of how many future archaeologists these programs spawn, the survey results here show that they are capable of introducing students to the field of archaeology and inspiring them to stay active in the field, even if from a non-professional standpoint.

This type of outcome is crucial to the field's success; with an interested and *educated* public, archaeological research will continue to thrive and cultural heritage protected. Generally speaking, these educational programs allow students to see first-hand the importance of preservation and conservation; because of this, many respondents wrote thoughtful comments on archaeology's impact on understanding modern cultures and learning from the past. These

students could go on to become our biggest supporters, fighting for preservation on local and national stages.

These responses also highlight what participants and coordinators view as the best practices for these types of programs. Overall, the programs operated on similar standards; almost all of them involved at least a minimal hands-on component, some with actual archaeological research and some with mock digs. Respondents overwhelmingly marked this activity as one of the most effective and most memorable, so clearly a successful archaeological education program should involve some excavation experience. Experimental activities, such as pottery-making and flint-knapping, were less common in these programs, but still largely popular among participants. Incorporating experimental activities is a way to connect students to the peoples of the past they are studying, and also gives them a method of learning outside of the standard read-and-regurgitate that is so prevalent in American education. Coordinators were reluctant to give up on the common readings-and-discussions model of educating, some wishing to expand on the theoretical aspects of their program's research. Participants were not in great favor of the readings and basic classroom discussions, however, and rated them as the least memorable and effective educational device. It seems almost impossible to completely do away with a literature-based learning model for these types of programs, but the message is clear: when running a pre-college educational program, archaeologists need to focus on getting the participants' hands dirty and letting them physically see and feel how societies of the past functioned.

A few drawbacks – or perhaps, to put it in a more positive light, openings for improvement – in these programs came to light with these surveys. First, participants were asked how these programs affected their confidence in STEM (science, technology, engineering,

mathematics) skills, and over 50% said their program had no impact on this area. One individual reported that their program in fact made them *less* confident in these skills. While the goal of an archaeological program is not necessarily to improve students' science and math skills, they are heavily utilized in archaeological work which means any future archaeologist should feel well equipped in that department. These responses suggest we need to spend more time explicitly addressing some of those processes – the scientific method that archaeology follows, the mathematics involved in laying out a unit or in understanding artifact distributions – in order to make the students feel more comfortable in performing those tasks. This could be especially important to programs being carried out in areas with low STEM exposure, like rural areas or low-income regions.

Another opportunity for expansion comes in the form of a concern for community heritage. As mentioned in the previous section, when asked whether they were members of the community in which their program occurred, nearly 87% of respondents reported that they were not. When asked if their program sparked any interest in the archaeology or history of their own community, the responses were nearly split down the middle. 51% said they were more interested in their community's archaeology while 48% said they were not. Though this ratio does not seem all that telling, the text responses to this question are. Many remarked on their community's lack of opportunity for archaeology; one individual said they were "not sure how to pursue archaeology in [their] own community." Others simply stated they found the history of their community "less captivating," that they were set on getting out of their hometown and were therefore unconcerned for the archaeology there, or that they were more interested in faraway places, like Greece or Rome.

This is a curious phenomenon, and one that I am not oblivious of as an archaeologist. Growing up in a small river town in southern Ohio, I didn't even know that there was any archaeology in my community to be aware of. But when I graduated from high school, I began working at Hopewell Culture National Historical Park, just fifty miles north of my hometown, where I learned about the magnificent mound building culture that covered the entire eastern half of North America with impressive mounds and earthen structures – including my hometown. I was shocked and embarrassed to realize that the incredible history of my town had been staring me in the face all those years – literally, as it is depicted in a mural on our floodwall – and I had never noticed. I, like so many of this survey's respondents, thought there was too little opportunity in my town. It seems likely that these individuals have had the same experience, but they have not yet had their moment of realization that their community does indeed have a rich and interesting archaeological history.

These programs have an opportunity to provide students with those “Aha!” moments. If archaeological programs were to target community members as participants, perhaps those students would be more involved beyond the program's end and better appreciate the history of their own homes. It is much easier to stay involved in a conservation effort if one becomes interested in what there is to preserve and protect in one's own community. Positioning these programs as community archaeology projects could serve to introduce sometimes painful histories to populations who live on top of another group's heritage. This issue is prevalent in the U.S. as many towns occupy landscapes rich with Indigenous heritage but lacking any Native inhabitants today. Citizens of these kinds of places in the U.S. often miss out on educational opportunities to learn about the pre-Columbian past and frequently do not understand that American Indians are real, living people, and not caricatures of history. I again speak from

experience here, coming from a place where children have never interacted with a Native person yet go to schools with mascots like the “Indians” and the “Mohawks” without having any idea what that means.

While acknowledging the potential bias in the sample, it is still safe to say that these data point to an overall success in these types of programs to garner interest in archaeology – after all, these organizations would have no social media followers to whom they could have disseminated these surveys had their programs not had any traction. All in all, this survey tells us that pre-college educational programs *are* important to our field and to at least some of the individuals who participate in them. They give interested youth a chance to see firsthand what the field is like, to explore a career they may otherwise never hear about, and produce a public that is deeply interested in the preservation of the past. With proper planning, they could also encourage greater interest in community archaeology and a better understanding of cross-cultural community heritage. It is essential, then, that professional archaeologists put time into designing and carrying out these projects to ensure the security of our future as a discipline and to promote an educated citizenry that is eager to work with archaeologists in attempts to learn from and protect the past.

The following chapter is devoted to a case study of a different brand of archaeological education programs – one that begins to move toward the idea of community-based education. Although the program in question has not been entirely planned and coordinated by the community, it was carried out in the participants’ home turf and focused specifically on the archaeology and history of that particular region. It is, in my opinion, a step in the right direction for more community-minded archaeological education programs.

## **CHAPTER 5: CASE STUDY: KIDS IN COLLEGE, HOPEWELL CULTURE NATIONAL HISTORICAL PARK**

The previous chapters have touched on the theoretical and real-life value of community-based archaeological education programs. While it seems clear that students benefit tremendously from learning about their community's history, there are relatively few examples of community-specific educational programs in the field of archaeology. One such example has already been discussed – that of the South Bend, Indiana college-level field school through Indiana University-South Bend (VanderVeen 2018). In June of 2018, I had the fortunate opportunity to direct a program that ran on the cusp of this notion of community-based education at Hopewell Culture National Historical Park in Chillicothe, Ohio.

Organized by Ohio University-Chillicothe in partnership with the Ross-Pike County Educational Service District and Chillicothe City Schools, the annual Kids in College program offers week-long summer courses covering topics like science, history, and theater to students grades K-8. The park's course, Archaeology for Kids, is offered to students in grades 3-6 and seeks to teach the fundamentals of archaeology, from digging to lab work to interpreting sites. While it is not explicitly focused on the principles of community-based research (especially those concerning forming a *partnership* with the community), this educational program at Hopewell Culture NHP does provide an in-depth look at what lies in most of the students' backyards, and opens their eyes to the archaeology of their own landscapes.

In the past, the program was successfully coordinated by the park's Education Technician, Susan Knisley, and utilized the park's well-crafted curriculum to teach students the



fundamentals of archaeology and the basics of the Hopewell culture. This year, I was able to completely rework the program from scratch to put an archaeologist's perspective on the program. My goal was to walk kids through the entire archaeological process - from understanding why we do archaeology to physically excavating a site and finally analyzing and interpreting the things we find. I divided the five days into archaeological themes: 1) Introduction to Archaeology; 2) Finding and Excavating a Site; 3) Analyzing Finds; 4) Researching and Interpreting a Site; and 5) Relaying our Finds to the Public. In the following sections, I describe these themes and the activities that accompanied them, along with the actual results of these activities with the students.

### *Day 1: Introduction to Archaeology*

On the first day of the program, I started the kids out with an introduction both to archaeology in general and to our park's history. We started with a brief overview of what the class would be about and our tasks for the day, and then kicked off with a screening of our 20-minute-long park orientation film entitled "Mysteries of the Ancient Architects." Although the language in this film is probably a tad over the heads of this age group, it still gets them familiar with the overall concept of the Hopewell Culture – that they built complex geometric earthworks and used raw materials from faraway places to create masterful pieces of art and material culture. After the film, we took a short tour of the mounds – made even shorter by the fact that it was a miserably rainy day. However, most of the kids in my class had visited the park before, so it was more of a refresher than an orienting tour. After that, we started our final activity of the day: Peanut Butter and Jelly Archaeology. In this activity, students are given a plate full of food items (bread, peanut butter, jelly, M&Ms, chocolate sprinkles, raisins, and gummy worms) and led

through a story about the creation of their edible archaeology site. The first layer of bread represents a floodplain, followed by a flood deposit layer (peanut butter or chocolate frosting in the case of nut allergies). Then, the students build a fire pit of raisins and chocolate sprinkles, left by “Archaic people.” Another slice of bread is added to symbolize a layer of rock and dirt that develops after the Archaic people abandon their site. Then, students cut “posthole” patterns into their bread to illustrate a Hopewell structure, followed by a pit of broken “pottery” (crushed up M&Ms). After that, another flood layer is represented by a layer of jelly. Finally, the final piece of bread is laid on top, representing sediments accumulated over time. Once their site is built, students use a large plastic straw to “survey” their site. They then analyze the layers they see inside their core sample and excavate (using a butter knife) a unit around the core, going layer by layer and taking note of what pieces of food-artifacts they find.

There is always some danger in having kids do any kind of activity with food – once they see the amount of sugary goodness on their plates, their minds tend to shut off. That wasn’t entirely the case with my class, although there were lots of questions about when they could eat their site throughout the activity. For the most part, students paid close attention to which layers to put down, and many of them were very meticulous about how they arranged their fire pits and posthole patterns. When it came time to core and excavate the sites, things got a little tricky. We didn’t have enough large plastic straws for every student to use one at the same time, so many of the students were more concerned about when they could use a straw than why they were actually using them. By the time they were “excavating” their sandwiches, most of the kids were too excited about actually getting to eat them to really pay attention to how each layer was coming off. Overall though, it gave the kids a chance to think about how sites are constructed

over time, and how the archaeological process actually works. Plus, it gave them a chance to eat a really gross peanut butter and jelly sandwich.

### *Day 2: Finding and Excavating a Site*

The second day was devoted to getting kids' hands dirty with archaeology – literally. Our first task was to introduce kids to the idea of finding a site through geophysical technology. The lead education technician at our park, Susan Knisley, had the brilliant idea to represent magnetometry (a technology that detects changes in magnetic signatures in the earth's surface) using stud finders and nails. So, in preparation for this program, park volunteers and I got to work creating a workshop site inside our wooden dig boxes. Basing our site off of a real site, Datum H at Hopewell Mound Group, we scattered fragments of mica, obsidian, copper, and worked flint in a semi-circular shape to represent a workshop in which craftspeople would throw the remnants of their work over their shoulder. Then, we outlined the site in nails so that the students would be able to identify the cultural elements of their dig site using their stud finder-magnetometer. Or so we thought.

Before the kids went outside, I explained the process of magnetometry and excavation thoroughly. I emphasized the need to dig *slowly* and *carefully* so as to not disturb the artifacts in the soil. I explained the importance of context, saying that an artifact without context lost most of its useful information. When we got outside, I described the process they would be using to locate their site – showing them how to wave the stud finder over the dirt, and demonstrating the noise it would make when it found something, and telling them to place a pin flag in the exact spot the stud finder went off. I handed out excavation forms that I based on the park's real archaeology forms and explained the importance of note taking and site documentation. We

started with the stud finder activity, which worked fairly well, although some groups spent a little too much time making sure to cover every square inch of their unit. Once the flags were in place, I told the kids that the cultural materials would fall inside those flags, but they needed to excavate the entire unit, keeping the floor flat at all times. Then I let the kids loose in their dig boxes.

Once those kids had trowels in their hands, it was like I had become silent and invisible. Occasionally, someone would ask me a question that prompted a whole group explanation – like, for example, how to properly map an artifact using the scaled grid I had added to the back of their field form. After I explained to the entire group how to map an artifact – and that every single artifact they found in their unit needed to be mapped – every group proceeded to either pluck artifacts out of the dirt without mapping or ask me how to map them. Some groups really got the process; two pairs of kids, a group of cousins, were very intricate with their excavation and mapped every single artifact they saw. They rarely asked me for help after my initial explanations, and worked diligently and quietly the whole morning. Other groups, however, did not quite grasp the entire concept. One group of girls plowed through their dig box, digging one corner almost to the bottom of the box and uncovering very few artifacts because they were not within their pin flagged area. At one point, they asked one of my volunteers why they weren't finding any artifacts – after being told time after time to dig more slowly and more evenly – to which the volunteer exasperatedly replied, “Because you're not following directions.”

For the most part, though, the students seemed to grasp the basic idea: we dig in a measured off area, put the dirt into buckets, screen it and collect any artifacts that come out, and try our best to map the artifacts we find still in the soil. I was concerned on the day of our dig

that our plan to have them understand this pre-made archaeological site was not going to work. They had surprises in store for me later in the week, though.



*Figure 5.1. Day 2 of the Kids in College Program at Hopewell Culture NHP; students conducted their own excavation in previously prepared mock dig boxes. NPS Photo by Hannah Knisley.*

### *Day 3: Analyzing Finds*

On the third day of the program, we introduced lab work. We set the kids up in our archaeology lab (much to the chagrin of our park archaeologist) with an artifact washing station, a sorting station, and a cataloging station. I created cataloging cards based on our park's actual curatorial system and provided plastic baggies for students to store their artifacts. We set up one person from each group on the washing station and had the other partner(s) carrying cleaned artifacts to the drying racks. Once the groups were done cleaning their artifacts, we carried them into another room where we had prepared a sorting chart on butcher paper for them. We had them organize their artifacts by material (giving them categories for mica, obsidian, copper, flint,

historic materials, and other), and then took a count of each material type per unit. Then, the groups all got a chance to try their hand at filling out the cataloging card, taking down the unit number, the artifact name, material, and count. After the hectic nature of the day before, I was pleasantly surprised by the smoothness of lab day. Many of the kids told me after the fact that lab work was their favorite part.



*Figure 5.2. Day 3 of the Kids in College Program at Hopewell Culture NHP; students organized, counted, and cataloged their finds from the previous day's excavation. Photo by Hannah Knisley.*

#### *Day 4: Research and Interpretation*

The idea for the fourth day was to practice the process of researching and using comparative data (other similar sites, ethnography, etc.) to reach conclusions about the “site” we had excavated. Park volunteers and I developed some reading materials for the students to use in better understanding their own site. First, we made a mock site report for a real Hopewell site in which we pushed the idea of what a workshop area might look like archaeologically. Then, we

created an ethnographic account of a fictionalized group of people called the Tarzuzu who created similar workshop areas. These two short readings were accompanied by a worksheet which helped guide students to think about the similarities between the sites and cultures they read about and the site they had excavated.

As is probably no surprise to anyone who's ever been around children, they were less than thrilled when I announced the day would be mostly a reading day. I heard cries of dissatisfaction at having to read outside of school and complaints that this was a summer program and it was supposed to be fun. Nevertheless, we persisted, talking through the uses of comparative analyses in archaeology, and then each group took time to read through both the site report and the ethnographic report. We went over each reading as a group, walking through each step of their worksheets. It took some prodding to get them to understand the main idea - that both the site report and ethnographic report were about workshops, and that was what their site had been. Several of them –I may even say most of them – did eventually get it. But they definitely acted like it made no sense to them. I ended the day uneasy about how our last day would go, and feeling like I needed to drastically rework that day's activities if I repeat the program in the future.

#### *Day 5: Relaying Our Finds to the Public*

The final day was dedicated to a much-overlooked aspect of archaeology: disseminating the information learned to the public. The public, in this case, consisted of the parents of the participating students. We allowed the individual groups to make their own decisions on how they would present their information, but all of them chose to do posters, which they presented in professional conference form.



The kids *loved* this part of the program – far more than I anticipated. Perhaps it was the glitter glue that made it an exciting process, but it was very clear that these kids were eager to share what they had learned with their parents. As I paced between groups, I caught glimpses of their conversations with their parents. I overheard one group of girls excitedly telling their parents about the Datum H site and the Tarzuzu tribe and how their workshops created semi-circular features just like the one they found. It was truly heartwarming to see that they actually *did* get this stuff, no matter how loudly they complained about having to read.



*Figure 5.3. The final day of the Kids in College program; students created and presented posters on their excavation results.  
Photo by Cailey Mullins*



### *What did they learn?*

At the beginning of each day, I had students create and add on to their own definitions of archaeology. The first day, we had an impressive number of definitions revolving solely around “learning things about the past.” Unfortunately though, those were peppered with definitions like “digging for bones,” or “dinos.” On the second day, we had very few additions. One was quite specific – that we dig for obsidian, sparked by the fact that they had learned about the obsidian the Hopewell used. Another simply said “fun,” which was an answer I heavily approved of. We also got another dose of “digging for dinosaurs,” which I attempted to address the next day. By the third day, students knew that archaeology was also “hard work.” Their thoughts didn’t change much by day four, and since I didn’t see the topic of “digging for bones” coming up organically, I decided to take a moment that morning to explain the importance of NAGPRA and respect for human remains during archaeological excavation. I had hoped that would change their idea of archaeology being a hunt for bones, but on Friday, I had them write new definitions on a clean sheet of paper and alas, the second kid at the board wrote “digging for Indian remains.”

I was definitely not pleased with my progress there so I took a good ten or fifteen minutes to go back over this concept. Archaeology was not in the business of intentionally finding human remains, I told them, and when we do find them we are supposed to ask the ancestors of those people what we should do with them. So, I asked them no less than a total of five times, “Do archaeologists intentionally find human remains?” until the answer was a resounding “no.”

### *Concluding Thoughts*

Overall, the program went well. It would have been nice if they could have actually seen the shape of the artifact scatter on the ground, and maybe then they could have made those connections without having to do all that dreaded reading. If I get the chance to do it over, I definitely want to consider reworking the reading day, although I do feel that it is an important skill for students to learn. Perhaps I could devise an optional activity for those learners who are not reading oriented. For the most part though, students walked away understanding the basics of archaeology, and I do think their conception of the field changed – positively – over the course of the week.

Although this program does not necessarily embody principles of community-based participatory research, it does at least have a community element present among its educational framework. The children who participated in this program (with the exception of one student who was moving to Texas after the program) were all relatively local. At the very least, they were all from an area where the culture whose heritage the park protects had great influence thousands of years ago. Being exposed to the history of that familiar place was, no doubt, eye-opening for these children. They learned to respect cultures of the past, and in doing so, realized the need to respect different cultures for people in the present. We tackled complicated issues, like the ethics of researching or exhuming sacred human remains from cultures that are not our own, and at the same time they were put through rigorous mental training where they began to think critically and problem solve.

There are several takeaways from this program that could be relevant for future programs. First, the wide age range was a huge issue. It seemed clear that the students in the upper grade levels (particularly the 10-12 year olds) were far more inclined toward this type of

thinking than the younger ones. It may be more prudent to aim these sorts of programs at older students in the future. Second, there is certainly room for expansion on the presence of the community. While the students did get an understanding of the heritage that exists in their physical communities, there wasn't much of a chance for them to derive any sense of civic responsibility to their community. This might be solved with more of an emphasis on how the community as a whole interacts with and is responsible for the heritage the park protects. Finally, this program would be undoubtedly more impactful if the students participating came from a wider variety of backgrounds – specifically, if at least a portion of them were from the *descendant* community rather than just the local. Incorporating Native American students will take time, money, and a great deal of work to accomplish.

The overall message is clear, though: kids are very capable of learning archaeological methods, and benefit from doing so in ways far beyond simply recognizing archaeological research. These programs give students a chance to learn about the past and the present through critical thinking, can teach them to be more culturally aware, and can enthuse them about their own communities in ways other educational programs cannot.



*Figure 5.4. The Kids in College students, park rangers, and volunteers. Photo by Susan Knisley.*

## CHAPTER 6: CONCLUSIONS

The goal of this thesis was to find the methodological sweet spot for a community-based archaeological education paradigm through an in-depth look at the relationships of both community-based participatory research and education with archaeology, and through testimonials of former archaeological education program participants. In an effort to determine the best ways in which archaeology can help educate children and create real change in communities, I have discussed several important theories of archaeological methodology and on archaeological education.

First and foremost, I have distinguished between *outreach* and *engagement*. These two extremely similar terms are enacted in profoundly different ways: the difference is between *talking* and *listening*, or *witnessing* and *acting*. While both almost assuredly involve some kind of conversation, the former is focused on the act of disseminating knowledge while the latter shifts the focus to knowledge production. This contrast of terminology is exceedingly important when it comes to community participation in archaeology, but it should be noted that these two concepts exist on two ends of a continuum rather than in stark opposition to one another. Within the confines of this continuum falls the myriad of expressions of public or community archaeology: archaeological research that is carried out either with heightened visibility to or in partnership with the communities in which research takes place. Archaeology can become public through simply opening sites to visitors and presenting finds to the community after the research is over (*outreach*); it can become community-based when the archaeologist loosens some of

his/her power over the research process and works toward a true, equal partnership with the community (*engagement*).

I argue that all research projects need to be consciously positioned along the outreach/engagement spectrum. Without input from local and descendant communities– or at the very least, without sharing what we find out with them – archaeology loses something. It loses, first, its relevance. If we do research without ever sharing the results, why are we doing it in the first place? Secondly, it loses authenticity. If archaeological research is done without an ongoing dialogue with the peoples whose heritage we study, we no longer have a reason to study it, and we have less culturally authoritative knowledge with which we can back our claims. The need for this kind of input makes a community-based participatory research methodology essential for the future of archaeological work.

CBPR in archaeology meets many objectives. Because it is a research paradigm so centered around forming relationships with communities, both local and descendant, it makes archaeology on the whole a more giving discipline. Building relationships with individuals outside of the academy allows archaeology to be conducted in a way that can make a difference. It can create a more ethical practice, in which we attempt to step away from the colonialist roots of the discipline and relinquish some of the imperialist power built up over generations. It shifts the power dynamic, giving more control to Indigenous and local communities to tell *their* stories. But beyond this, a community-based approach can turn archaeological research into a tool for activism, where the privileges of the academy and of the researcher can be used to address political and social concerns as well as archaeological questions.

Archaeological education programs, particularly those focused on pre-college students, clearly have an impact on how students perceive the past, and how they understand the

importance of preserving the past. The surveys I conducted with former archaeological education program participants demonstrated that pre-college programs have several effects: 1) they increase students' interest in archaeology; 2) they increase students' awareness of the past and the need to preserve and protect it; and 3) they help influence students' career and educational choices. What these programs are missing, it seems, is a community-based framework.

If these educational programs are put into action through a community-based research paradigm, they will gain a tremendous amount of personal relevance to the students who participate in them. When students are exposed early on to the archaeology and heritage of their own homes, they may become more connected to that past, and therefore begin to show more enthusiasm for community activism. This combination of archaeological education and community reflection can lead to more civically minded youth, which in the long run could mean big changes for communities in need.

This combination will, I hope, prove especially fruitful in my research area. My hometown of Portsmouth, Ohio enjoys a particularly rich archaeological past, spanning at least 10,000 years or more. Beneath the relatively modern addition of the city streets lies a 2,000-year-old earthwork built by the original inhabitants of the land. Today, the city – and the entire rural area that surrounds it – is struggling to regain its former glory. For decades now, Portsmouth has struggled with an economic crisis as industry has moved away from the area and left a gaping hole in employment opportunity for the community. With that economic depression has come a sweeping substance abuse issue: the region has long been known nationally as an epicenter of addiction (see Arnade's 2017 article for the Guardian and Montagne's 2015 NPR broadcast on the "pill mill of America"). But Portsmouth, despite its problems, still has a thriving, passionate

community filled with individuals interested in Portsmouth's history and how that history might be better understood in a way that can lift the town out of its stupor.

By coming at this project from a community-based approach, I hope to establish an educational program for students of both the local community and the descendant community of those who built the amazing monuments in the Ohio River Valley 2,000 years ago, and mostly now live in Oklahoma. The local students will be easy enough to reach through their teachers and other community partners. In order to form a relationship with the descendant community, I intend to build on what has already been established at Hopewell Culture National Historical Park, and continue the good work done there between researchers and Indigenous peoples.

Through conversations with the local community, I have learned that there is great interest in establishing an educational presence in Portsmouth, and that teaching about the area's past is a high priority for these folks. Community members have told me that in order to get young people excited about Portsmouth's future, we have to get them excited about the past. I wholeheartedly agree, and hope that by working with the community to design and carry out an archaeological education program with the youth of Portsmouth and hopefully with Indigenous students we can begin to heal the community in many ways – socially, economically, perhaps even politically.

It is not clear whether archaeology itself can change a community. There is nothing inherently magical about studying the peoples who came before us – it will not guarantee a renewed economy, nor will it guarantee forward momentum for the communities we work with. But what it can do is provide hope. If communities become passionate about where they have come *from*, they may begin to harbor some passion for where they are *going*. Through community-based archaeological education programs, student participants and community

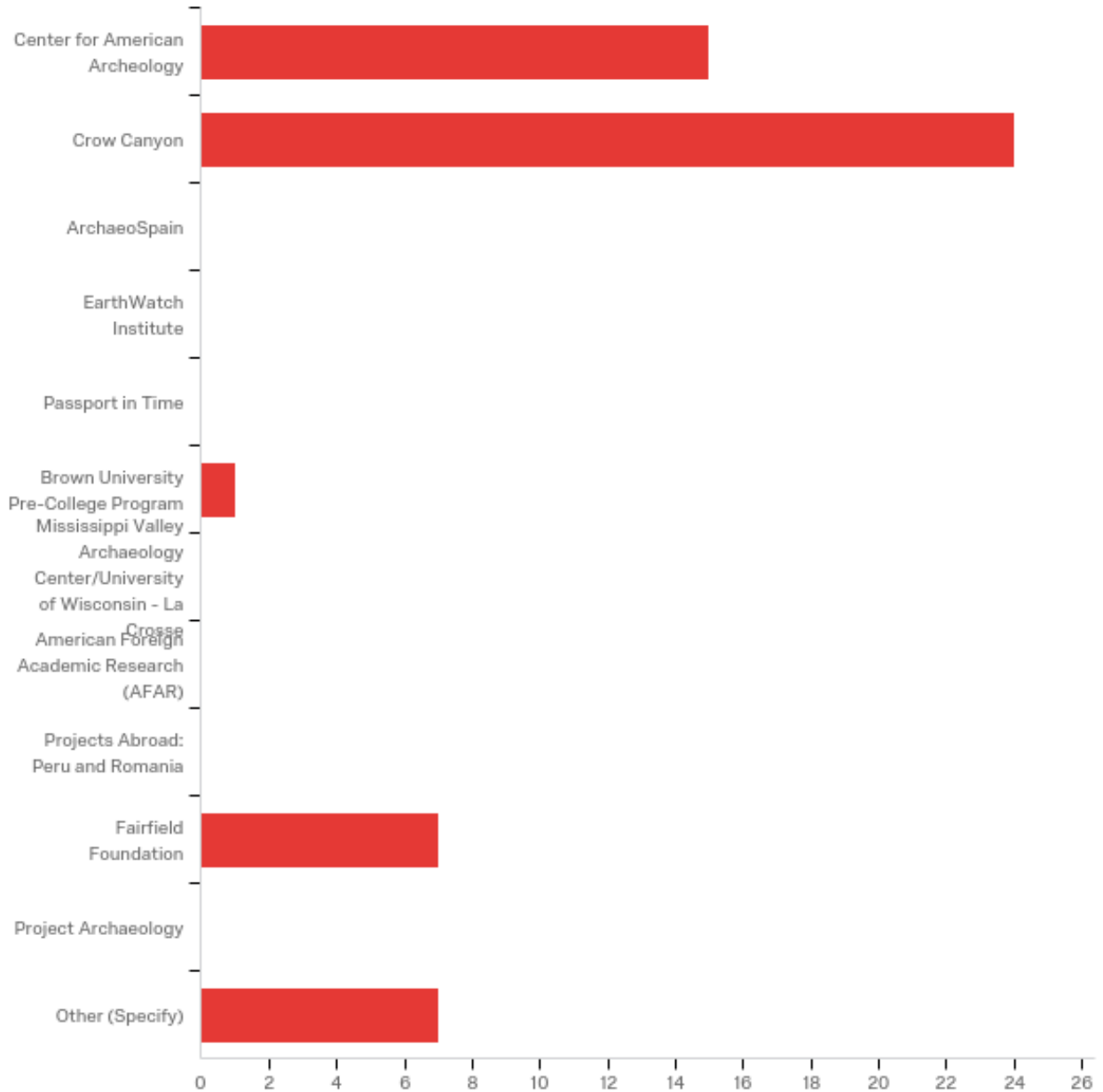
members alike may begin to remember the value of home, and they may pave the way for a better future with this renewed sense of hometown pride.



## APPENDIX 1: PARTICIPANT SURVEY REPORT

### *Impacts of Archaeology Education Programs - Participant Survey*

**Q1 - What archaeological program did you participate in? (Select the appropriate organization. If not listed, select 'other.')**



#	Answer	%	Count
1	Center for American Archeology	27.78%	15
2	Crow Canyon	44.44%	24
3	ArchaeoSpain	0.00%	0
4	EarthWatch Institute	0.00%	0
5	Passport in Time	0.00%	0
6	Brown University Pre-College Program	1.85%	1
7	Mississippi Valley Archaeology Center/University of Wisconsin - La Crosse	0.00%	0
8	American Foreign Academic Research (AFAR)	0.00%	0
9	Projects Abroad: Peru and Romania	0.00%	0
10	Fairfield Foundation	12.96%	7
12	Project Archaeology	0.00%	0
11	Other (Specify)	12.96%	7
	Total	100%	54

#### Other (Specify)

Research Laboratories of Archaeology at UNC Chapel Hill

Stanford EPGY

Stanford EPGY Summer Institute

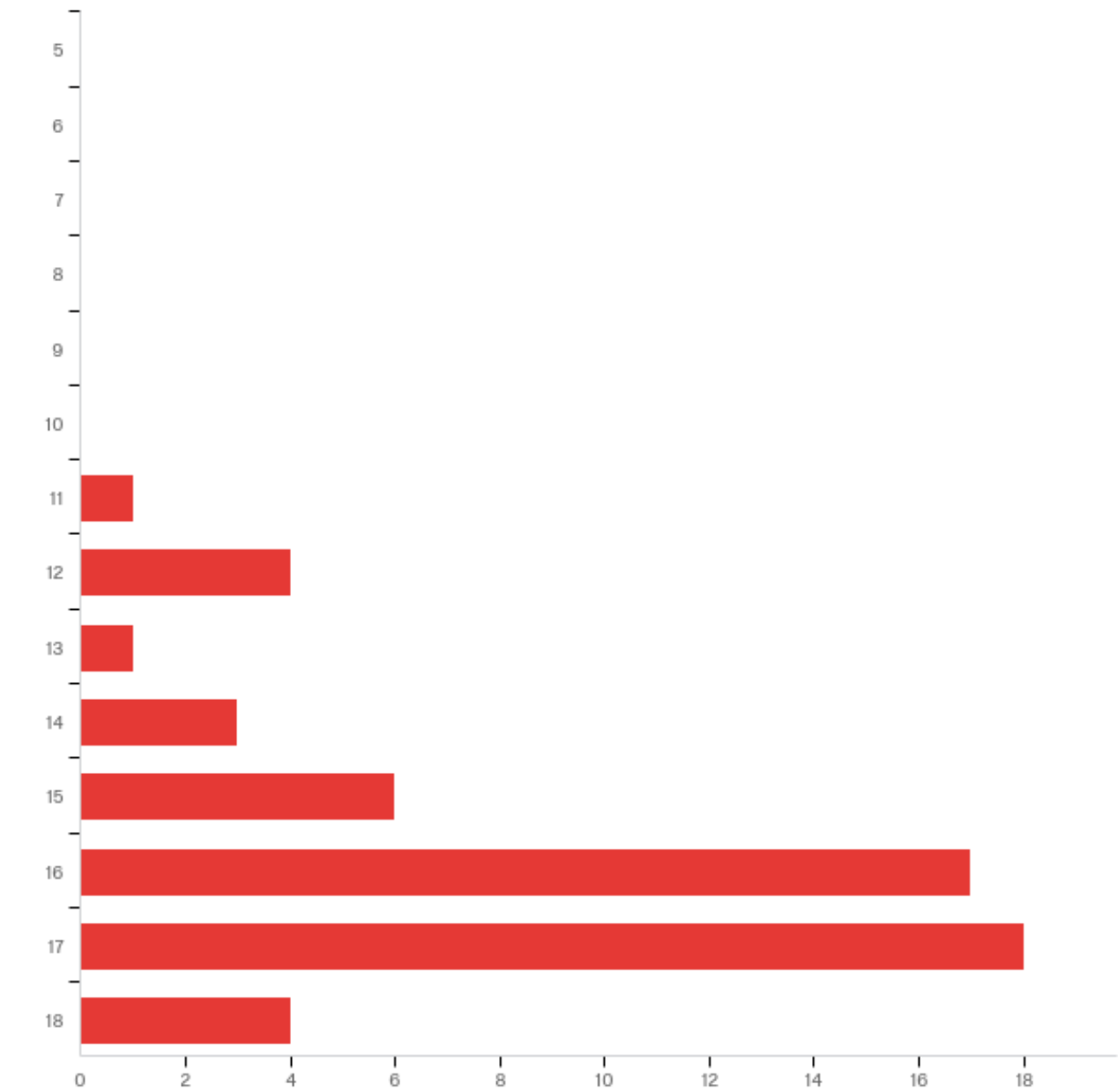
EPGY at Stanford

Abbe Museum Field School

SCA Summer Field School in PA (1 week)

Stanford EPGY

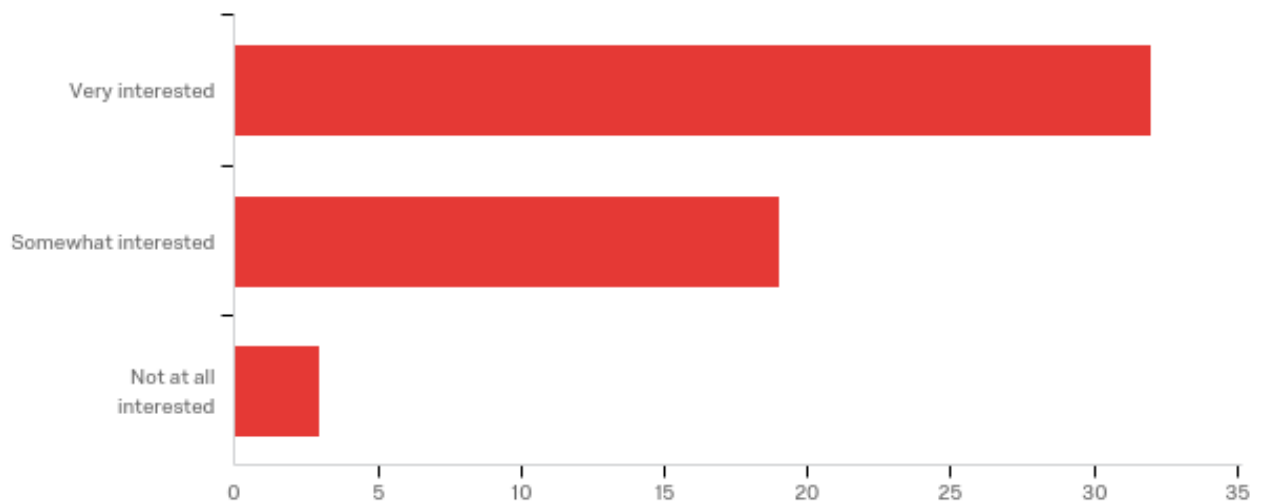
Q2 - How old were you when you participated in this archaeological program?



#	Answer	%	Count
1	5	0.00%	0
2	6	0.00%	0
3	7	0.00%	0
4	8	0.00%	0

5	9	0.00%	0
6	10	0.00%	0
7	11	1.85%	1
8	12	7.41%	4
9	13	1.85%	1
10	14	5.56%	3
11	15	11.11%	6
12	16	31.48%	17
13	17	33.33%	18
14	18	7.41%	4
	Total	100%	54

**Q3 - How would you rate your interest in archaeology before participating in the program? Feel free to explain.**



#	Answer	%	Count
1	Very interested	59.26%	32
2	Somewhat interested	35.19%	19
3	Not at all interested	5.56%	3
	Total	100%	54

### Very interested

I created a binder of native american archaeological sites in my hometown. Also, I sat in on a talk on a dig being performed on the Catawba River.

I've always had a passion for archeology. This passion emerged from various sources like TV shows, movies ,and magazines.

The summer before I did Crow Canyon I did a summer program at Oxford and took a class on archaeology, so I was already pretty sure that it was what I wanted to do when I went to Crow

I did the program because I wanted to be an archaeologist

I always had an interest in archaeology and this was a way to know if I wanted to study this in college.

Planned to pursue it as a career

I had previously spent several days working with them as a part of NIAHD.

I had been very interested in archaeology for sometime, this was my first time to experience it.

I was very interested in getting a sense of how people in archaeology implemented their knowledge, and also gaining knowledge for myself

Loved geology and wanted to pursue archaeology as well

I was going to the camp to see if I wanted pursue archaeology as a career and get first hand experience.

I recently decided Archaeology was what I wanted to do so I thought going to a camp for it would solidify my plan to pursue archaeology.

For me it was a perfect blend of activity and history

I knew this was something I was interested in pursuing in college and wanted to get some hands on experience before going into higher education.

### Somewhat interested

I was fascinated with the field but knew nothing about it

I knew I wanted to something in the field but not the particulars

The program helped renew the interest I already had in archaeology.

I didn't know much about it be I was interested in it.

I really wanted to be a forensic anthropologist at the time, and archaeology camp was the closest thing I could think of that would give me relevant field experience.

I loved history and my mom had done archaeology and encouraged me to try it.

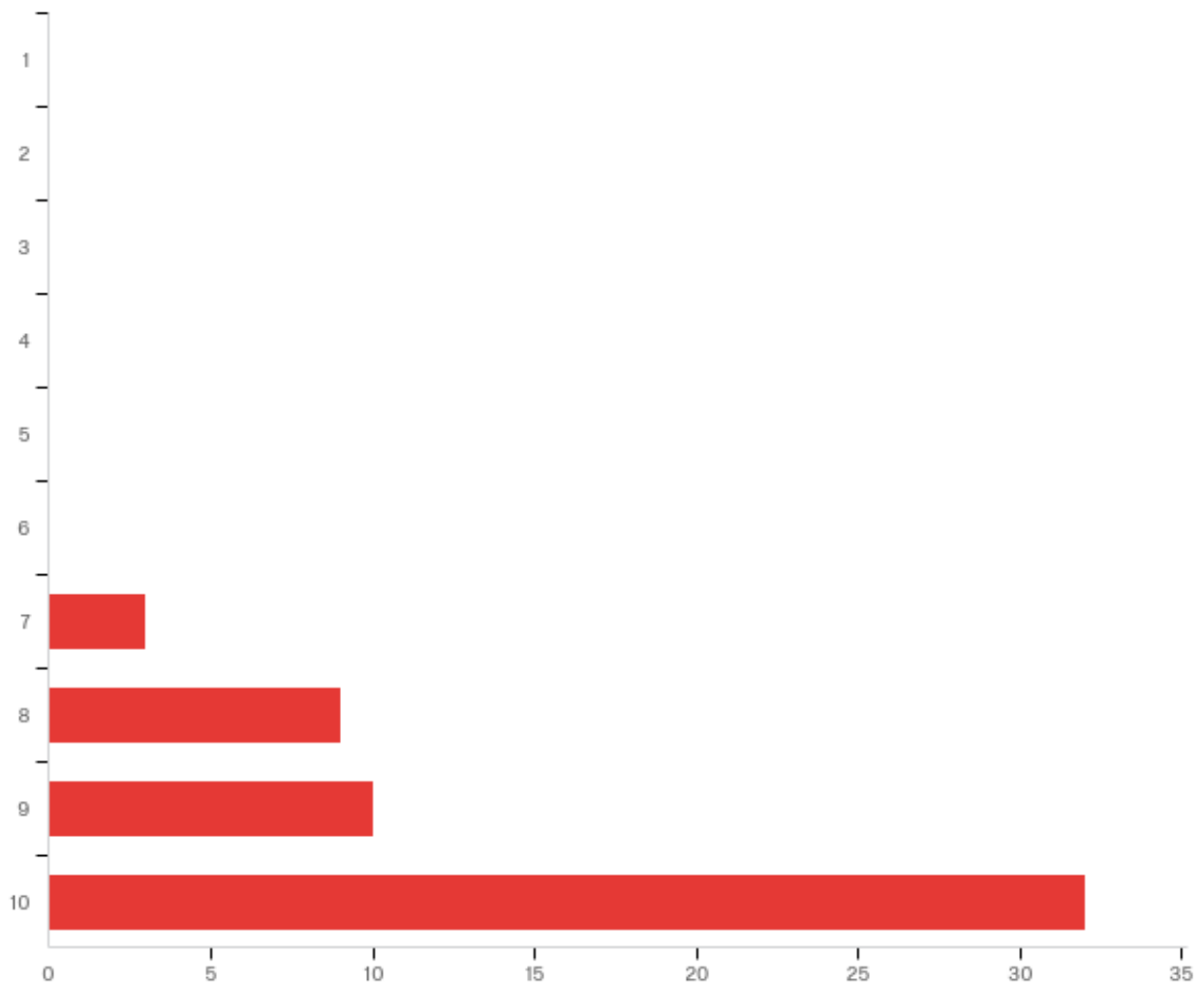
no experience, just a whim, but liked documentaries with archaeology

I attended from age 15 to age 17 and came back for “archeology” day at 18. I had wanted to study anthropology, and went on to study anthropology- but with the added dimation of field school experience

Not at all interested

I had no idea that archaeologists regularly worked in North America

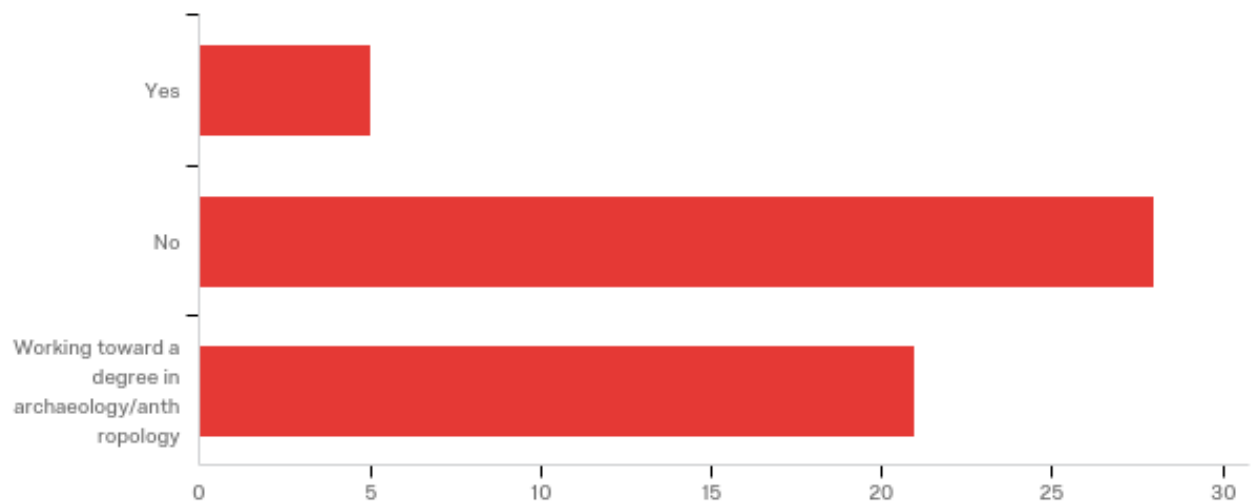
**Q4 - On a scale from 1-10 (1 being not at all informative, 10 being extremely informative), how informative was this program on the field of archaeology and its importance?**



#	Answer	%	Count
1	1	0.00%	0

2	2	0.00%	0
3	3	0.00%	0
4	4	0.00%	0
5	5	0.00%	0
6	6	0.00%	0
7	7	5.56%	3
8	8	16.67%	9
9	9	18.52%	10
10	10	59.26%	32
Total		100%	54

**Q5 - Do you currently hold a job in the field of archaeology? (Feel free to specify what type of job if 'yes.')**



#	Answer	%	Count
1	Yes	9.26%	5
2	No	51.85%	28
3	Working toward a degree in archaeology/anthropology	38.89%	21
	Total	100%	54

Yes

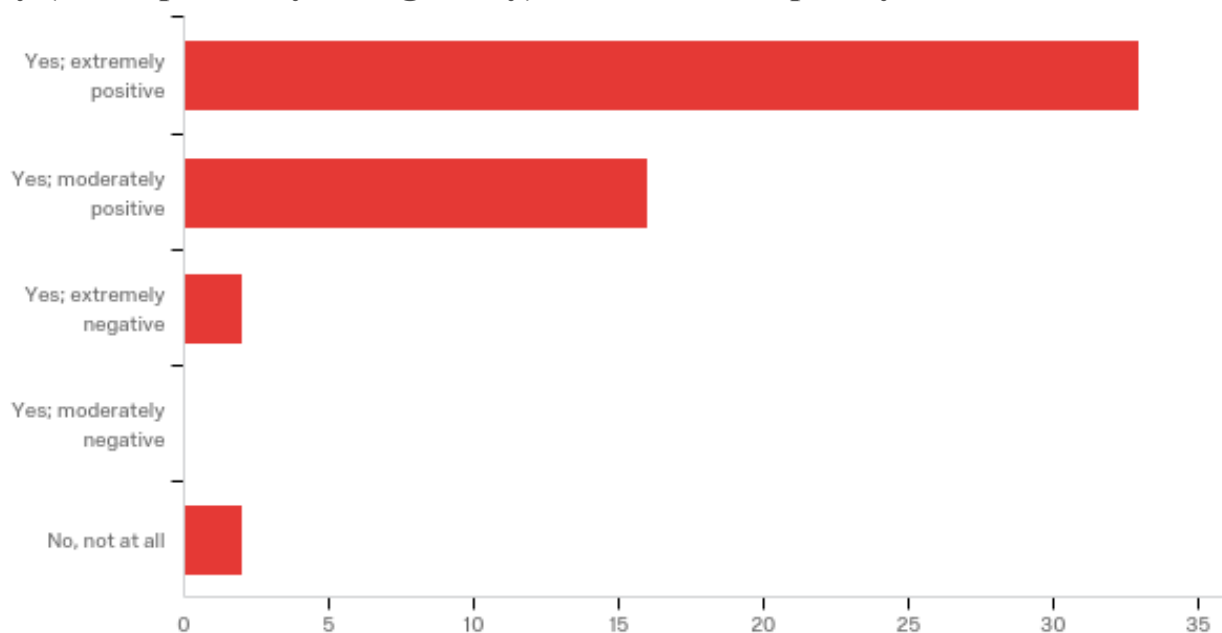
I am working with a state park service

I am a research assistant as I complete a master's in geoarchaeology

I work as Graduate Research assistant in a Sound Archive

Assistant Prof of Anthropology, Asst. Curator in an Anth/Arch museum

**Q6 - Did your participation in this program affect your career choice in any way (either positively or negatively)? Feel free to explain your answer.**



#	Answer	%	Count
1	Yes; extremely positive	62.26%	33
2	Yes; moderately positive	30.19%	16
3	Yes; extremely negative	3.77%	2
4	Yes; moderately negative	0.00%	0
5	No, not at all	3.77%	2
	Total	100%	53



Yes; extremely positive

Volunteering with UNC Chapel Hill on their field schools fueled my love of archaeology and led me to study archaeology in college.

Had a great influence in what I wanted to study at University.

It gave me insight into the job a field technician

I now know what major I want to study

My participation in Crow's program solidified my interest in archaeology. I ended up getting my undergraduate degree in archaeology and I'm in a Cultural Anthropology PhD program right now.

Going to Crow Canyon was the deciding factor as to whether I wanted to be an Archaeologist

Yes, it made me look at archaeology as a very positive option to work towards a position in

It allowed me to experience and talk with people who were in the positions I hoped to be in one day. College students, graduate students, and working professionals! I loved Mary! She was so inspiring. I loved that we got to excavate and that we were immersed in what we wanted to pursue.

It really inspired me to become more involved in pursuing archaeology

It solidified that I wanted to be an archaeologist.

Yes, I want to study archaeology in college

My experience led to me later attending another field school for two field seasons and I am now definitely looking more towards an archaeology career than forensic anthropology.

I just graduated with my BA in Anthropology with a focus in archaeology. I am intending to pursue my Masters in remote sensing of archaeological sites.

It made me want to be an archaeologist even more, so I can help people discover their past.

It's sort of the reason I'm pursuing archaeology as my major/career!

became much more interested in other cultures/social justice/native populations

Went to Kent state to get an archaeology degree, but did not finish. (Got married and started a family)

It confirmed that this is what I wanted to do and that it was possible to do it

It made me realize that archaeology was truly my field of interest. And it made me, in general, more adventurous and willing to travel on my own. It was my first experience going off into the world and doing something truly alone, which I think primed me for all the experiences I've had and pursued since then.

He wants to become an archeologist.

Yes; moderately positive

Although it only increased my respect and appreciation for archaeology and its practitioners, it showed me it is a field that is likely not for me.

I initially wanted to go into the field but numerous lab nights in college (with the same organization) and talks with the archaeologists convinced me to pursue another field.

Yes

So I am not planning on being an archaeologist but seeing how much these people loved their work and how passionate they were about sharing that with us inspires me in my own career pursuit

It taught me to value the small things

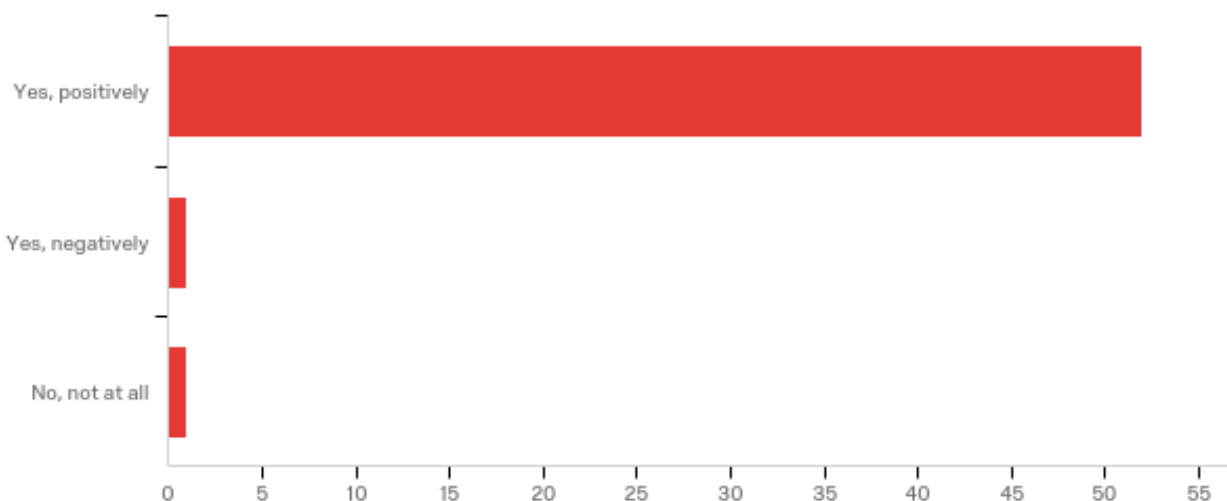
art history; I liked history, investigation, cultural context, but emphasis on art and museums

As a high school senior I now know I want to study history before I do Archeology and hope to become an urban historical archaeology

No, not at all

I've wanted to be a history teacher for a long time, and doing archaeology hasn't changed that, but I do think my experience will help me be a better teacher

**Q7 - Did your participation in this program affect your opinion of the usefulness of archaeology and conservation in any way (either positively or negatively)? Feel free to explain your answer.**



#	Answer	%	Count
1	Yes, positively	96.30%	52
2	Yes, negatively	1.85%	1
3	No, not at all	1.85%	1
	Total	100%	54

## Yes, positively

It made me realize how important it is to people to preserve their heritage and culture and archaeology helps to make this possible.

I had not realized fully the importance of archaeological site preservation in the US, and the program really changed that for me.

We did the trash project and I hasn't known archaeology could be applied to modern people

I had not understood the importance of limited excavation before my time at Crow Canyon- as a teen this was a very disappointing revelation, but laid the foundation for archaeological ethics that I built on in college and fieldwork.

Yes, it helped me learn about the importance of conservation and how people in archeology can be careful to conserve

See above! I stayed for the entire summer! Making friends and getting your feet wet with the whole archaeology/anthropology thing. Something I would not have been able to experience in my hometown area.

I had issues in the past seeing the point to archaeology and this program helped me see the usefulness of the career.

Yes, I learned how to value other cultures more

I am now a huge advocate of preservation

It led me to go on more excavations as well as become museum staff to inform others about the importance of archaeology in our world.

I love the idea of conservation archaeology, I had never heard of it until going to this camp. I actually wrote a paper on it for my English class.

Conservation is a huge aspect of my work and I was inspired by my program

Obviously!

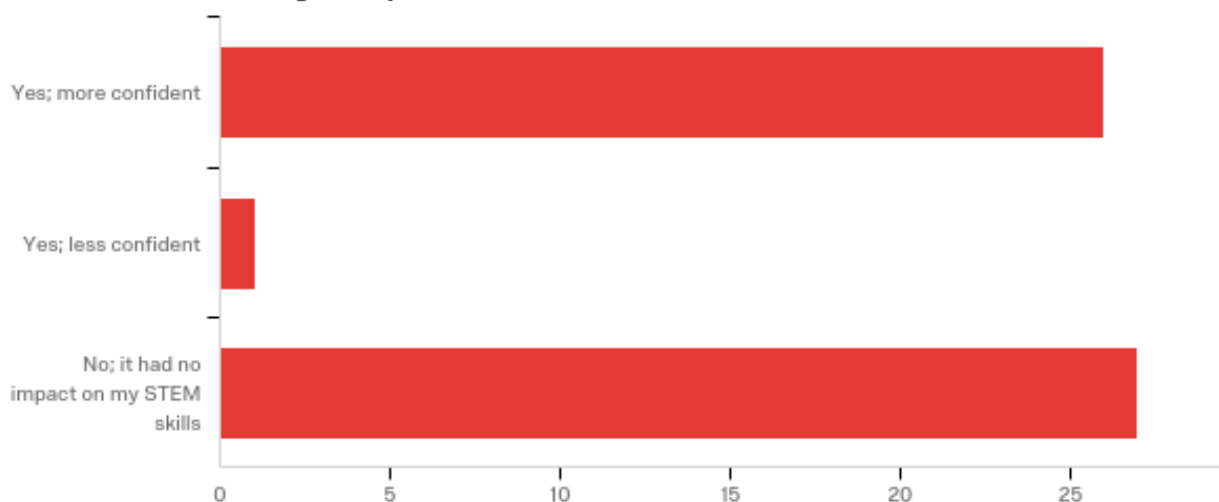
It made me better understand the importance of the public side of archaeology and how it can be used in education very effectively

For me, it connected the digging with the field - before, archaeology had just been this abstract excavation practice. Field school began to reveal archaeology as a theoretical practice.

No, not at all

I was already an archaeology nerd going in, so I already had a good idea about how important archaeology is.

**Q8 - Did your participation in this program make you any more or less confident in your STEM (Science, technology, engineering, mathematics) skills? Feel free to explain your answer.**



#	Answer	%	Count
1	Yes; more confident	48.15%	26
2	Yes; less confident	1.85%	1
3	No; it had no impact on my STEM skills	50.00%	27
	Total	100%	54

Yes; more confident

Through my work with UNC I gained valuable knowledge of the technologies used in archaeology such as 3D modeling, photography, and mapping.

I felt like this stuff was actually useful

Yes, it helped me become more confident in science, especially earth science

Definitely science! I loved how it provided the possibility of exploring the career!

I felt like I got more understanding of scientific studies that I will actually use.

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My skills made the stem parts of camp easier

---

I loved the lab work and hands on using scientific equipment

---

It pushed me towards geology (my major)

---

This program helped bring the gap between the arts and sciences that I was yearning to find. I am now working in a field of stem that I never thought I would never have been in before learning about archaeology.

---

Actually using them felt great

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I am a stem major now!

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Before, I'd considered myself the English/history kid, field school made me realize that what I wanted to do was research and STEM based and made me realize my potential as a scientist.

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No; it had no impact on my STEM skills

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I did not see it as informing nor requiring STEM knowledge.

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I already felt very confident in those skills.

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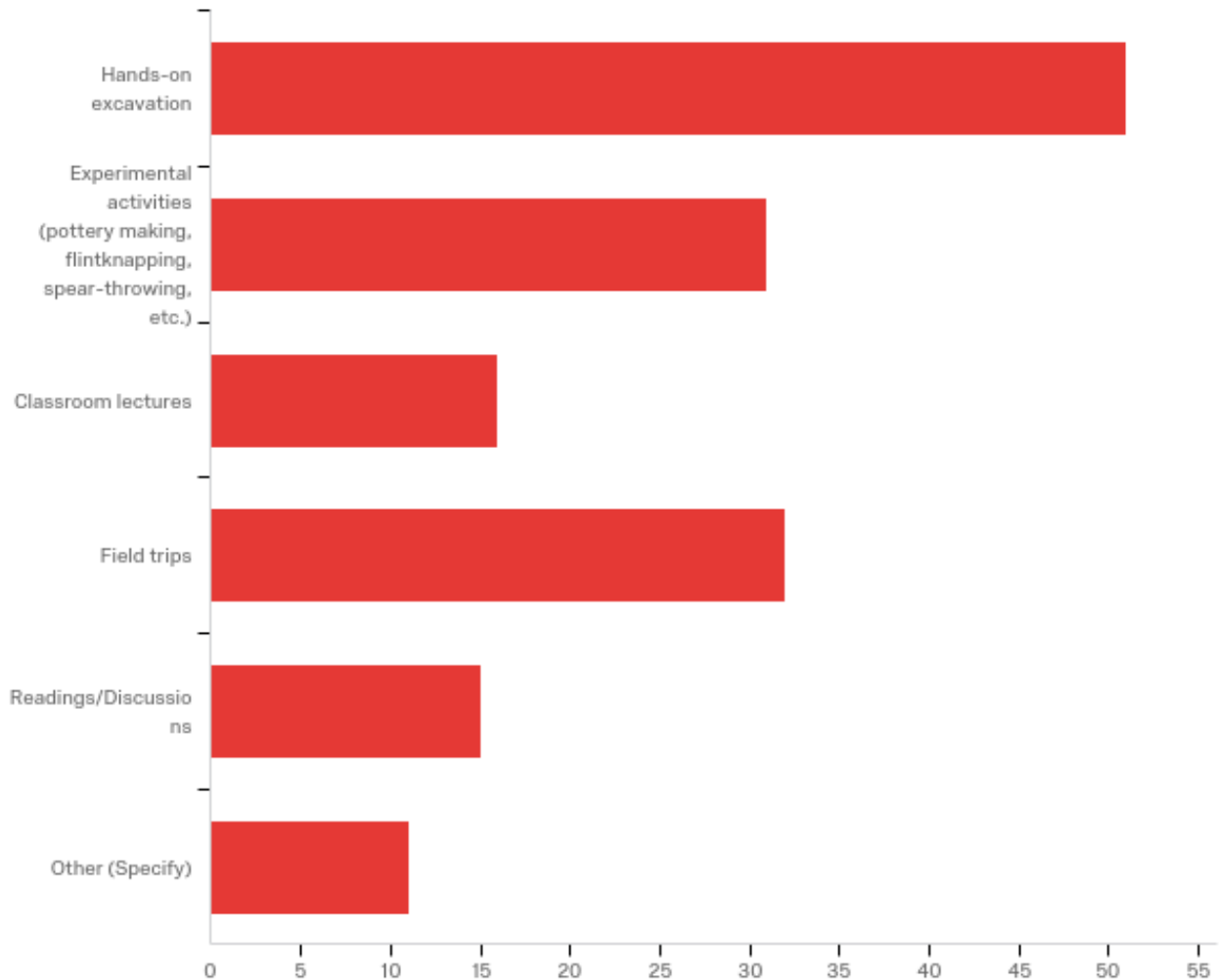
Except for to an extent it led to me later doing faunal osteology work and therefore making me feel more confident in my biology knowledge

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I started out with strong STEM skills from going to a project based learning school

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**Q9 - Which types of activities were most memorable/educationally effective for you? Select all that apply.**



#	Answer	%	Count
1	Hands-on excavation	32.69%	51
2	Experimental activities (pottery making, flintknapping, spear-throwing, etc.)	19.87%	31
3	Classroom lectures	10.26%	16
4	Field trips	20.51%	32
5	Readings/Discussions	9.62%	15
6	Other (Specify)	7.05%	11
	Total	100%	156

## Other (Specify)

Group projects

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Research project as part of field school

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Hands-on lab work and analysis were the most influential things for me by far.

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Exposure to real archaeologists and to Native American culture, and the way archaeologists worked with Native Americans as partners to ensure they were doing sensitive and relevant work

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Atlatl

---

Cleaning and examining artifacts

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Archival research

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working with the public

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I found a family at Crow Canyon!!

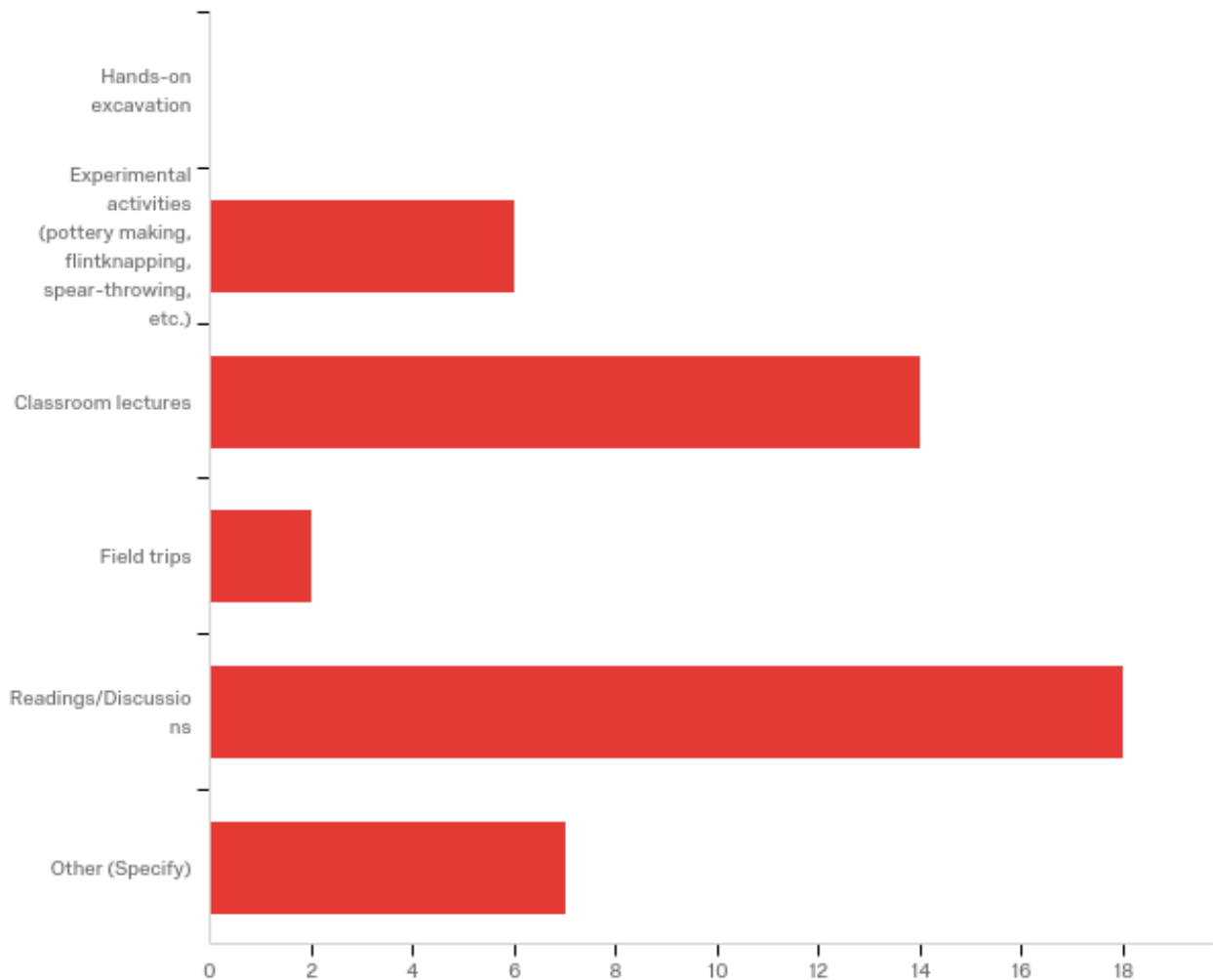
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lab work

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Lab Work

**Q10 - Which types of activities were least memorable/educationally effective for you? Select all that apply.**



#	Answer	%	Count
1	Hands-on excavation	0.00%	0
2	Experimental activities (pottery making, flintknapping, spear-throwing, etc.)	12.77%	6
3	Classroom lectures	29.79%	14
4	Field trips	4.26%	2
5	Readings/Discussions	38.30%	18
6	Other (Specify)	14.89%	7
	Total	100%	47



## Other (Specify)

None- it was all impactful

Internship only involved hands on excavation and cleaning of artifacts.

I thought everything was valuable. Having a good mix of all of these in the program was ecential to my overall experience.

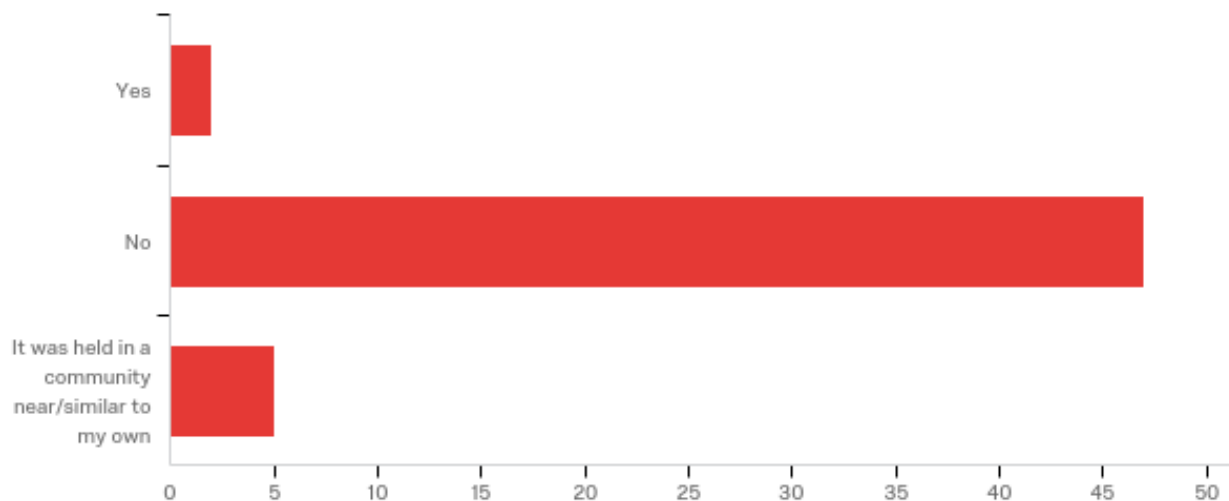
Maybe I'm biased bc I really loved the program and how we got to participate in everything!

I honestly remember most things we did, time more so than the educational effectiveness of Crow Canyon's activities has made me forget some

none of the above?

I don't remember any classroom lectures

## Q11 - Were you a member of the community in which the program occurred?



#	Answer	%	Count
1	Yes	3.70%	2
2	No	87.04%	47
3	It was held in a community near/similar to my own	9.26%	5
	Total	100%	54

**Q12 - Briefly describe your experience in the program. Highlight your workload, daily routines, and the activities that were most interesting or unique.**

I attended the high school level camp when I was 17, then again as an adult in my last year of university.

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It was amazing and a great experience to have . It was very very difficult but very rewarding.

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I assisted in various excavation procedures daily such as digging, clean troweling, dry and wet screening, and flotation. Additionally, I was trained to use a total station, set up units, identify and excavate features, catalog and record data, and to use a metal detector. When I first started volunteering I found the screening the most exciting part of the excavation because I got to handle artifacts. As I grew older and learned more I began to find the discovery of features the most interesting because of the information they provided.

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If I remember correctly, the workload was not too much, but an enjoyable amount. It was a wonderful experience and I really enjoyed the excavation aspect of the program as well as our hands-on/experimental activities like flint-knapping.

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The workload was very low. Every day was different, but it was the most fun when we were out in the field excavating. It was about five years ago, so I can't remember much of the daily aspect. I thought that finding pottery sherds was incredible and loved the experience.

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Each day in the CAA Highschool Field School was centered around equal amounts of hands-on excavation, experimental arhceology (flint knapping, pottery making, etc) and lectures from various leading anthropologists from in and outside of the community.

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I went out on two separate saturday mornings with a large group. We worked for about 3-4 hours doing basic plowzone removal, screening, and backfilling.

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I do not remember the experience especially well, but it was a very fun and engaging experience that was neither too serious nor restrictive.

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I enjoyed the program because it was not overly difficult or strenuous, but not completely easy. I enjoyed hands-on excavation, traveling to Mesa Verde, and spending time with friends in free time.

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Overall a very enjoyable and social experience. While digging or doing research it was very helpful to have others' opinions on a certain piece. Many of us were able to divide up the work load and make it much more manageable. Teamwork was key, especially while at the official dig cite

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Daily classes with hands on activities. Culminated in group project studying modern day trash collections with a final presentation.

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The field school i participated in had 3 weeks of field work and 3 weeks of research that resulted in a published paper for each participant. The CAA under it's directorship cancelled this amazing program. It was very shame and a detriment to the future students.

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I participated in the program 8 years ago, so please excuse me if I do not remember everything. I did the high school field school, so it was a 3 week intensive program. We split our days between the field and the lab. Two participants shared one excavation unit and we were responsible for recording field notes, collecting artifacts, and recording depths. We were obviously trained to do this first, and spent the first few days learning the proper techniques for excavation and recording. In the lab, we cleaned and analyzed artifacts. We were mostly using

the type collections, but the skills that I learned in the lab were invaluable. We slept in the bunk house and ate meals there. If we were in the field, we packed lunches and brought them with us. The workload was minimal, we were mostly learning in the field or lab and did not have work outside of that, as far as I recall. We may have had some short readings. We went on two or three field trips, one to Mesa Verde, one to Utah, and I think another one. The trip to Utah was a camping trip and it is one the primary things I remember. One the most unique things they did for us, was teach about the jobs you could do with an archaeology degree, that was really helpful. We are did experimental archaeology, like visiting their pit house and pueblo and trying a bow and arrow and atlatl. They are have Native staff members and are educators. At the time, I did not appreciate this as much as I do now, but having a Native perspective is absolutely fantastic. I actually came back to Crow Canyon in 2015 as a lab intern.

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It was a month-long program that was basically an archaeology 101 course. We had lecture every weekday and some sort of activity during the day. One activity that I remember was a mock excavation, and we did some work in the soils lab working on material from an excavation in Turkey. We also had to do the trash project and try to reconstruct the life of whoever owned the trash. I think we had some readings, and maybe one test, but it was mostly hands-on and discussions based.

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The program gave a glimpse of the culture in the area as well as some archaeological techniques. The workload was a normal amount to give students who are interested in the program.

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I attended a week-long high school archaeology camp at Crow Canyon in 2008. The five days were broken up into a number of activities, including classroom lectures, mock excavation, artifact analysis, two half-days spent at an excavation, and a full day field trip to Mesa Verde. Every day we had a morning and evening lecture as well as homework assignments and projects. We also had hands on experiences that were informative and fun.

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My experience in the program was awesome! Every day I would wake up have breakfast with my friends and then we would go off and do something amazing and learn about our field. After a long day, we would have time to shower and then eat dinner and we would all hang out and talk about what we liked. I would say a majority of our work was done during the day and we would have free time at night to sit around and talk. One of my favorite activities was when with did Atlatl and played other games.

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Daily, two other interns and myself would drive out to the dig site and spend the day excavating under the supervision of the directors. Each Tuesday we had a lab night open to the community during which we cleaned artifacts. I developed a staph infection in my ankle and could not participate in excavations for several days during which I helped with fundraising and administrative work.

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I had a number of different experiences within the program. I started as a high school field school student and spent two summers in that capacity (5 weeks each summer) and then came back as a 'docent' for another 3 summers for 10 weeks each summer. As a first year student I was involved in excavations, artifact preparation, lectures, a research project, and experimental archeology. As the years progressed, I had more responsibility in terms of supervision on site and the scope and complexity of the research projects expanded as well. Days were full - typically excavating from around 8-9 until 4 or so. When we got back to the dorm after dinner we typically had lecture or research activities for another 1-2 hours per night. We had field

trips to other local sites on weekends once or twice a summer, but otherwise had weekends for relaxing.

In the SCA program, we excavated with partners who were college students in anthropology at the time, it was just a one week introduction to the field and techniques. The CAA program was much different. We were expected to learn and utilize the skills we were being taught. This was also my first experience with experimental archaeology (flintknapping, basket weaving, etc.).

I had a very positive experience in this program. The workload was almost nonexistent, but that meant there was a nice break from a full day of learning and writing in our field books, which we were encouraged to reflect over. I like the way this program started with conversation/learning, to being in a lab learning to recognize artifacts, to a simulated excavation, to a full day of excavation.

We would dig in the morning, go to lunch, & dig in the afternoon. We had dinner at a woman's house nearby. In the evenings, we had time to hike or explore and do some "lab" activities.

Away from home for 6 weeks. Up early each morning to get on the fairy to get to where we would be cooked breakfast. Riding the fairy to the site to work maybe some form of a half day? I can't completely remember. We excavated with a partner. We would come home for lunch and it would either be a lab day or maybe we'd go back out? We got to wash artifacts at the end of the day! We'd also have free time to knap, make baskets, work on the dugout canoe, or hike up the hill. We had projects I think. The group dynamic was great.

The program was highly structured featuring a lot breakfast, dig, onsite lunch, break, evening program, dinner. The take away which stayed with me was tedious every aspect was.

We were in the field every day and I loved it. It was definitely hot and sweaty and dirty but that was all part of the fun and the experience. I learned so many skills and procedures that I would not have the chance to learn anywhere else. I also made life long friendships.

We excavated once every week and we were always doing hands on activities like working in the lab or doing experimental archaeology on the other days. We had classes in the morning, afternoon, and an evening class and our weekends were spent camping and learning about archaeology in different regions of the Southwest.

The program was one week long, during which we learned about ancestral Puebloans, performed hands-on excavations and lab work. We also did activities like spear-throwing and went on a field trip to Mesa Verde.

We left the dorms at about 8am, went to the site until noon. Then we went back to the dorms and had lunch and then clean artifacts as well as other lab duties. Then we got cleaned up and went to a woman named Jodell's for dinner. Then we were free to do whatever. Unless there was a lecture or something. I enjoyed the field work the most.

The physical and mental work was hard but it was a lot of fun to do.

My program was three weeks long in the summer. We did various activities from excavation in the field, to lab work, to classroom lectures, to hands-on activities and field trips. We had weekly assignments which were a good review of what we'd learned but not particularly challenging. We would typically have activities in the morning and afternoon with a lunch break and free time at night. My favorite activities were excavation, working at Crow Canyon's corn patch where they were using indigenous techniques, working in their lab, really everything we did. I can't say enough good things about Crow Canyon; the staff was

passionate and enthusiastic, our activities were well-planned and fun, the food was top-notch, and I loved our off-site weekend excursions when we went camping and rafting.

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My memory is kind of foggy, but I worked with a team of two other students and one supervisor to excavate our own 2x1 meter test pit for a few hours each three to four days per week. We spent a few half days working in the lab or doing experimental archaeology, but most time that I remember was spent on field trips to nearby sites or in lectures.

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A summer of full days in the field - excavation, washing, picking, sorting, cataloging (when it was rainy). Guided school groups/boy scouts.

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It was a nine to five job, and always longer on lab nights. I worked both in an office and in the field, and while the field was a lot more exhausting, it was also a lot more fun. Not to say that the work I did in the office wasn't fun. I transcribed an old farm log, and researched some of the slaves listed within it, trying to trace them in the community. The field work was great, but I think it's what you expect when you sign up to do archaeology, I didn't know archaeology was more than digging. I learned it's A LOT more than just digging.

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The workload was a good amount of work. Daily routines were followed with good times. The lectures were very educational. The hands on work was very interesting and educational.

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In this program, we alternated between lectures and digging experiences every day for three weeks. Although we had a large workload, it all felt like fun. Some of the most interesting activities were an excursion to Mesa Verde National Park and the ability to participate in an on-site dig.

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I worked eight-hour days, mostly assisting with field excavations, but also with archival research. I enjoyed all of this work, except on hot or rainy days.

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I participated in the program more than 8 years ago now and I will never forget how engaged we all were as students. Everything from lab analysis to active excavations were planned with a purpose to build our skills and develop our interest in archaeology. Everyday was packed with a balance of lectures, museum trips, and an active skill-building component.

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Overall I had an extremely awesome time working with Crow Canyon. We didn't have much of a work load pertaining to homework, but we did do something practically everyday. In the beginning of the week we mainly had lectures about the Anasazi people and what their culture was like. As we got towards the middle/end of the week we actually started working on the Hainey site. That was so fun! I enjoyed a lot of the hands-on experience, especially when we did the archaeology excavation simulation. I loved taking what I learned and using it in a real life excavation. Something I found most unique was when we went to see an Indian dance, I loved it! All of the colorful clothes and the dancing was new for me. I loved getting to know more about Pueblo Indian culture.

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Working along side real archeologists was amazing. Learning how the archeologists used clues to solve question about the past history was incredible.

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My experience in archaeology started with an internship with the Fairfield Foundation my senior year of high school, after which I began working at the Fairfield Foundation and at DATA Investigations, LLC. During my internship, I only worked for about 4 hours per week, during which I helped with volunteers, washed artifacts, and/or catalogued artifacts. After I was hired (this was the summer between my senior year of high school and my freshman year of college), I worked full-time as a field tech. For me, the most interesting parts of my work were the hands-on excavations and being able to work with the public, especially kids and older people; many of the latter tell me they "always wanted to do something like this, but life just got in the way!" It (I also did a short stint at Crow Canyon as a sophomore, at a week-

long High School Archaeology Camp. However, this wasn't as formative for my education/career, since it was only a week long and therefore we didn't get to do as much hands-on excavation, nor was it as specialized to my interests as Fairfield was. It was still very cool though, and sort of spurred me into seeking out the internship with Fairfield!)

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We did hands on excavation, urban archaeology, classroom lectures, demonstrations, and readings. The readings and papers may have been excessive for our age range, but I felt like our opinions and work was taken seriously.

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Three weeks of excavation, three weeks of lab work and research. Learned about tools and culture, went to Cahokia. Loved all of it!

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My first summer, I was there for two weeks. I lived with one of the archaeologists and his family. We would go out to the site around 8 am and stay out there until 4-4:30 pm. Most of what we were doing was cleaning test units down to subsoil where the plowzone had already been removed by other volunteers, although we did get to work on the manor house ruins for a few days, which I later learned was not a common occurrence. However, on my first day, we went out to a different site where the neighbor was very unhappy to see us there (even though we had some permission from the landowner). The neighbor called the police on us and because we could not get the landowner on the phone we had to leave. That was an interesting introduction to the more political and logistical side to archaeology. At the beginning of my second week, a group of younger high school students came out to the site for a few hours and I was put in charge of a group of them, overseeing them removing and screening plowzone. It made me feel accomplished that I was trusted enough to do this. I also got to take part in some historic preservation activities, helping to restore an 1930s gas station that is being turned into a future lab.

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Summer 6 week field school with an NSF paper due at the end, I think. Days were digging, night had a light educational component- but we had a lot of free time. We could have been pushed harder, but I did not think so at the time. This was the early to mid 90's

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A week long overnight program where students were housed in on-site dorms. From what I remember, we spent half the day on site excavating, then the other half of the day either in a classroom or on field trips. There were no formal tests/presentations involved. Excavation, of course, was most memorable, but I also loved the field trips and getting to meet like-minded students.

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We lived in dorms where we did some lab work at night and we excavated all day. It was VERY hot and difficult, but that caused us to band together in the same way college field school's do. I distinctly remember learning to piece plot every artifact and really getting a sense of how much detail there was to record. I also remember needing to sandbag to preserve the site, making it clear how at risk many locations are.

**Q13 - Please describe how your participation in this program impacted you in terms of your educational interests and your career aspirations.**

The programs solidified my interest and passion for both native American culture and archaeology. While I am not currently in an archaeology position, I have started a career path towards park service and will hopefully one day work in a park with archaeological significance.

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It solidified my interest in archaeology and made me want to keep studying it.

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After volunteering with UNC I knew that I wanted to be an archaeologist and I went on to study anthropology in college. It provided me with valuable knowledge and skills in the field of archaeology and allowed me to network. For these reasons it led to me getting an archaeology internship with a museum and led to my current job working in the archaeology labs at my school. After working on the Catawba project I decided that I want to attend graduate school at UNC Chapel Hill and continue my studies of Southeastern native american archaeology. In the future I aspire to work for the National Parks Service or Department of Natural Resources and assist in the mitigation of endangered sites.

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This program had a very positive impact on me in regards to what I wanted to study when I went to university/college. I pursued a major in anthropology and a minor in Mediterranean Archaeology. Following undergraduate education, I have now shifted onto the path of museum studies, and hope to have a career associated with museums, but I hope to have a specialty focus working with archaeological collections.

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It definitely steered me deeper into the sciences. I ended up doing Botany and Biology at a state school.

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Through hands-on and experimental methods I found what excavation/archeological techniques were most interesting to me. This encouraged me to find classes at my university that would either re-introduce or expand upon the knowledge that I gained from this experience.

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I was interested enough to return the next year as an intern, but at that point, I was not considering archaeology as a career.

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It instilled in me my interest in history, which is one of the undergraduate degrees I am currently pursuing, and it also made me more interested in policy making as its clear that it is policy makers and administrators who find the funds which make archaeology happen.

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It did not change my opinion.

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I was hesitant to pursue a career in Archeology because it seemed like a lot of work but after I did the program at Crow Canyon I realized that it was reasonable and actually kind of fun

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It helped me realize that I enjoy working with active and enthusiastic people in a non-traditional work environment.

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Majored in anthropology and remained very interested in human behavior - ended up pursuing medicine specifically psychiatry to better understand human behavior

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It impacted me a lot. I was interested in archaeology, but had never done archaeology outside of the classroom. The program really solidified my interest. I got my bachelors degree in archaeology and I am currently working towards a PhD in cultural anthropology all because of that first field experience. Like I said before, it was really the lab that did it for me. While I

am no longer an archaeologist, I still love working with objects and am working towards become a curator in Native American Art.

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The archaeologist who ran the class recommended that I look into Boston University for college and wrote me a letter of recommendation. I ended up going to BU, studying archaeology and classics, and am now working on my PhD in Anthropology/Archaeology.

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My time at Crow Canyon definitely encouraged my interest in archaeology as an occupation and (probably more surprisingly) fostered an appreciation of the environment and outdoor activities. While I felt sure I wanted to be an archaeologist, I was left with many lingering questions that weren't totally resolved until after I completed an undergraduate degree in Anthropology and began working in the field, especially in regard to what archaeologists actually do. Personally, I felt there was an overemphasis on excavation, creating a disconnect between the participants and professional archaeologists (as we often only do pedestrian survey, shovel testing, or limited excavation).

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After this program I found myself more interested in archaeology and ended up getting my BA in archaeology as well as participating in a dig during undergrad. Now I'm getting my MA in contemporary art history, but I have an archaeological fellowship through the Institute for Aegean Prehistory and will be participating in a pottery study on Crete next spring.

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I went to Crow Canyon to see if I truly wanted to become an Archaeologist. After attending the week-long camp I decided that Archaeology was in fact what I wanted to do for the rest of my life. The opportunity to get hands-on experience in the field and lab was amazing. After leaving Crow Canyon I reach out to my local museum (The New York State Museum) and began volunteering with them (and still do to this day). I am now an undergrad at SUNY Potsdam with a double major in Archaeology and Anthropology. I can happily say that if it wasn't for Crow Canyon I don't think I would be studying archaeology today or be as involved in the field as I am.

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By the end of the internship I was certain I wanted to take up a career in anthropology or archaeology.

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I started as a very young student in the program. It was a high school field school, but I had just turned 14. I can't say I had the best work ethic or a detailed idea about what archeology actually entailed. However, my experience with the Center for American Archeology profoundly impacted my life in a number of positive ways. The enthusiasm of the instructors as well as the participants was infectious. I learned a work ethic in a way that has stuck with me to this day. I learned to love what you do and put your heart into your work. I learned the scientific method hands on. I learned geometry and anatomy and geology and biology and geomorphology and ecology and all while having fun and seeing real world applications of all of them. I learned to work as a team. I loved it all. I kept coming back. I spent part or all of 9 summers with the CAA. I went to college as an anthropology major and earned a BA in anthropology. I also majored in biology, and while I ended up ultimately choosing a different path than archeology ( I'm a physician), I can't overestimate the impact the CAA had on my life. I started in Kampsville when I was 14 in 1989 and I'm 42 now and I still remember my summers like they were yesterday and take the lessons I learned with me.

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After both programs it solidified for me that maybe field archaeology wasn't what I wanted to do with my life. While I don't regret them one bit, it did impact my decision to move more towards a career in museum conservation with a potential to focus on archaeological and ethnographic materials.



This program definitely increased my interest in archaeology to pursue as a career. I learned a lot in terms of technique and history.

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I thought I wanted to be an archeologist before I went to camp. After camp, I knew that I didn't want to be an archeologist anymore. It was just different than what I thought it would be, not necessarily bad though.

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I came to CAA after finding it online. I'm from a rural area where there was an absense of these programs, and it was pretty far from KS. I met a friend that I still speak with today. The women who were our TAs inspired me to go on. I ran into one at SAAs. It was so unforgettable being able to have real conversations with them about their experiences in the field and what their dreams were and how they got to where they were.

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I still pursued a degree in anthropology but I change my focus to museum work with a minor. Through the minor, I gained the chance to do an internship (which turned into a job) at the school archive. Archive work followed me to grad school as well. Though I think I would like to try an attain the role of accessibility within a museum.

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It inspired me to look for university programs in Archaeology for my major. By exposing us to many parts of archaeology, it allows us to choose what is right for us as individuals, and personally I discovered that I belong in the field.

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This program really helped me realize how passionate I am about archaeology and how I want to continue pursuing it as a career.

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I was already interested in pursuing archaeology as a career and had taken a couple of classes in high school, and Crow Canyon was an opportunity to try out archaeology.

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I was questioning whether or not I really wanted to be an archaeologist. My chemistry teacher pushed me do the program. I got in and after the first day I knew that I wanted to do this for the rest of my life. Now I'm 22 and am about to finish up my undergrad degree and then move on to grad school.

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This made me want to work harder to achieve my goals is college as an archaeology major.

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I was interested in archaeology and history before this camp, and while I do not aspire to be an archaeologist, this program was very influential in making me interested in history and preservation, especially when it comes to indigenous rights and justice. I can say that at least two of my fellow participants are pursuing archaeological studies beyond that experience.

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It led me to be more interested in historic preservation and museum work than forensic anthropology, which I was previously intending on studying. I have since worked on a project in Ireland and worked with the community to explore how the site affected their identity and heritage.

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I learned how much I love research and how much I love field work. The result is that I majored in geology.

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While my career aspirations have not changed, I never imagined that I'd want to spend my summers digging in the dirt and taking archaeology courses at university, but that's exactly what I'm doing now. My degree might just say history, but I know I have learned much more than that.

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During one of the lectures, a bio archaeologist was talking. While she was talking about her excavations and explaining what a bio archaeologist is, my path changed from archaeology to bio archaeology.

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This program bolstered my interest in pursuing a career in archaeology.

Participating in this program made me realize that I do not wish to pursue a career in archaeology. While the work is certainly fun and rewarding, it is too physically difficult and too low-paying for me.

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This program solidified my love of archaeology and helped me develop my passion into a career. I am now a post graduate interning at NASA with the goals to be a space archaeologist, using satellite remote sensing imagery to study archaeological sites.

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Because I went to this camp I am actively pursuing a career in archaeology. I am currently in my undergrad right now going to get a Biblical Studies and History degree and then I plan to go into a Middle Eastern Archaeology graduate program. Crow Canyon made me want to become an archaeologist even more.

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I decided to go on and go to college for a degree in the sciences in part because this program made me interested in research based science.

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My work at Fairfield is pretty much the reason I'm studying archaeology in school now! I had been vaguely interested in archaeology beforehand, but the job statistics were daunting, and I wasn't sure if it was really worth it (especially if I got all the way through college, started working, and decided I hated it!). However, after a seven-month internship and three months of working full-time, and still loving it, I decided it was something I could see myself doing for the rest of my life. I'm currently majoring in Anthropology with a concentration in Archaeology, with a possible minor in Historic Archaeology.

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This helped me realized that I could pursue a career outside of medicine, which everyone makes a point to pressuring any child or relative academic gifts. I was encouraged to pursue a passion and interest in the arts and history.

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It solidified my desire to be an archaeologist.

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These two weeks really cemented that archaeology was what I wanted to do in my life and really also made me interested in plantation and public archaeology. I have been back almost every summer since, making it 8 summers now, and I credit them with helping to get me into grad school.

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I went on to persue a career in the humanities- I have a different career now in the non profit world, but I see how my humanities background has shaped in interests

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It solidified the thought I'd had to enroll in college as an archaeology major. This was the first time I'd traveled solo or really attended any kind of camp/program where I didn't know anyone going in. It gave me the confidence to continue this kind of solo-exploration, and since then I've traveled solo to many archaeology-related opportunities.

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I credit the program with making me confident that I really did want to do archaeology and thus pushing me toward applying to an undergrad institution that was arch-focused. It also solidified my interest in Native American archaeology specifically and convinced me that I would like the more rural field setting.

**Q14 - Please describe how your participation in this program impacted you in terms of your opinion on the necessity of archaeology and conservation.**

Some of the sites we dug were being excavated because a housing development or road was going to be built over the site. This made me realize how important it is to learn what we can from these sites while they are available to us and to preserve what we can off or from them.

This program really allowed me to see what archaeology really was and get hands on experience. It really strengthened my stance that archaeology and conservation are important.

Very important - preserving and learning about history is very cool. I've always been a conservation nut. This just reaffirmed that.

At the time of participation in this program, current issues in archeology were not highlighted. It was not until my final year of undergrad studies I did not learn about current issues in anthropology/archeology.

I went from not comprehending that archaeology was regularly practiced to being completely enthralled with historic preservation and archaeology.

Made me even more certain of its necessity and value to society.

I believed this was absolutely necessary and this program only reinforced my opinion.

I have always felt that preserving the past should be a priority, but I was not aware of how much work was required to preserve these sites

It greatly increased my appreciation and support for archaeology and conservation because I learned that our waste reflects our culture past and present.

Like I said, I did not think about the need for archaeological site preservation in the US before this program. I had also never really thought about SW archaeology as someone who grew up not even close to the area. Seeing the sites in the SW and hearing presentations really made me reflect on this and realize the need to preserve the past and descendent cultures.

It made me realize how archaeology can impact modern times, specifically with the trash project.

Crow Canyon did a great job of emphasizing the importance of conserving both cultural and natural resources and explaining how interconnected the two are. I already felt the importance of preserving cultural sites, but left Crow Canyon with a commitment to the environment as well, which I wasn't expecting.

It definitely emphasized the value of archaeology and the importance of conserving archaeological sites and artifacts for further studies.

The program really shed light on how important the two are. Without them, we would not have an understanding of our ancestors. Also without conservation and preservation so many things would be lost or destroyed. Between Crow Canyon and my current degree program I find archaeology and conservation an absolute must.

I felt the program was absolutely necessary for preservation and protection of history.

I learned a great deal regarding the need to study our past as well as preserve it. I learned very early on that archeology is by its nature a destructive science - you must destroy the site in order to study it. More modern techniques reduce the impact, but often sites still require actual excavation and removal of artifacts. As such, conservation is a huge part of archeology. Not just conservation of artifacts but also of sites themselves. I spent a few summers doing

'contract' (CRM) work mostly on road or bridge projects and saw the impact that human changes to the landscape have on our cultural heritage (good and bad).

---

I always knew archaeology and conservation were important, even if those around me couldn't see it. It gave me a better understanding of why and how archaeologists work to solve problems.

---

This program went over how conserving what you find in the field is very important. They were very good at describing how archaeology was important.

---

No impact.

---

I feel like I came into it pretty set on conservation and public program focused because I was aware of the lack of such programs in my area. It definitely helped though.

---

I still believe its very necessary but in the terms of archaeology, I personally don't do that aspect.

---

It was interesting because we did certain processes with artifacts and soil that allowed us to see the analytical side of archaeology, which inspired me to want to work in conservation. I would hate to see anything happen to these remnants of the past because they tell us so much about ourselves and our past.

---

This program really helped me find the necessity of archaeology when I was having trouble finding purpose in pursuing this career.

---

It didn't really impact my opinions of archaeology. I already knew it was important and that people needed to learn about the past so we don't mess up and make the same mistakes in the future.

---

I now believe that this is very important

---

This program emphasized the protection and study of cultural and heritage sites. We learned about the endangerment of these areas and how important studying them is to their conservation.

---

It reinforced my belief that archaeology, conservation, and historic preservation are very important to the communities they take place in.

---

I went from having a fairly decent appreciation for archaeology to absolutely loving it. I loved the hands on approach. I loved being in the field and actually touching history.

---

I think I've always known archaeology was important, but until I worked at Fairfield I don't think I understood to what extent. Archaeology reveals treasure troves of information, and is not as biased in subject matter as many historians choose to be (can we be done talking solely about kings please). Archaeology is hands on, its relatable, easily understandable at its basic levels, which I believe makes the information gathered a lot more memorable.

---

Archaeology and conservation is very important. Without it we would not know a lot about humans of the past.

---

It made me feel that they were even more important.

---

Participation in this program has definitely given me greater insight into the difficulty and importance of conservation.

---

This program allowed me to see the importance of the land to the people of the past. In terms of conservation, I was able to take my learning opportunities at Crow Canyon and apply them in my own state where I actively became a member of many environmental organizations especially through college.

It opened my eyes to the fact that there are many different ways to do archaeology and that it's beneficial to know/understand the reasoning behind each way.

---

I never thought of it before and after the program -I advocated for archeology in my community.

---

While working over the summer, I was on a construction site (or rather, what would soon become a construction site). There was so much information in the ground - artifacts, features in the hundreds, etc. - in just this one place that it made me wonder just how much there is out there, and how much could be destroyed if archaeologists and conservationists don't do something about it...

---

I was able to see the effectiveness of archaeology from an immediate forensics standpoint, and later, in my career as the means of uncovering artwork and artifacts of cultural significance and protecting them for generations of learning. Each piece is part of a larger puzzle and gives insight to the overall understanding of a culture or era.

---

I already thought it was important

---

On my first day I got to see a Native American settlement/graveyard, 17th century settlement, and early 20th century settlement and graveyard being eroded into the river at a rate of 4 feet a year. That was very impactful on showing me how archaeology could be a rescue operation (as well as participating in CRM projects with the group while I was in college - but I know other high schoolers who did that while in high school with these guys). It showed me how public archaeology can really start conversations with the community, connect people who might otherwise never interact, and really illuminate parts of history that otherwise are not very known. It showed me that archaeology wasn't just about finding cool old stuff, but learning about the past and how the past can affect the present and the future.

---

I had more awareness

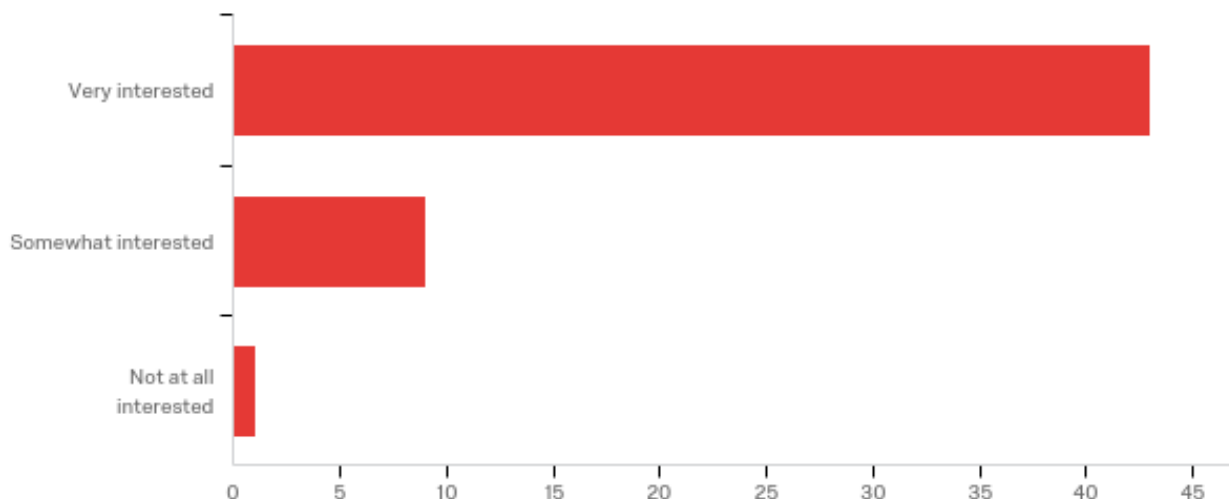
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It absolutely connected the act of doing archaeology to the act of historic preservation. I think before that I'd always thought of archaeology as an isolated event that happened just to find things, but being exposed to the holistic practice of archaeology made me realize how important it is to cultural and heritage preservation.

---

I think I was largely convinced of the necessity of archaeology already, but it definitely taught me how important and difficult it was to effectively record information from the site. It also taught me a lot about natural threats to sites.

**Q15 - How would you rate your interest in archaeology after participating in the program? Feel free to explain.**



#	Answer	%	Count
1	Very interested	81.13%	43
2	Somewhat interested	16.98%	9
3	Not at all interested	1.89%	1
	Total	100%	53

**Very interested**

It led to me studying archaeology in college. Additionally, it made me want to study other areas of archaeology so I participated on an excavation of a historical kiln site in Winston-Salem, NC and on a Mississippian mound in Natchez, MS.

This program solidified my interest in archeology/anthropology

It made me look very positively at archaeology as a field to work in one day

I love it!

I am very interested

I love archaeology. I don't actually want to work as an archaeologist but I am fascinated by it and I love reading updates.

I want to keep doing archaeology, not as a job, but as a lifelong hobby

I am planning to work for NASA as a space archaeologist, the remote sensing of archaeological sites.

I'm super excited to pursue archaeology!

I'm in grad school studying archaeology.

I'm currently pursuing a bachelor's degree in it!

### Somewhat interested

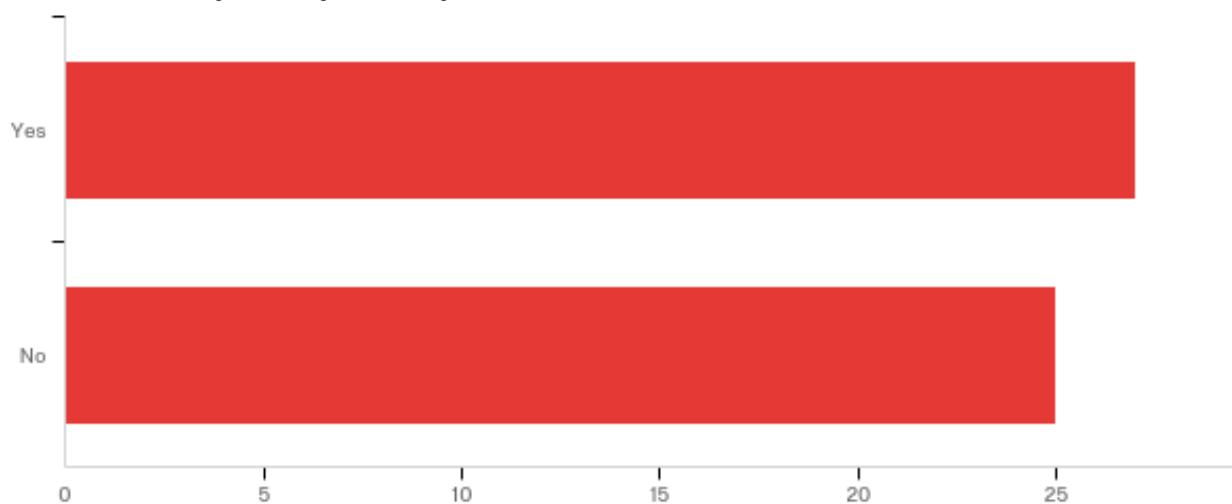
The life of an archaeologist seemed to be one which relied heavily on the whims of bureaucracy and politics which seemed kind of bleak to me.

I had such an amazing time at Crow Canyon, I don't have intentions of becoming an archaeologist but I wouldn't trade the experience for anything

### Not at all interested

I deal with it once its out of the ground.

### Q16 - Did this program spark any interest in the archaeology/history of your own community? Why or why not?



#	Answer	%	Count
1	Yes	51.92%	27
2	No	48.08%	25
	Total	100%	52

Yes

It led me to research the native americans who lived along the river in my hometown.

I had never heard of digs in Dallas or really knew anything about Dallas history which I became very interested in after seeing that even in the middle of a New Mexican desert there was history to be uncovered.

The community I live in has an interesting history.

I thought it would be interesting studying how the past impacts social norms in my community today.

I have always been interested in the history of New York State but going to Crow Canyon made me realize that there was so many things I didn't know about New York. So after attending I decided to work as a volunteer to better understand the history of where I grew up.

But I was also already interested.

I wanted to see if there were archaeological societies in my community

It pushed me to research gloucester county history

Because my community has built over all of its history, and I think that's really a shame.

I actually did an archaeological dig in my backyard... my parents weren't too happy about that one.

Yes, I now am more curious about the archaeological origin of Christianity

The group I worked with was small enough that a lot of what we did was "local history."

Archaeology is vital to understanding regional identity.

Took urban archaeology class at local college afterwards

The program was 3 hours away from my home, but afterwards, I kept an eye out for more local opportunities.

Yes - before I'd thought of archaeology only in terms of the exotic locales (and then I did an excavation in Colorado!).

Definitely! Since I worked on a mound site and grew up in St. Louis, on top of a huge Native city, I became much more interested in what archaeology could tell us about the local area.

No

This program was relatively close to where I lived. I always wondered what would have been found on the other side of the river (the Missouri side) but I never actually pursued these interest/questions.

Already knew much of it.



Most of my community is in an area where the history of my town is not considered relevant. Much of my town's history is kept in a "historic town hall".

Personally, I found the history of my community less captivating

Not much has happened in my community

It was confined to the university and not integrated into the community

Going from the Midwest to Colorado, I was left with the sense that archaeology was located in far-off places. It wasn't until I went to college that I gained a better appreciation for the history and archaeology in my own community.

I am much more interested in Greek/Roman archaeology

No, because I live in the middle of a city, but I think the history of the city I live in is interesting.

I think I was too set to get out of my own area

There aren't that many opportunities in my city.

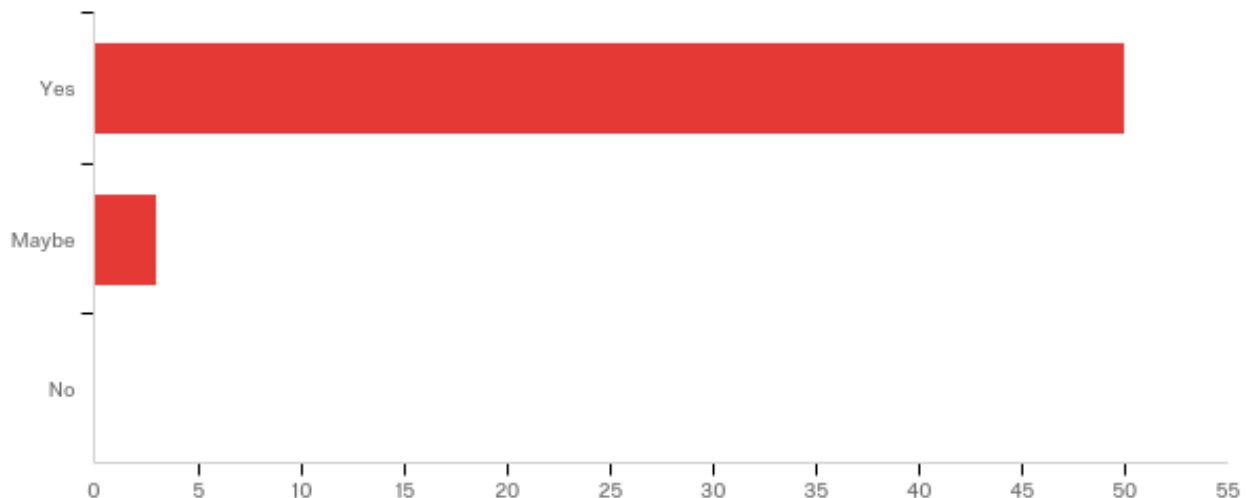
I was not sure how to pursue archaeology in my own community.

I've lived my hometown my entire life. I was bored with my hometown and I still am.

No it didn't

There are not many opportunities in archaeology or history near me, and I generally do not have an interest in historic archaeology

**Q17 - Would you advise K12 students to participate in a similar program?  
Feel free to explain your answer.**



#	Answer	%	Count
1	Yes	94.34%	50
2	Maybe	5.66%	3
3	No	0.00%	0
	Total	100%	53

## Yes

I would recommend students participate in excavations to learn more about the field of archaeology and see if it is something they want to pursue.

I think it is really important to get hands-on experience with something of interest. I am a very hands-on learner and this program really helped me understand what archaeology is and what goes into it, more so than I think I would have been able to grasp from a book at that age. It will also help you figure out if you actually really like doing the work associated with that topic. For example, someone may enjoy archaeological studies, finds, or theories interesting but they may not enjoy the fieldwork that is associated with archaeology. That may influence them to take a different approach to archaeology, such as lab work or doing analysis of the finds. This kind of experience can also really spark someone's interest as well.

Absolutely!

I think it's a great experience not just for kids looking into archeaology

If you can afford it. The program was really expensive and that can really be limiting to who gets to participate.

To educate on the work and effort required to preserve historical sites. Also to teach that Indiana Jones was not an archaeologist.

Yes, I think it would help people decide wether or not archeology was interesting to them.

Through the experience I got to see the real archeology is like not some Hollywood version and I was able to be exposed to the other element/similar paths I could take.

But only if they are actually interested

Yes. This was a great experience

Yes, yes, yes. Getting to learn more about this subject with other motivated, diverse individuals was so awesome

So many people in the program have gone into unrelated fields, but they all continue to talk about how impactful this program was on their world view.

Kids do a lot better with hands on learning, and that's what archaeology can offer.

This program offers any child great exposure into the world of archaeology and the mysteries of the past. Highly reccommend.

Explore beyond what your high school can offer you. A world is out there. Not everyone has to build a rocket or design a new computer to make a difference.

---

I would advise any K12 student who is remotely interested in archaeology to try out a field school in the same way I'd recommend that any student should get hands on experience in their field of interest before entering college.

---

It's a great and important way to find out if it is really something you're interested in. It's not for everyone and hands-on is the only way to know.

---

Maybe

if there was a similar program under alternative leadership

---

Crow Canyon is a great program for aspiring archaeologists but I'm not convinced it is the best educational model for all K-12 students

---

### **Q18 - Do you have any other remarks on K12 programs in archaeology or their importance (or hindrance) to the field?**

These programs help students to connect with history in an exciting hands on way and teaches them the importance of material culture and why it is studied.

---

I think it is beneficial to the field. It can spark younger generation's interests in archaeology as well as promote the ideas of how important it is to try to understand and respect the past.

---

It is very important for kids to get hands-on experience in the fields they're interested in. That's part of the reason why Crow Canyon is so valuable.

---

I think archaeologists need to be careful with making it look like archaeology is a skill that can be mastered on a Saturday or that all archaeology is appropriate for children to participate in.

---

I think the best part is that people become more aware of the importance of archaeology.

---

They should continue to teach kids not only the importance of preservation but also the techniques. As more and more jobs become digital, less and less jobs are hands on, so teaching kids that these kinds of jobs are still out there is very important for the future of archaeology and preservation

---

Money can be a huge barrier to these programs. Scholarships and financial support are crucial to allowing access and participation.

---

They are wonderful!

---

Most of my friends who I met during the program are not studying archaeology now, but it definitely impacted their future choices of career and opened their mental horizons. It also gave me an opportunity to talk to an archaeologist and set me on the best possible path to becoming an archaeologist.

---

I feel strongly that while K-12 archaeological education is important, we spend too much time trying to create archaeologists instead of educating the broader public about the benefits of archaeology as a discipline. While excavation is an engaging educational method, we need to ensure students are understanding the broader context of archaeology, including the

contributions of archaeological data, the meaning of archaeological interpretations, and the ethical issues associated with our discipline.

---

I think that these programs are really important because it gives opportunities to experience new things and get a better appreciation for something you are passionate about. Without this experience, an individual may not figure out if archaeology is their true passion or not. Being able to find this out makes figuring out college and a career so much easier.

---

I think that participation in a program that exposes youth to archeology, particularly somewhere near their home, can have a significant impact on the child and their perception of their surroundings and their sense of their place in history. It allows them to see science in action. It allows them to see teams working together. It allows them to see different branches of science working collaboratively. And, frankly, some the artifacts and the stories they tell are pretty cool. I think the potential positives of having kids involved with digs/research/etc far outweighs any potential negatives of having kids excavate actual archeologic sites. In fact, the point is that it is a real site and they are doing real work. That's what creates the investment and the excitement. We won't all end up as archeologists, but we'll have a lot more respect for our past.

---

I believe that students interested in this field definitely do need to get their "hands dirty" before college and explore this field. Field archaeology isn't for everyone, and the number of my peers I've encountered who began college having never experienced field work before have all said on one occasion or another that if they had, it may have affected their decision to pursue this path.

---

I think that these programs can help train people at a young age to learn techniques and help learn the necessity of archaeology.

---

Such importance! Wish we had more funding for such things. They are amazing and enriching opportunities!!

---

It is really good to have these programs because a lot of students dont realize that this is an option, and those who do, have so fee resources to try it out. Im so grateful for this experience and to be able to know going into college where i belong.

---

Archaeology seems to be going by the wayside. People aren't as interested in it as they used to be. I think these programs get kids interested and some of them even go on to be archaeologists.

---

It is important to spark an interest in archaeology among younger generations, but it is equally important to find a way to do so without detracting from the work at hand. At Crow Canyon, the students were only doing 10-20% of the work done during the time we were there and there were designated employees to take us on field trips, so the archaeologists employed on the project were able to complete the important work they were doing. The project I've worked on in Ireland does not have these practices in place: Students complete 50-60% of work done, often without much experience, so the work is slow and done impartially or not at the caliber needed. The project has continuously felt like it runs short on time at the end of the field season because so much time is taken from all employees and staff volunteers to teach the students.

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You don't have to have a doctorate to be a good archaeologist, or to learn something from a dig. If a chance for learning is there, don't waste it; teach. You might inspire the next generation of archaeologists.

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It's important to give scholarships for these programs for the under-privileged students to be able to attend as well.

---

Even very young children can participate in archaeology. I have worked with kids as young as 2 in the lab washing artifacts and children as young as 4 in the field. Sometimes these younger children can be more interested and more impacted by archaeology programs than older high schoolers. In fact, it was a mock excavation on a field trip in 4th grade that first sparked my interest in archaeology.

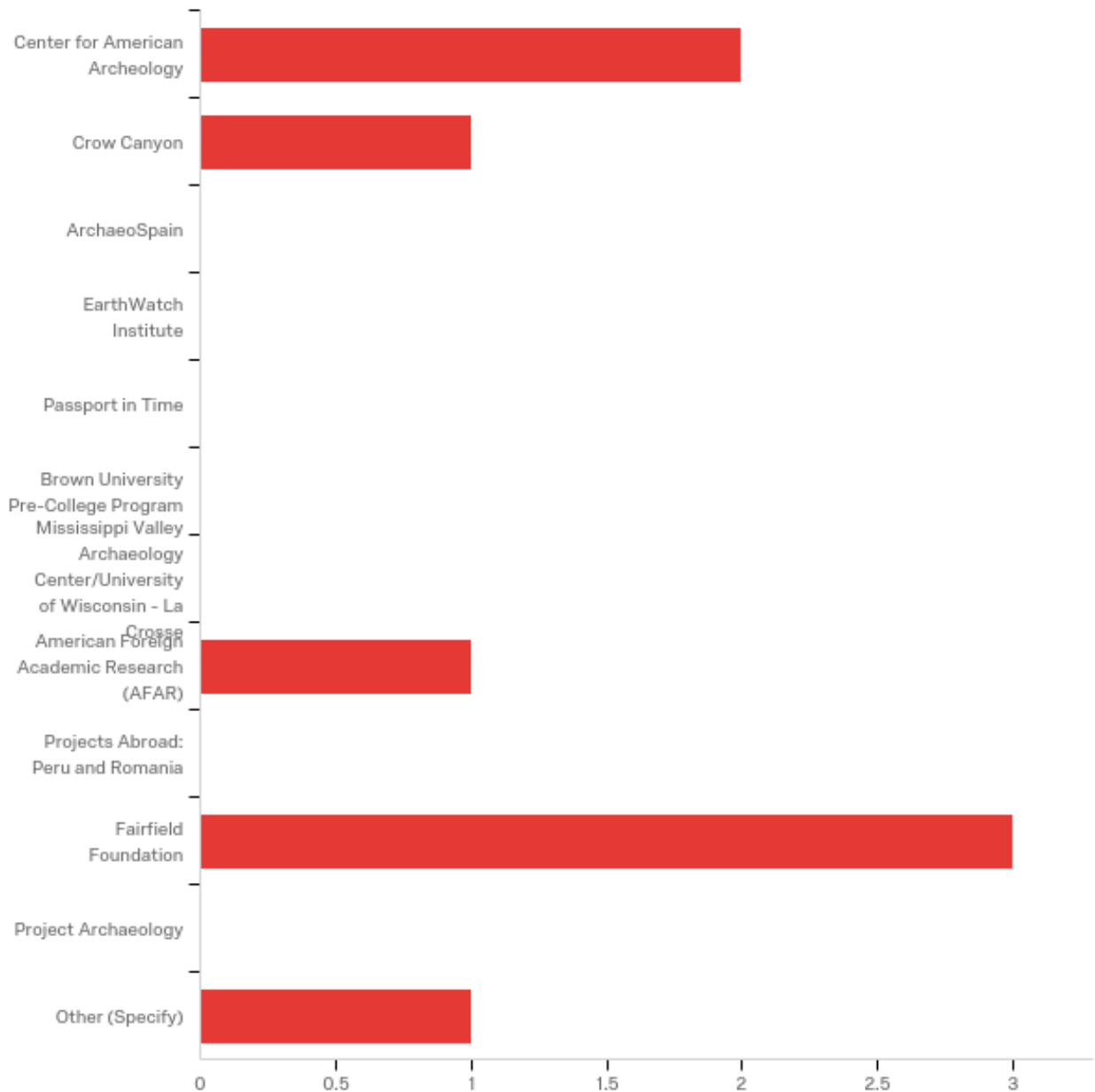
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I do wish that my experience had been a little more theoretically technical - I don't think I realized archaeology was a subfield of anthropology until college or the history it had in the United States and the world at large. Maybe just a broad lecture on "What in the world is archaeology" would have sufficed in filling in that essential broad background knowledge.

## APPENDIX 2: COORDINATOR SURVEY REPORT

### *Impacts of Archaeology Education Programs - Coordinators Survey*

**Q1 - What archaeological program did you coordinate? (Select the appropriate organization.)**

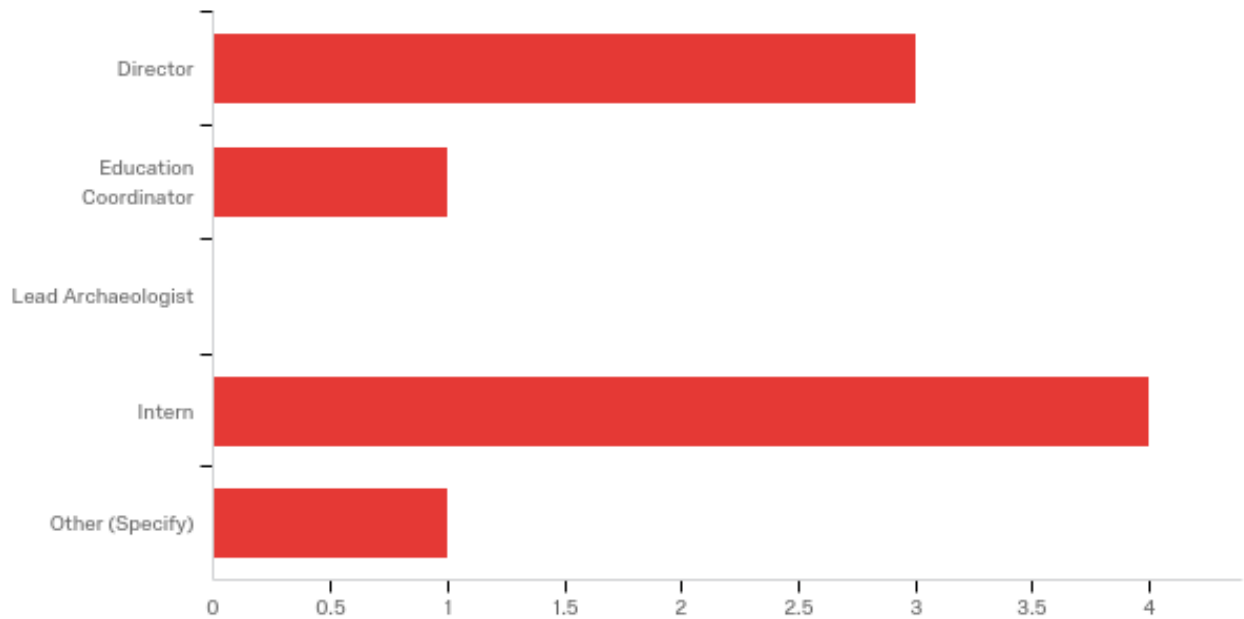


#	Answer	%	Count
1	Center for American Archeology	25.00%	2
2	Crow Canyon	12.50%	1
3	ArchaeoSpain	0.00%	0
4	EarthWatch Institute	0.00%	0
5	Passport in Time	0.00%	0
6	Brown University Pre-College Program	0.00%	0
7	Mississippi Valley Archaeology Center/University of Wisconsin - La Crosse	0.00%	0
8	American Foreign Academic Research (AFAR)	12.50%	1
9	Projects Abroad: Peru and Romania	0.00%	0
10	Fairfield Foundation	37.50%	3
12	Project Archaeology	0.00%	0
11	Other (Specify)	12.50%	1
	Total	100%	8

Other (Specify)

University of South Alabama Archaeology Museum

**Q2 - What was your position in the program? (Select all that apply.)**



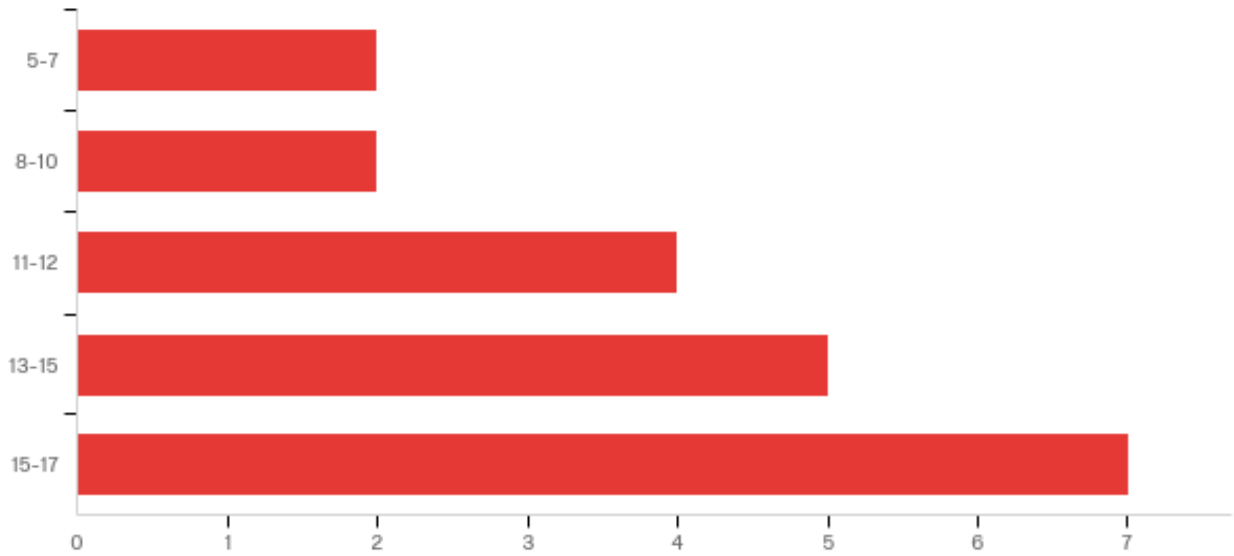
#	Answer	%	Count
1	Director	33.33%	3
2	Education Coordinator	11.11%	1
3	Lead Archaeologist	0.00%	0
4	Intern	44.44%	4
5	Other (Specify)	11.11%	1
	Total	100%	9

Other (Specify)

Student Assistant

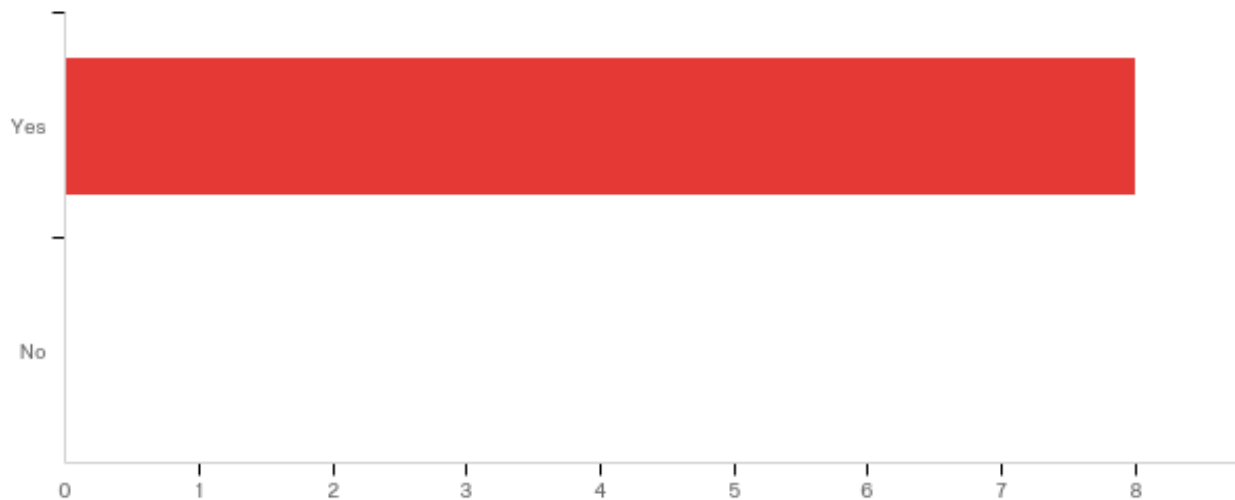


### Q3 - What was the age range of participants? (Select all that apply.)



#	Answer	%	Count
1	5-7	10.00%	2
2	8-10	10.00%	2
3	11-12	20.00%	4
4	13-15	25.00%	5
5	15-17	35.00%	7
	Total	100%	20

**Q4 - Would you say this age group is appropriate for this type of program?  
(Feel free to explain your answer.)**



#	Answer	%	Count
1	Yes	100.00%	8
2	No	0.00%	0
	Total	100%	8

Yes

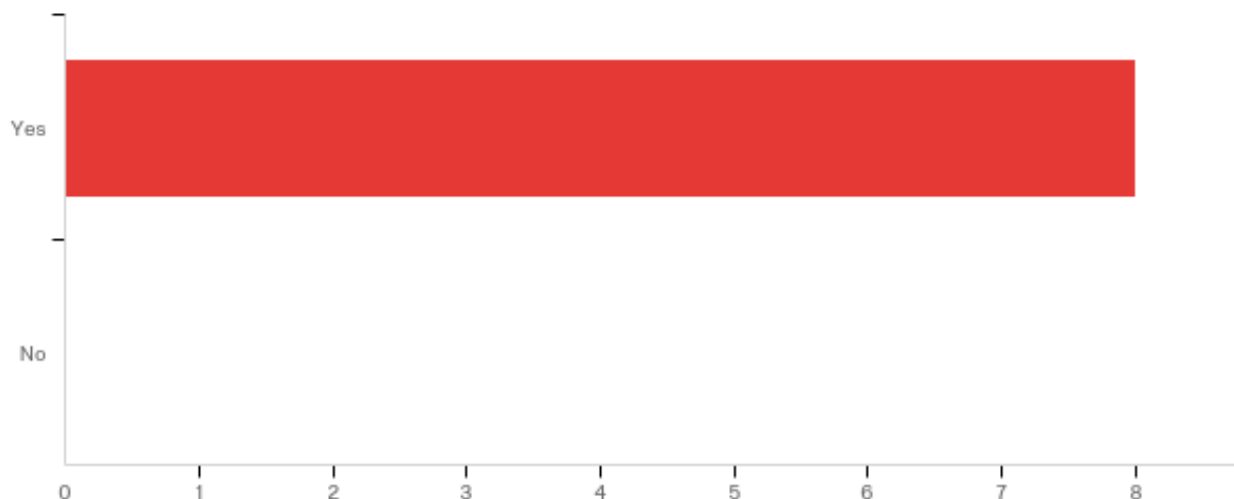
Different activities for different ages, but all archaeology and hands on

Our programs are different so different age groups are suited best for different projects.

Overall, we are confident that the age group participating in the projects are appropriate.

The experience was carefully crafted for advanced High School students and undergraduates, so the expectations were reasonable, and the challenges manageable.

**Q5 - Overall, did students seem actively interested in this program? (Feel free to explain your answer.)**



#	Answer	%	Count
1	Yes	100.00%	8
2	No	0.00%	0
	Total	100%	8

Yes

Obviously not all, but there were always a handful that were

Yes. We are very deliberate in describing the programs before students commit to participate so we have overwhelming engagement. The students not only participate during the actual field work but they also budget a large amount of time for preparation and a large population end up disseminating the results at conferences and publications. They take ownership.

and no. Depended on their mood, the individual student, and the weather.

Especially those who voluntarily joined the program (compared to those whose parents signed them up because it was "good for them."

While the majority of the students did not pursue archaeology, they did stay in touch with the Fairfield Foundation and often found other ways to support us and archaeology outside of a vocation.

## **Q6 - Please describe a typical day for the students during your program.**

For the day camp for upper elementary and middle school students, they would arrive in the morning, help dig and screen plowzone, break for lunch, and switch off in the afternoon between washing artifacts they had found in the morning and continuing to dig/screen. There was a fieldtrip to Jamestown one day as well.

---

We have four different field programs so I encourage you to visit [goafar.org](http://goafar.org) to see daily schedule specifics.

---

Students would sit in groups at a table with a bag of clean modern garbage that represented a single household. Each group would go through all of the items in the bag and make a conclusion about who lived in the household based on who the products could have been used by (women, men, children, etc.) This garbology project was used to get students to think like an archaeologist. After the tasks were completed by each group, they were given authentic historical artifacts to do the same with.

---

Field day: Excavation, including screening, forms, mapping. Lab day: washing, identifying artifacts, water screening. Evening lectures, some experimental archaeology demonstrations.

---

Come in early in the morning and remove plowzone and screen for about 3 hours. Some students worked doing backfill.

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Early rise, breakfast, field work/lab work, lunch, field work/lab work, break, dinner, lab work and/or activity related to archaeology (e.g. flintknapping), open time before bed.

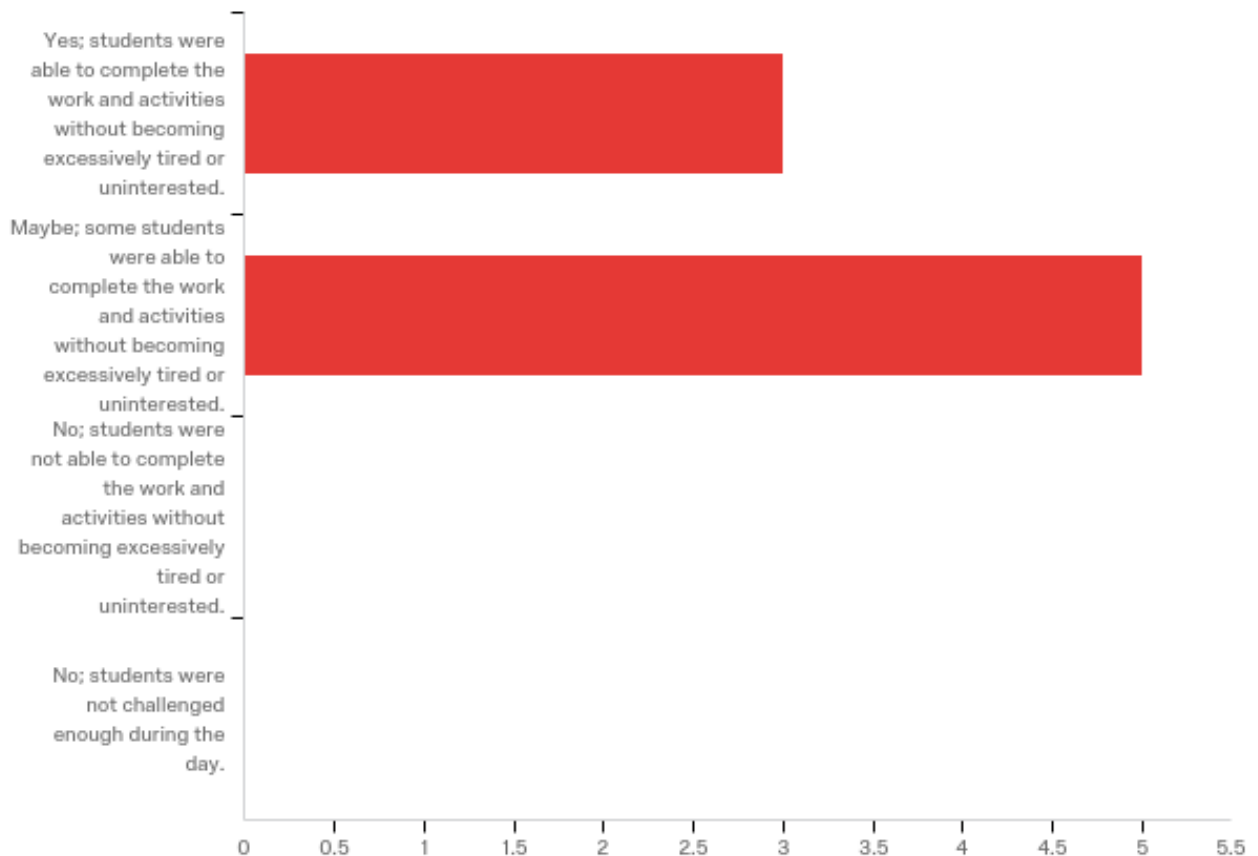
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7 am breakfast 8 am - 10:15 am fieldwork 10:15 am - 10:30 am cookie break 10:30 am - 12:15 pm fieldwork 12:15 pm - 1 pm lunch 1 pm - 4 pm fieldwork 5pm - 6pm dinner 6pm - 7pm Free time 7pm - 9 pm lab work/guest lecture 9pm - 10pm Free time

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After staying with a host family, they would be picked up by a staff member, driven to the site or the lab, and work alongside the staff. Activities were hands on. After initial instruction, they mirrored what the staff was doing, asked questions, and became essentially part of our crew. Timelines were set to allow for in-depth conversation. Lunch was typically on site and the afternoon often repeated the morning, but occasionally brought us to a different site; tasks often stayed static on an individual day, but might change from day to day (lab work, archives, public outreach programs, etc.). Interns were driven to their host family at the end of the day, except for Tuesday nights, when they would join us for our weekly lab nights, washing artifacts, doing restoration work on our headquarters, or generally hanging out with our other volunteers. Some evenings incorporated group meals.

**Q7 - Was the daily schedule and workload appropriate for the students? (Feel free to explain your answer.)**



#	Answer	%	Count
1	Yes; students were able to complete the work and activities without becoming excessively tired or uninterested.	37.50%	3
2	Maybe; some students were able to complete the work and activities without becoming excessively tired or uninterested.	62.50%	5
3	No; students were not able to complete the work and activities without becoming excessively tired or uninterested.	0.00%	0
4	No; students were not challenged enough during the day.	0.00%	0
	Total	100%	8

Yes; students were able to complete the work and activities without becomin...

Things are always changing and every team is different but we have managed to create a productive and engaging balance in our recipe.

Tasks might be shifted on the subsequent day if it was noticeable that the intern was not performing well or having a good time.

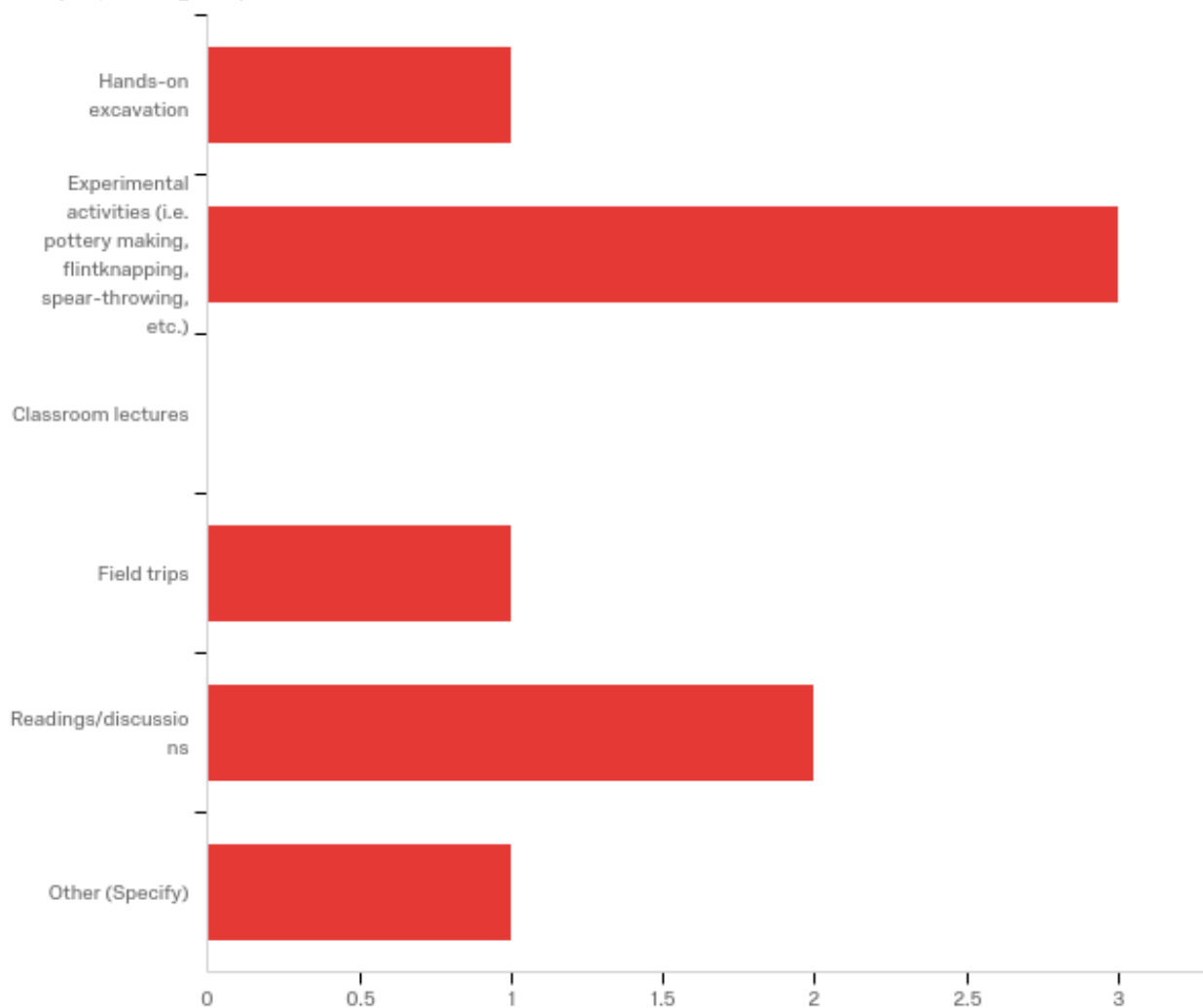
Maybe; some students were able to complete the work and activities without...

For most yes, but some were obviously there because their parents wanted them to be, and they were hard to keep interested

This varies between "maybe" and "yes". Some students struggled with the repetitiveness of the activities and work day, especially during inclement weather. Others really immersed themselves into the routine. The latter group tended to be the students who had a strong initial interest in archaeology.

Some students were not acclimated to the humidity and manual labor aspects of excavation and had issues because of it.

### Q8 - Which types of activities would you do more of if given a chance to change your program?

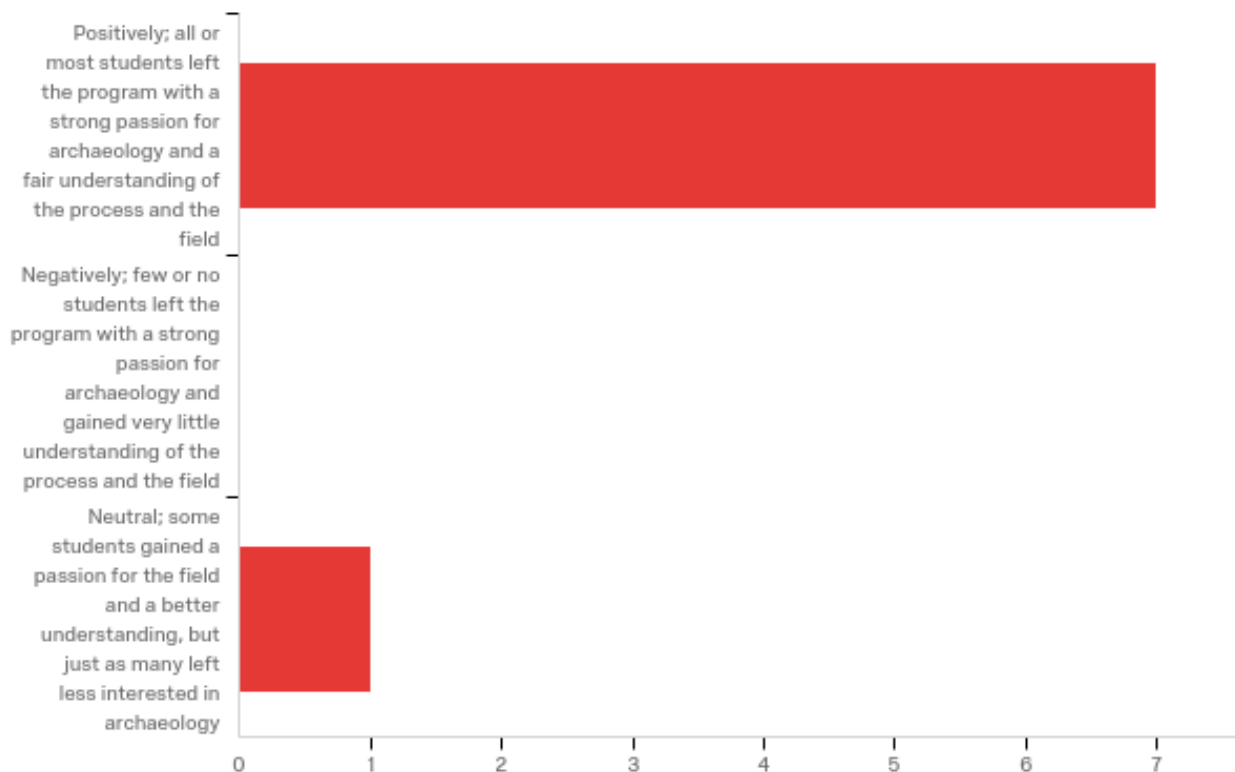


#	Answer	%	Count
1	Hands-on excavation	12.50%	1
2	Experimental activities (i.e. pottery making, flintknapping, spear-throwing, etc.)	37.50%	3
3	Classroom lectures	0.00%	0
4	Field trips	12.50%	1
5	Readings/discussions	25.00%	2
6	Other (Specify)	12.50%	1
	Total	100%	8

#### Other (Specify)

I would have liked to expand the academic/intellectual aspects of the program to get into some of the theories and philosophies behind the practice. I think for some students, this would have done a better job of explaining the basics of "why?". Time usually proved to be a constraint.

**Q9 - How do you think students' understanding of and appreciation for the importance of archaeology changed after the program? (Feel free to explain your answer.)**



#	Answer	%	Count
1	Positively; all or most students left the program with a strong passion for archaeology and a fair understanding of the process and the field	87.50%	7
2	Negatively; few or no students left the program with a strong passion for archaeology and gained very little understanding of the process and the field	0.00%	0
3	Neutral; some students gained a passion for the field and a better understanding, but just as many left less interested in archaeology	12.50%	1
	Total	100%	8

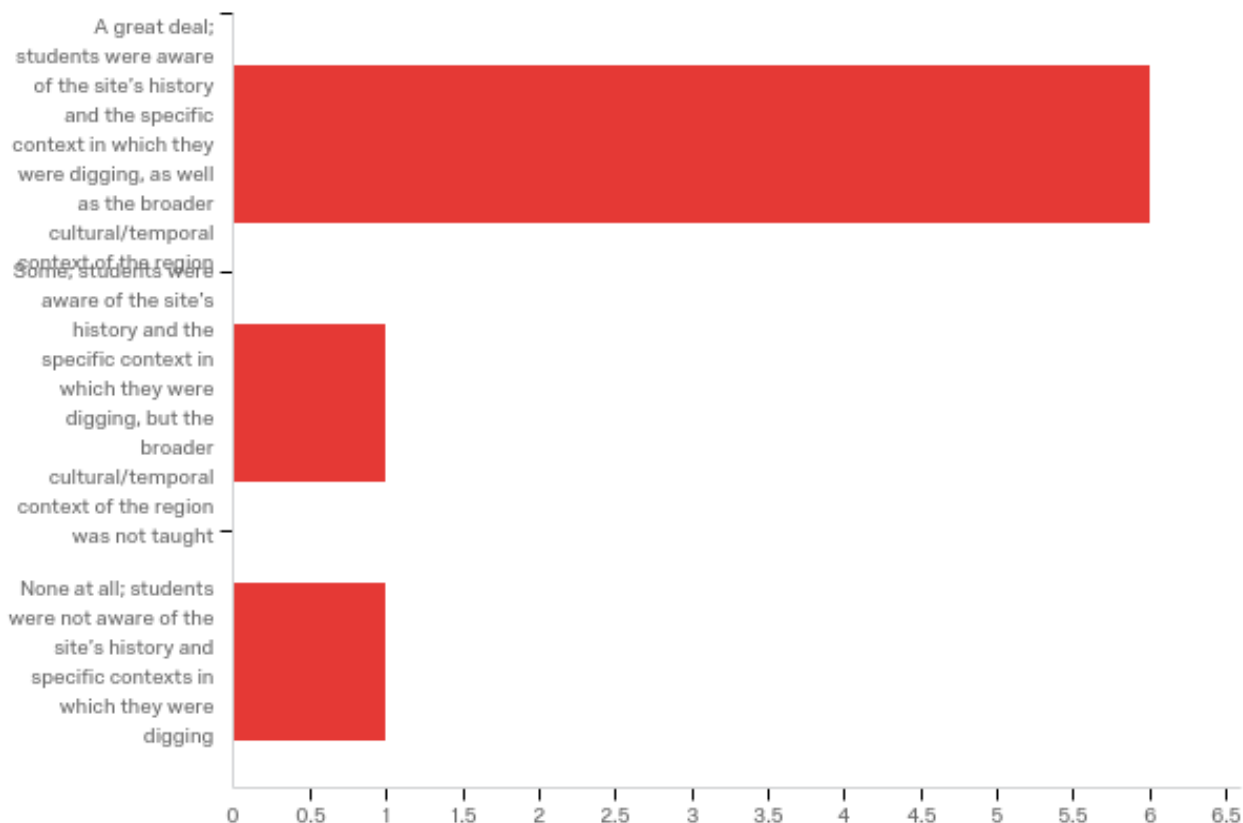
Positively; all or most students left the program with a strong passion for...

Definitely

And often confirmed whether they were interested in pursuing it as a vocation, which I believe is crucial.



**Q10 - How much emphasis was placed on the specific research being carried out by the program? How much local archaeology did the students learn? (Feel free to explain your answer.)**



#	Answer	%	Count
1	A great deal; students were aware of the site's history and the specific context in which they were digging, as well as the broader cultural/temporal context of the region	75.00%	6
2	Some; students were aware of the site's history and the specific context in which they were digging, but the broader cultural/temporal context of the region was not taught	12.50%	1
3	None at all; students were not aware of the site's history and specific contexts in which they were digging	12.50%	1
	Total	100%	8

A great deal; students were aware of the site's history and the specific co...

The research element of our programs are really no different than other college-level field schools so they are very prepared and are actively working on all aspects of the project from curriculum preparation to report production.

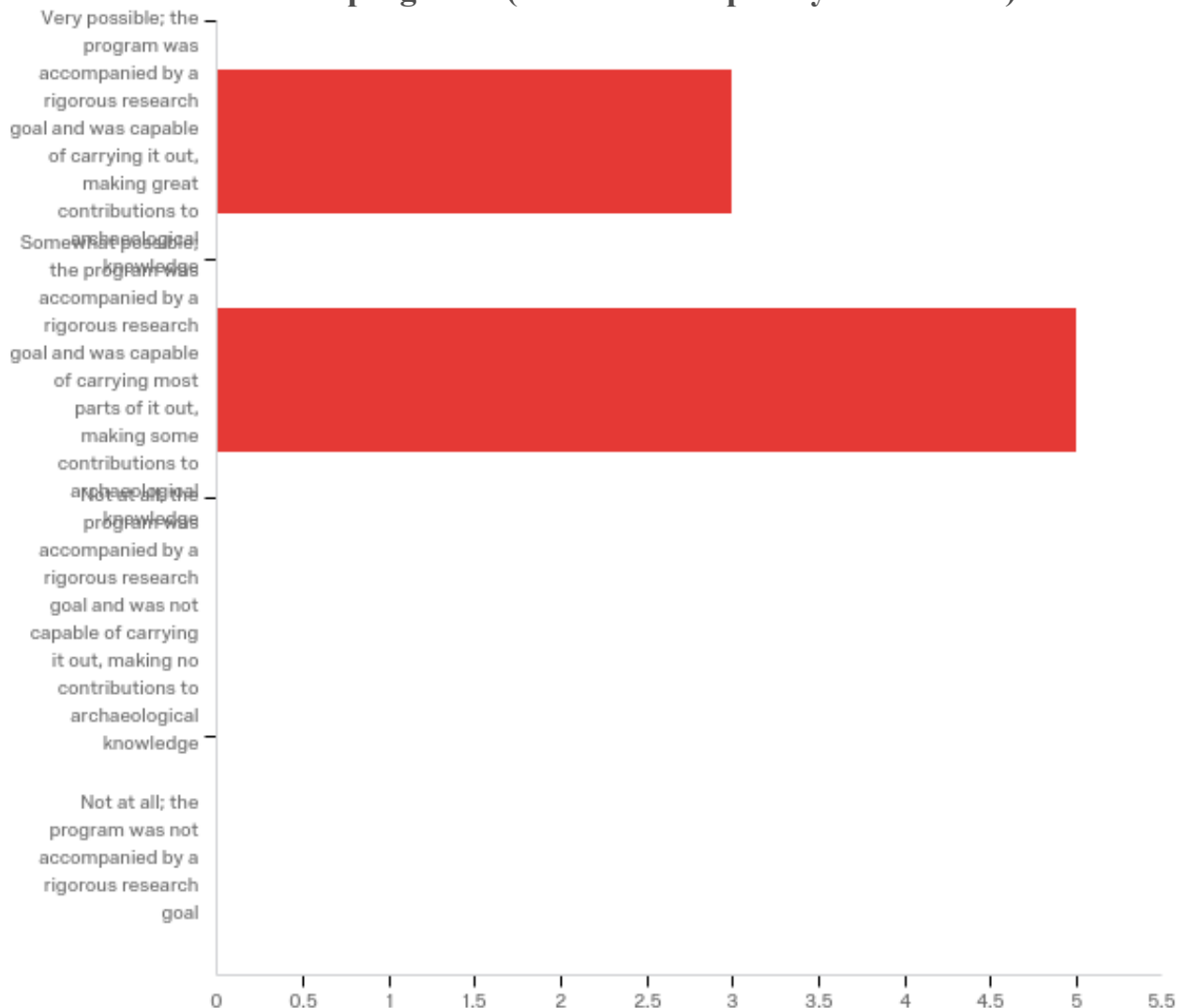
We tried to give the students a broader perspective, but this is sometimes lost in translation given the absence of the theoretical/contextual explanations I referenced in an earlier question. Hindsight truly is 20/20, though you have to be very aware of the intellectual development stage of your audience; very few 10 year olds are equipped for an in-depth theoretical discussion!

This is often driven home through other activities as well, including site tours, archival research, and occasional lectures.

None at all; students were not aware of the site's history and specific con...

This program was not designed to teach about a specific site.

**Q11 - To what extent was it possible to achieve archaeological research goals over the duration of this program? (Feel free to explain your answer.)**



#	Answer	%	Count
1	Very possible; the program was accompanied by a rigorous research goal and was capable of carrying it out, making great contributions to archaeological knowledge	37.50%	3
2	Somewhat possible; the program was accompanied by a rigorous research goal and was capable of carrying most parts of it out, making some contributions to archaeological knowledge	62.50%	5
3	Not at all; the program was accompanied by a rigorous research goal and was not capable of carrying it out, making no contributions to archaeological knowledge	0.00%	0
4	Not at all; the program was not accompanied by a rigorous research goal	0.00%	0
	Total	100%	8

Very possible; the program was accompanied by a rigorous research goal and...

We have contributed a great deal to every site that we have worked. In addition to the research, we publish every year's results and provide funding for major site preservation in the areas we excavate.

Not only did interns help accomplish major research goals, many of them turned the research they did into research papers they wrote.

Somewhat possible; the program was accompanied by a rigorous research goal...

By catering to participants, research is slowed and slightly compromised sometimes

My primary focus was in the physical training of the field school rather than pursuing a specific research goal.

We had to switch excavation sites the last week, but students made great strides at the first site.

## Q12 - Please list the major strengths of your program.

Actual excavation experience for local middle school students not simulated digs. A lot of the students attended the church that was related to the site so it was their own history and they were interested in it.

I'm willing to discuss if you would like to arrange a conversation. Mat Saunders - [mat@goafar.org](mailto:mat@goafar.org) or [mat.saunders@gmail.com](mailto:mat.saunders@gmail.com)

Students were able to understand what an archaeologist does and why they do archaeology.

Native American collaboration, split up by appropriate ages, hands on, broader concepts reinforced with lectures

It got locals aware and interest in the history of the area and highlighted the benefits of archaeology.

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Hands-on, physical engagement. The site was not "precious" in that we forbade students from getting into the units and doing the work. Yes, we attempted to provide the proper instruction in technique and approach to maintain scientific integrity, but didn't have a total meltdown when mistakes occurred. That's when deeper learning takes place.

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Variety; hands-on experience; strong personal support; networking; critical thinking and discussion.

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### **Q13 - Please list the major weaknesses of your program.**

We could only accommodate local students and often times not nearly as many as wanted to sign up for the camp.

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I'm willing to discuss if you would like to arrange a conversation. Mat Saunders - mat@goafar.org or mat.saunders@gmail.com

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The program did not talk about the whole process of excavating.

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There were not many fascinating artifacts to show off. The weather and bugs could be quite miserable also.

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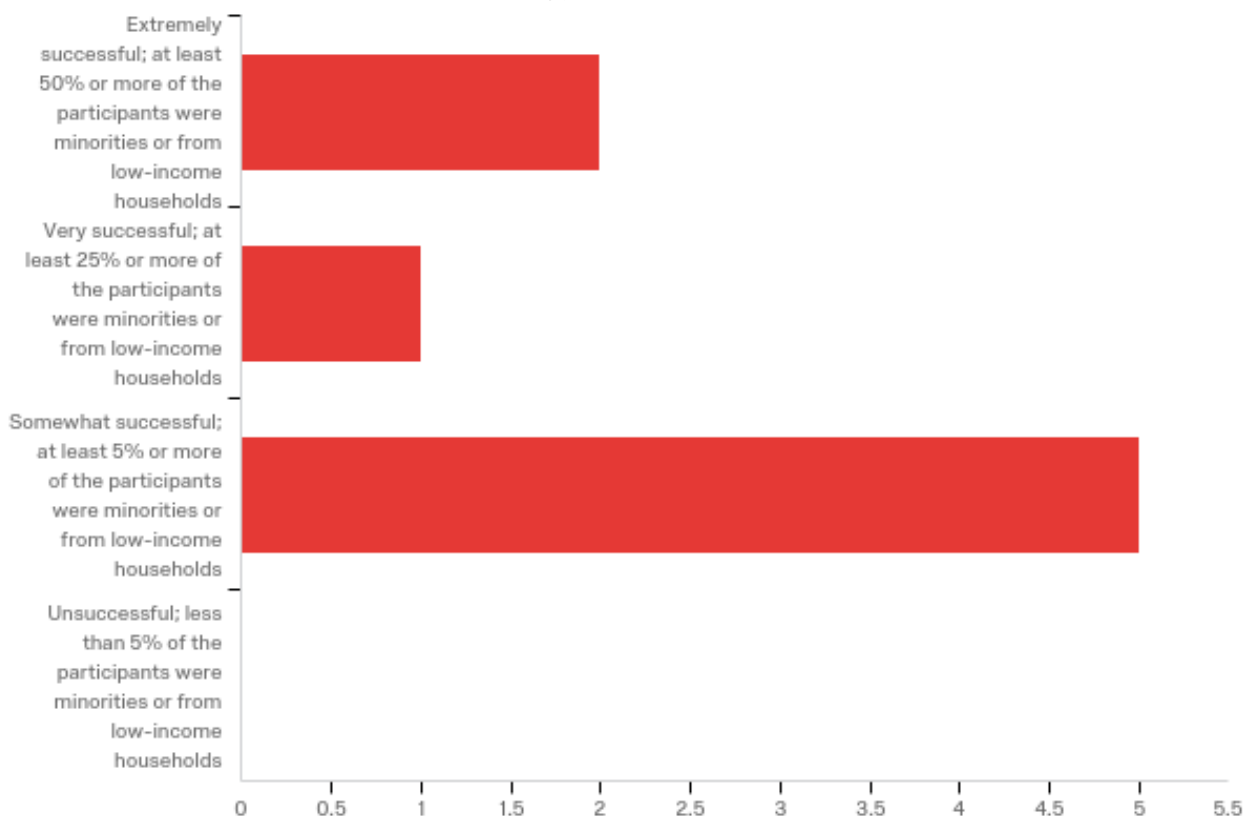
I advocate for older students (middle school and high school) being given the chance to produce authentic contributions to science. Unfortunately, staffing and time didn't allow us to pursue some of the follow-up programs that had been done in the 1980s - 1990s (science fairs, presentations at scholarly events, working with staff at the student's school, etc.). That lack of connection/follow through was disappointing to me.

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Sometimes excessive variety detracts from the learning experience; discipline with completing projects and serving as role models for interns in that way.

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**Q14 - What was your success rate at including students from marginalized backgrounds - minorities (including all non-white races, women, and members of the LGBTQ+ community), low-income households, etc.?**



#	Answer	%	Count
1	Extremely successful; at least 50% or more of the participants were minorities or from low-income households	25.00%	2
2	Very successful; at least 25% or more of the participants were minorities or from low-income households	12.50%	1
3	Somewhat successful; at least 5% or more of the participants were minorities or from low-income households	62.50%	5
4	Unsuccessful; less than 5% of the participants were minorities or from low-income households	0.00%	0
	Total	100%	8

Extremely successful; at least 50% or more of the participants were minorit...

There was one week in particular in which the majority of students identified as LGBTQ+

Somewhat successful; at least 5% or more of the participants were minoritie...

Minority no, low-income yes

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Historically this figure was much higher. In fact, AFAR was founded to help low-income families and over 80% of the students had financial need. We currently operate out of a private college prep school so the numbers are much lower. I would say 15% receive financial aid. I do not track minority statistics but our percentages are consistent with the school.

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Crow canyon has funds specifically to bring minority (esp Native American) students to campus but due to price per student they do not make up more than a few students each session.

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The years we did Museum Tech Academy, ca. 2004-2008 gave us the opportunity to work with urban youth (Springfield, IL). That is one of the programs that connected us to minorities and low-income households. I think the rest of our participants generally had the means to provide the opportunity for their child (though scholarship support helped, it wasn't means tested).

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We were successful in attracting students regardless of income by providing fee waivers and free lodging; while not promoting specifically to the groups listed above, we often received interest from and incorporated LGBTQ+ members; women are by far the majority of our interns; only a handful of non-white participants to date, though.

### **Q15 - What was your strategy for recruiting students from marginalized backgrounds?**

I was not involved in this.

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I'm willing to discuss if you would like to arrange a conversation. Mat Saunders - [mat@goafar.org](mailto:mat@goafar.org) or [mat.saunders@gmail.com](mailto:mat.saunders@gmail.com)

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Offering local schools field trip options

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See above. As an intern I did not work in this capacity.

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The Museum Tech Academy program (NSF grant funded) was specifically designed for underrepresented audiences. Outside of that program, we didn't have a plan to recruit from marginalized backgrounds. I attribute it to inadequate staffing, both in terms of grant preparation and presentation of program.

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We have no distinct strategy, other than presenting ourselves as open to everyone and interested in discussing any topic. This needs to be improved on, as a more diverse group of interns would lead to a more successful program with relevant research goals, audiences, etc. Our focus on low or no-cost options continues to be part of our program's identity and we've resisted making the internship program contingent on fees or even revenue neutral because we see it as a core element of our organization's mission.

**Q16 - Do you have any final remarks on the best practices for coordinating K12 programs in archaeology or their effect on the field?**

I'm willing to discuss if you would like to arrange a conversation. Mat Saunders - [mat@goafar.org](mailto:mat@goafar.org) or [mat.saunders@gmail.com](mailto:mat.saunders@gmail.com)

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Hands-on activities have been more successful than just having reading material.

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I think it's an essential experience for students who are interested in pursuing any time of research-based career, and I think programs are most effective when coordinated by a team (program, schools, community, etc.). Participation in a program is one thing; when it's part of a larger effort to connect the student to the richness of scientific pursuit, I think its impact is greater and deeper. In an ideal world, participating students would have a pre-field experience, participate in the project, and then have some type of post-project activity, or options for additional experiences, etc.

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Involving kids in archaeology is essential to our vocation's success, but also a fantastic way to involve people in understanding ourselves through looking at the past. It is relevant to most STEM and humanities classes and the experiences we create are lifelong and significant, affecting how others (and ourselves) look at the world around us.

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