

Abstract

Our 2012 article, “Putting Anthropology Into Schools,” argued that integrating anthropology and archaeology into K-12 schools must involve teacher preparation, state certification requirements, and in-service training. National anthropology and archaeology organizations’ decades-long push for the integration of their disciplines into schools was outlined but assessed as relatively limited compared to successful efforts in psychology, sociology, and economics. Some progress did occur, traced primarily to the National Science Foundation and other funders, alongside committed individuals with well-developed curriculum materials. Our 2019 publication includes the original article followed by an UPDATE outlining developments since 2012. Reports from the National Academies and the American Anthropological Association are discussed alongside efforts by the Society for American Archaeology and the Archaeological Institute of America. Highlights also include initiatives to align anthropology and archaeology with national standards and global education goals; online resources for teachers and homeschooling parents; and informal, out-of-school opportunities including museum programs.

At a Montgomery County, Maryland high school, seniors in an AP biology class stage an imaginary 1890s debate focusing on Darwin’s theory of evolution by natural selection, while in a Cheyenne, Wyoming 9th grade social studies class, students engage in a simulation of two “societies” meeting one another for the first time but unable to communicate because their body languages appear so alien to one another. Back in Washington, D.C., at the National Zoo, 6th graders divide into small groups to conduct assigned observations of primate language, locomotion, and mother/infant behavior. The teachers of these three classes do not know one another, but each participated in the NSF-funded or NEH-funded *Anthropology For Teachers Program*.

Because teachers in schools influence such large numbers of students, they constitute a constituency of great importance to the wider public understanding of anthropology. To anyone who has ever taught anthropology to middle- and high-school students, the discipline’s impact on young people’s intellectual and social development is undeniable. Because of anthropology’s positive influence on student motivation and understanding of the modern world, some educators become committed to bringing anthropology to their classrooms and then further dedicate themselves to promoting the discipline’s even wider dissemination. These educators join a long-standing effort to integrate anthropology into the K-12 school curriculum.

Today, junior high and high schools with a separate anthropology course appear to be primarily private or independent schools, charter/magnet schools, or public schools in wealthy school districts. The essential ingredient is almost always an energetic teacher with some anthropology training. Anthropology at Fairfax County, Virginia's Thomas Jefferson High School of Science and Technology (TJ) provides an instructive case study. TJ opened in 1985; two years later the Social Studies department added a one-semester Anthropology elective, due to the strong advocacy of a single teacher, Dolores Steinhauer, a graduate of the 1978-1982 George Washington University/Smithsonian Institution Anthropology for Teachers Program.

A year later TJ hired Carolyn Gecan, a history teacher with anthropology training, to teach the anthropology elective to 10-12th graders. Given complete freedom to develop her semester course -- with textbooks, readings, films, field trips, guest speakers, lab activities -- Gecan taught anthropology every semester for 23 years, often to 32 students in each of two or sometimes even three sections. For many years, a popular field archaeology unit culminated with a mock dig at an old sanitary landfill in Fairfax County. Students read classic ethnographies, studied human evolution, and conducted primatology zoo labs. Visiting forensic anthropologists brought in bones to teach Gecan's classes. A few years prior to her retirement in 2012, the school system hired Amanda Hurowitz to continue the course, although budget restrictions, state graduation requirements, and competing social studies electives reduced the number of enrolled students (Figure 1).



Figure 1. Amanda Hurowitz and *AnthroNotes* editor Carolyn Gecan examine artifacts at a Smithsonian Department of Anthropology teacher workshop. Photo courtesy of Carolyn Gecan.

The record of anthropology in schools, like this TJ case study, illustrates teachers' earnest efforts, low national visibility, limited resources, and scant assistance provided by national anthropology associations. This story unfortunately also reflects the low value that professional anthropologists have placed on putting anthropology into schools.

Why should anthropology exist in pre-college classrooms? For those who believe in putting anthropology into schools, the answer is obvious: anthropology motivates and excites students while broadening their perspective; it helps young people deal with differences at home and understand international differences abroad. Increased awareness of the discipline encourages students to pursue the subject further in college, and such study undoubtedly would increase the public's understanding of anthropology. To put anthropology into schools, effort must be made to make anthropology a part of teacher preparation programs, certification requirements, and in-service training. To bring about such change, there must be continuous and sustained support at the national level on the part of the national anthropological associations.

A Smithsonian Case Study

For almost thirty-five years (1978-2012), several Smithsonian staff members mounted a continuous, concerted effort to promote the teaching of Anthropology in Schools. Encouraged by the National Science Foundation's "Pre-College Teacher Development Program," the Smithsonian initially undertook a major initiative in anthropology teacher training in cooperation with the Department of Anthropology at the George Washington University and later, with NEH funding, with the Anthropology Department at the University of Wyoming. Along with the publication, *AnthroNotes*, the two Smithsonian Anthropology for Teachers programs continued to provide one model demonstrating how museum and university anthropologists can work together with teachers and schools to offer anthropology teacher training (Selig 1997; Selig and Lanouette 1983). As a result of this effort, a small cadre of teachers began to take an anthropological approach to the teaching of social studies, science, literature and the arts.

The Anthropology for Teachers Program, both in Washington, D.C. and in Laramie, Wyoming, offered a university course specifically designed for teachers. This course focused on a variety of monthly topics since each class included teachers representing a number of grade levels and subject matter teaching. The course carried university graduate level credits. The Anthropology for Teachers course was offered for four years in Maryland, Virginia, and the District of Columbia. Later it was offered to teachers representing every school in Laramie, Wyoming, and every junior high and high school in Cheyenne, Wyoming. Many of these teachers incorporated anthropology and museum resources into their curriculum for years afterwards.

During the Wyoming program, a linguist at the University of Wyoming wrote about the power of anthropology, to help both teachers and students understand their own cultures, in addition to the cultures of other societies:

“The most important aspect of this teacher training program has been its making all of us aware and proud of the rich resources right here in our own community for understanding some of the most important anthropological and humanities questions ever posed: Where and when did humans first come to the New World? How do cultures change and adapt to varying environments over time and around the world? How has language shaped local cultures? We didn’t need to go very far to learn about and to discuss these issues -- teachers and scholars together.”

Cultural anthropologists have often been seen as “cultural outsiders,” both in their own culture and the cultures they study. This “outsider” role helps anthropologists bridge the worlds of anthropology, teachers and schools, enabling them to act as effective cultural brokers, moving from their discipline into the arena of schools, bringing the richness of each to the other.

Although funding eventually ceased for the two teacher training programs, *AnthroNotes* continued, designed to carry out the same goals as the teacher training program: to give teachers a firm foundation in anthropology by offering up-to-date, research-based articles on major topics in the field; to provide teaching activities and exposure to community resources such as museums, zoos, and research laboratories; and to create a network of teachers, and museum and university professionals committed to precollegiate anthropology. Today, through the internet, *AnthroNotes* reaches tens of thousands of teachers, anthropologists, and the general public.

In 1998, The Smithsonian Press published a compendium of the best *AnthroNotes* articles in a single volume – designed for classroom use – titled *Anthropology Explored: The Best of Smithsonian AnthroNotes* (Selig and London 1998), with a second, expanded edition published six years later (Selig, London and Kaupp 2004). The book, selected as a Natural History Book Club selection when first published, is divided into three sections devoted to Human Origins, Archaeology, and Culture, and, with its free online instructor’s guide, serves as an introductory text for the high school as well as college classroom.

In recent years, the Smithsonian Anthropology Outreach Office has organized local teacher workshops on anthropological subjects (American Indians, Archaeology, Forensic Anthropology), and the office has continued to be an important source of teaching material, much of it available online (<https://repository.si.edu/handle/10088/2706>). In addition, there are new museum programs reaching high school teachers such as the Human Origins Program website

(<http://humanorigins.si.edu>) and its new NSF-funded effort to encourage the incorporation of human origins science into high school AP Biology classes.

Currently, the *AnthroNotes* editors are planning to repurpose their publication for the digital age. Using technology to scan, convert, upload, package, tag, and recombine materials, *AnthroNotes* will become even more accessible, usable, relevant, and connected for teachers and the general public. By "bundling" the best and most useful *AnthroNotes* articles, teaching activities, and videos under "topics" of wide public interest (i.e. Human Origins; Africa; Evolution; Asia; Race; Growing Up in Other Cultures; Archaeology; Language, etc.), these materials will have even greater relevance to classroom curriculum and teachers around the globe.

The AAA

The story of the American Anthropological Association (AAA)'s contribution to K-12 education has been one of intermittent involvement with a few exemplary efforts by the Association as well as by a few dozen AAA members. In the 1960s and 1970s, professional anthropologists and the AAA first became involved in curriculum development and teacher training programs for schools (Rice 1986). The successful launch of the Soviet satellite Sputnik (October 1957), Cold War rivalry, social ferment, and increased concern over science teaching in schools all led to increased federal funding for education through the National Science Foundation in the 1960s.

The AAA took advantage of this new opportunity and produced an anthropology-based high-school curriculum, *Patterns in Human History* (Figure 2). Many elementary schools also taught the anthropology-based *Man: A Course of Study* and the University of Georgia's *Anthropology Curriculum Project* (Higgins 1993; Rice 1993; Dow 1991). These early initiatives apparently had some impact, reflected in three surveys of pre-college anthropology courses conducted by Thomas Dynneson in 1971, 1978, and 1985, revealing a small but increasing presence of anthropology in schools (Dynneson and Coleman 1986). During the 1970s and 1980s, NSF funded a major social science teacher training initiative in anthropology-focused pre-college teacher training programs. In a 1986 review of 17 such programs, Patricia J. Higgins documented the increased emphasis on anthropology in pre-college classrooms that resulted from this federal funding (Higgins 1986).

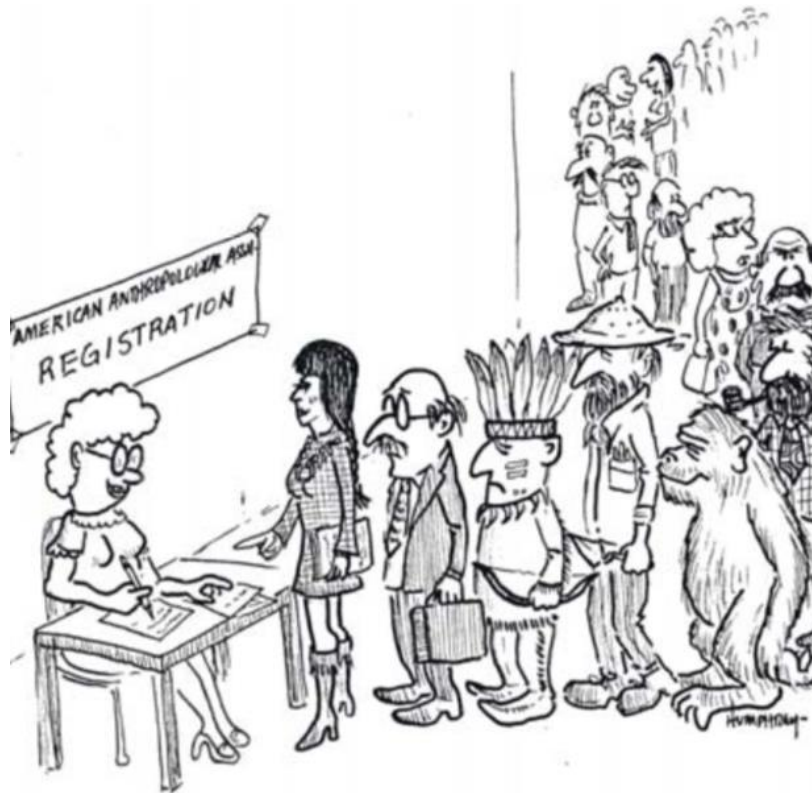


Figure 2. AAA members, and others, have worked for decades to better integrate anthropology and archaeology into pre-college classrooms. illustration © Robert L. Humphrey.

AAA Task Force/Commission

In 1988 several AAA members created a Task Force on Teaching Anthropology sponsored by the AAA, with the Board's support to promote the teaching of anthropology from elementary school through college (Higgins 1993; Erickson 2000; Selig 2001). The Task Force under the leadership of Jane J. White organized symposia at the annual AAA meeting that helped define the core concepts of anthropology and identified effective ways of teaching them. This effort resulted in a major publication focusing on teaching anthropology at all levels, including K-12 students (Kottak et al. 1997).

In 1990, the American Anthropological Association's Task Force on Precollege Education, under the leadership of anthropologist Paul Erickson, undertook a survey to assess the presence of anthropology in the pre-college curriculum, in teacher training, and in teacher certification (Erickson 1992, 2000; Selig 1997). The survey revealed that 19 of the 50 U.S. schools of education that responded had a required course in anthropology for teachers in training, although seven of these required it only for those training to teach anthropology. In 20 schools of education, anthropology could be taken

as an elective. Of the 30 U.S. state certification agencies responding to the survey, 13 said anthropology was required for some types of teacher certification.

Thus, in 1990, there were clear indications of anthropology's growing inclusion in teacher education and in state certification of teachers (Higgins 1993). Almost a decade later, in 1997, Eric Haanstad compiled a state-by-state assessment of high school social studies curriculum on behalf of the AAA (Haanstad 1997; Selig 2000). Haanstad found that 15 states approved the offering of anthropology electives or had stated anthropology goals or requirements. Momentum continued from 1999 to 2002, as the President appointed seven members to a three-year Commission on Anthropology in Schools, which undertook several initiatives to encourage anthropology teaching in schools. When the Commission completed its work in 2002, the AAA Board voted to establish an official Anthropology Education Committee (AEC) to carry on the work begun a decade before.

Archaeology

Professional archaeologists in the U.S. have provided much strong institutional support for public education, primarily because of historical mandates related to combating looting and increasing public awareness of issues surrounding the repatriation of human remains. The public education efforts of the Society for Historical Archeology (SHA), and the Public Education Committee (PEC) of the Society for American Archaeology (SAA) have produced the most visible results in teacher programs, conference presentations, and classroom visibility (Smith and McManamon 1991; Smith 1998). Over many years, these organizations have conducted numerous teacher workshops, hired paid staff, and coordinated the work of active volunteer subcommittees. They also sustained a presence at some of the professional meetings of K-12 teachers (Smardz and Smith 2000).

Of all anthropology's subfields, archaeology has the most popular recognition. Students relate most easily to archaeology, which fits more comfortably with existing social studies classes such as American history, world history, and geography. A flourishing program of teacher training, begun under the auspices of the U.S. Bureau of Land Management – 'Project Archaeology' – has long brought archaeology to elementary and middle school teachers. Currently based at the University of Montana, Project Archaeology continues to offer innovative teacher workshops throughout the country and online (<http://projectarchaeology.org>).

Psychology and Sociology

It is instructive to compare anthropology's limited success in putting anthropology into US high schools as an AP elective to the successful story of psychology and sociology.

Partly this reflects the difference in the size and available resources of the national organizations. The American Psychological Association (APA) has 137,000 members today compared to the AAA's 11,000. But the American Sociological Association (ASA) includes only 14,000 members and has strongly supported K-12 education for many decades, and, in particular, an Advanced Placement (AP) course in sociology.

In the case of psychology, more than 30 years ago the APA focused manpower and funding on making psychology a substantial presence in American high schools. Today, almost a third of high school graduates take psychology. By 2005, approximately 31 percent of graduating high-school students (about 800,000) had taken a psychology course -- according to the 2005 U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, High School Transcript Study. By 2009, more than 133,000 students took the Psychology AP examination, compared to 4,000 in 1992 when the exam was first offered. Today the APA offers a panoply of support to teachers, including affiliated membership, teaching resources, an electronic network of K-12 teachers, publications, and several dedicated staff in the national headquarters.

Likewise, the ASA mounted a strong effort to have Sociology formally recognized as a high school elective with an AP exam. Currently, the ASA High School Initiative is building a grassroots network of high school sociology teachers who can join the ASA as individual affiliates. The ASA is hoping that this new network will help their advocacy with the College Board to establish an AP course and test in sociology. Additionally, the ASA supports an active teachers' listserv, a newsletter for teachers, a Teaching Resources Center, and high school teaching workshops held during the annual ASA meeting.

The Larger Educational Context

National and Local Standards

The National Council for the Social Studies (ncss.org) and each state-by-state counterpart is concerned with four disciplines -- history, geography, economics and civics (citizen participation in government). National and local state standards have been published with some involvement by the corresponding scholarly associations. Social Studies is a required subject for all pre-university students for the first eight or nine years, so there is both motive and opportunity for the standards to be implemented. Some of these social studies standards reflect anthropological content (see www.socialstudies.org/standards/strands) (Figure 3). However, none of anthropology's five fields is included in any state's social studies requirements. Consequently, there is no impetus on the part of teachers, school districts, parents, students, or relevant professional associations to produce uniformly shared standards for anthropology.



Figure 3. Archaeology can be used to teach geology, anatomy, paleontology, social studies, STEM, art, and creative writing. Illustration © Robert L. Humphrey.

IBO/AP Programs and Anthropology

Recent data from the administrative offices of the worldwide International Baccalaureate Organization (IBO) suggest that, at least in some of the IB schools located in the US, interest in anthropology has grown in recent years. In 2012, 193 of 777 IB Diploma schools offered Social and Cultural Anthropology (Wilson pers. com. 2012). Some 475 capstone essays in the subject were submitted to the IBO in 2012. These data are encouraging. As has been seen for psychology and sociology, the development of IB and Advanced Placement (AP) courses often helps lay a foundation for the creation and spread of elective classes in high-school subjects (Selig 2001). Wherever the IB course is offered, one can assume that teachers are trained in the subject and that curriculum and teaching materials are available.

21st Century Partnership

Global Awareness is a critical theme woven into core subjects. According to the Partnership for 21st Century Skills, an advocacy organization working closely with the U.S. Department of Education, as well as departments of education at the state and local level, achieving Global Awareness implies:

- Using 21st century skills to understand and address global issues;
- Learning from and working collaboratively with individuals representing diverse cultures, religions and lifestyles in a spirit of mutual respect and open dialogue in personal, work and community contexts;
- Understanding other nations and cultures, including the use of non-English languages (The Partnership for 21st Century Skills 2009; www.P21.org)

To those involved in the push to make anthropology a more visible part of K-12 education in the U.S., this statement represents an exciting opportunity. It provides a convenient shorthand and structure within which to justify teaching anthropological content, methods, and concepts. Some organizations that are focused on increasing global awareness in K-12 include *Asia Society* and its Partnership for Global Learning (<https://asiasociety.org/education>), as well as *Primary Source*, which connects educators to people and cultures around the world through professional development and resources (<https://www.primarysource.org/about-us/our-mission>).

Technology/ Informal Education

The education landscape is rapidly changing nationally because of technology-fueled globalization. Educators recognize that students will need different skills from those traditionally taught in the K-12 classroom. Rather than trying to encourage entire school districts or education departments to adopt new courses and standards in anthropology, advocates might, instead, leverage existing opportunities, including new technologies, with a view to introducing as many educators and students as possible to anthropological concepts and methods.

For classroom teachers, a simple Google search for K-12 anthropology resources will return pages of sites, some outdated or of questionable value, some with broken links, but others useful, providing ideas for lesson plans in anthropology, and more commonly, archaeology. Still, although teachers looking for inspiration can find among these resources ways to actively incorporate such lessons into their other courses, there is no single place for teachers with an interest in anthropology to get vetted examples of anthropology curricula clearly aligned to the standards they have been asked to teach. The quality of online resources is mixed, and without a process of

verification, outdated and even misleading information can be used from resources found online, particularly in physical anthropology and archaeology where theories, interpretations, and approaches frequently change.

Nonetheless, the rise of online education, as well as homeschooling, provides new avenues and new demands for producing precollege education materials in less traditional subjects. For example, K12 (<https://www.k12>) a company that produces online curriculum that can be used at home or in the classroom, has a unit on anthropology. In addition, some online schools and curriculum offerings include anthropology as an elective course, and we can expect to see more of these as more teaching moves online.

New emphases have also emerged with regard to Informal Education. The 2009 National Academy of Sciences study, "Learning Science in Informal Environments: People, Places and Pursuits," (<https://www.nap.edu/catalog/12190/learning-science-in-informal-environments-people-places-and-pursuits>) as well as the National Science Foundation Informal Science Education grant program, highlight the potential of informal education, emphasizing after-school programs, exhibits, and online learning experiences that teach anthropology to a general audience.

One informal education example comes from the American Museum of Natural History in New York City where every year, the After School Program (ASP) offers courses to New York City high school students interested in the sciences. The courses include anthropology, along with astrophysics, earth science, genetics, biodiversity, and more. As the museum's website explains, the courses include hall visits, lab and collections tours, talks and lectures by scientists, and hands-on activities. Each course session is six weeks long, and courses meet once or twice a week from 4:30 - 6:30 PM. The Museum has also initiated internships for high school students, an approach embraced by many museums nationwide, including Smithsonian museums. In fact, museum programs offer one of the best opportunities for bringing anthropology to a broad audience of students (<https://www.amnh.org/about-the-museum/richard-gilder-center-for-science-education-and-innovation/education-at-the-museum>).

With the explosion of the digital age and the increasing role of technology, the Internet, games, and free and available resources also may be changing the playing field. The future may well see much less emphasis on textbooks and more experimentation within the curriculum, particularly in charter and magnet schools, and in after-school programs.

Conclusion

The story of Anthropology in U.S. Schools begins in the early days of anthropology as a profession, with a few anthropologists such as Edgar Lee Hewett advocating the teaching of anthropology in schools. Hewett in 1904 wrote in the *American*

Anthropologist that anthropology “should enrich the course of study of every public school in the land” (Hewett 1904). Later leaders such as Margaret Mead continued this tradition, but most anthropologists disparaged the value of “popular anthropology.” Whereas other social sciences -- sociology, psychology, and economics -- had an “applied” aspect and emphasized the public understanding of their subject, anthropologists remained skeptical of those like Mead who popularized the field.

Although national funding led the AAA to support curriculum development and teacher training in the 1960s, this interest was short-lived. Efforts by anthropology national organizations were relatively limited compared to continuing, committed efforts by other social science organizations. For the most part, anthropologists value research above all else; there is little incentive to support efforts to integrate anthropology into school curriculum. However, increasingly graduate anthropology and archaeology programs include applied courses and even requirements encouraging public engagement, including involvement in school programs.

Looking back through time, it is clear that individual advocates rather than institutional efforts helped put anthropology into some schools. Individuals -- with their good intentions, strong commitments, and well-developed curriculum materials -- advanced the infusion of anthropological questions, perspectives and knowledge in school classrooms and, indeed, around dinner tables in homes worldwide. We hope these individual efforts will continue, while at the same time we recognize that only larger-scale institutional efforts, including at museums, can bring anthropology to a wider audience, here and abroad.

UPDATE

The original 2012 article presented both the long history of efforts to put anthropology and archaeology into U.S. schools as well as then current initiatives to make further progress. Therefore, this UPDATE will not repeat the historical overview within anthropology and archaeology over its 100-year history. Instead, we will update readers by returning to the basic outline of the initial article to document developments since the article’s original publication in 2012. Where possible, we include current internet links as well as citations to all references and websites in both the original article and this 2019 UPDATE. For additional information on the history of efforts to incorporate anthropology and archaeology into school curriculum, readers may also consult the 2010 article “Grassroots Dedication and Opportunism: The Pre-University Anthropology Education Movement in the United States,” by Colleen Popson and Guven Witteveen.

Smithsonian Case Study

The original article offered the Smithsonian as one Case Study of a thirty-year effort to encourage the teaching of anthropology and archaeology in schools. Although there is no longer a separate Anthropology Outreach Office or Project Archaeology Workshops offered by the Smithsonian's Department of Anthropology, there continues to be museum-based educational programming, as well as nationally funded teacher training efforts, specifically within the Department's Human Origins Program (<http://humanorigins.si.edu>).

In 2013, the opening of Q?rius, the Coralyn W. Whitney Science Education Center, provided a new opportunity to offer high-quality anthropology and archaeology education programming initiated by the National Museum of Natural History (NMNH)'s Education and Outreach staff (<https://naturalhistory.si.edu/education>). The 10,000 square foot space includes a theater, a lab, classrooms, interactives and a 6,000 object collection that is open for the public to explore and includes a variety of ethnological and archaeological objects. Educators working in Q?rius and the Hall of Human Origins together with staff of the Department of Anthropology form the core of anthropology education programming at the museum, which is focused on several critical but related themes:

1. Exposure to different cultures in ways that make the unfamiliar more familiar while placing one's own culture in a place of objective reflection;
2. Exploring the interactions of the natural world with different human cultures in order to give perspective on the many ways that humans have used the natural world to survive and been inspired by it to create; helping audiences understand and reconnect with the natural world in more immediate ways, consider how they and their actions affect the natural world, and what role they should play to help keep it in balance;
3. Presenting and discussing research into human origins and what makes us human;
4. Providing audiences opportunities to practice critical thinking skills and engage in the process of science, particularly in the areas of forensic anthropology, archaeology, and paleoanthropology.

Regular museum programming addressing these themes includes:

- school programs and workshops for middle and high school students in forensic anthropology;
- high school summer internships with museum anthropologists and archaeologists;

- performances and art demonstrations from representatives of indigenous communities, often in concert with visits to the anthropology collections;
- family workshops featuring material traditions derived from the communities whose collections are housed at the museum;
- drop-in informal conversations as well as lectures with anthropologists and archaeologists in the exhibit halls and in Q&A; and
- the annual Archaeology Family Day in celebration of International Archaeology Day each October, an increasingly successful program in support of archaeology education.

To reach beyond the museum walls, NMNH educators and anthropologists have produced digital resources covering human evolution through the Human Origins website, forensic anthropology through the *Written in Bone* materials, and a number of live interviews with anthropologists and archaeologists through the Smithsonian Science How webcasts (<https://naturalhistory.si.edu/education/distance-learning>). The Human Origins Program has also developed the Teaching Evolution through Human Examples curriculum as part of an NSF-funded research project (Pobiner et al. 2018). This 4-part curriculum was developed for AP Biology classes, and includes a Cultural and Religious Sensitivity Teaching Strategies Resource to help teachers create a comfortable and supportive classroom environment for teaching evolution.

AnthroNotes

AnthroNotes, the award-winning Smithsonian publication, published from 1979-2012, continues to present archaeological and anthropological research to educators and the public in an engaging and accessible style. As predicted in the 2012 article, *AnthroNotes* is now available to a digital audience worldwide. All 84 issues and 262 individual articles can be downloaded (<http://repository.si.edu/dspace/handle/10088/2706>) in three formats designed for computers (PDF), mobile devices (mobi), and e-readers (E-pub). Articles are free of copyright restrictions; photocopying for classroom use is encouraged. The *AnthroNotes* database is searchable by author, title, and 40 topic areas, including geographic regions, subfields, and contemporary issues. Smithsonian Books re-issued *Anthropology Explored: The Best of Smithsonian AnthroNotes* as an e-book through Amazon (<https://www.amazon.com/Anthropology-Explored-Smithsonian-AnthroNotes-Second/dp/1588340937>).

National Academies Report on the Social and Behavioral Sciences in K-12 Education

In April 2017, the National Academies of Sciences, Engineering, and Medicine published an “In Brief” summary of the Proceedings of a 2016 Workshop, “The Social and Behavioral Sciences in K-12 Education: Past, Present, and Future” (<https://www.nap.edu/read/24774/chapter/1>).

This workshop convened representatives of leading social and behavioral sciences (SBS) organizations (economics, anthropology, psychology, and sociology) and leaders in science and social studies education (NSCC, for example) to explore common interests in K-12 education; the current status, challenges and opportunities for teaching these disciplines in K-12; and possible collaboration moving forward. Participants considered practical constraints including limited time, lack of recognition of SBS as relevant or even part of STEM, the absence of SBS in current curriculum objectives, and limited materials for teaching SBS subjects. At the end of the workshop, participants discussed finding ways to encourage the inclusion of SBS in current curricula rather than carving out separate courses in all SBS subjects.

One of the most useful portions of the Proceedings Summary focused on recent developments in supporting K-12 education at four professional organizations, as summarized below.

Economics

The Council for Economic Education (CEE) described its work in creating national standards in economics education, its creation of an advanced placement (AP) course and exams, its training of teachers for all levels of precollege education, and its production and dissemination of curriculum materials. All 50 states now have economics in their education standards, but only 20 states require an economics course in high school. CEE has a web-based core economic curriculum that attracts more than one million visitors a year. Teacher training takes place through CEE’s program of university-based CEE educators, and 55,000 teachers each year are engaged in CEE’s professional development efforts. In-service training remains the primary challenge along with competition from other STEM subjects.

Psychology

The American Psychological Association (APA) focuses on high school psychology where it has had a large presence for decades. There are about 8-10,000 high school psychology teachers in the USA, and nearly 30 percent of all graduating high school students have credits in psychology. Almost 8,500 high schools offer AP psychology

classes, and, in 2016, 300,000 students took the AP Exam in psychology — the third most-taken AP exam in the sciences. National Standards have been developed and adopted thus far by seven states. APA also offers K-12 curriculum materials, including lesson plans and course outlines.

Sociology

Sociology has seen advances in recent years, with 25 to 30 percent of US high schools now offering sociology classes. The American Sociological Association (ASA) has developed standards for high school sociology as well as created Appendix C (Sociology) to the C3 NCSS Framework document (<https://www.socialstudies.org/sites/default/files/c3/C3-Framework-for-Social-Studies.pdf>). However, the ASA has not been able to persuade the College Board to adopt an AP exam or AP course in sociology, both of which would enhance the likelihood that students would take AP sociology in high school. Because of the significance of this effort, it has remained a long-term goal of the ASA for many decades.

American Anthropological Association

At the National Academies' workshop, Edward Liebow, American Anthropological Association (AAA)'s Executive Director described the importance of informal learning environments such as museums, as well as some of the AAA initiatives including publicizing resources for teaching anthropology in K-12, and AAA-sponsored exhibits and websites devoted to race and human migration. Liebow also mentioned AAA's sponsoring National Anthropology Day, in which college undergraduates engage with high school and elementary school students. Finally, Liebow reported that the AAA had been successful in creating Appendix D (Anthropology) to the 2017 C3 NCSS Framework document (developed by the National Council for the Social Studies) that outlines state social studies standards (<https://blog.americananthro.org/2013/10/15/anthropology-added-to-appendix-of-c3-framework-for-social-studies-state-standards/>). The C3 (College, Career, and Civic Life) document was launched by the NCSS in order to ensure that social studies was not omitted from the new language arts and mathematics standards, i.e. the Common Core.

The AAA's recent efforts are described in a May 2014 Final Report to the American Anthropological Association from their Anthropology Education Task Force that was convened in June 2011: (<http://s3.amazonaws.com/rdcms-aaa/files/production/public/Anthropology-Education-Task-Force-Report-2015-FINAL2.pdf>). The Anthropology Education Task Force Report's Executive Summary describes its goals: "to conduct an overview of schools of education to understand how

anthropology is integrated into teacher preparation; collect data on how anthropology is taught in K-12, community college, and museum settings; identify where the gaps are; and determine how other social science disciplines enhance the teaching of their subject in K-12 settings.” Based on a series of surveys and interviews, the task force report concluded that recent trends in education policy toward high-stakes testing limited the opportunities for anthropology to be better integrated into both the K-12 formal classroom as well as in teacher education.

The Task Force Report ends with recommendations for AAA to continue the work of more systematically integrating anthropology into K-12 education through standards, schools of education, and museums and other resource providers. It was this Task Force that was also able to insert anthropology into Appendix D (Anthropology) of the most recent C3 curriculum standards for social studies released by the National Council for the Social Studies in 2014, alongside similar appendices for Psychology (Appendix B) and Sociology (Appendix C).

Since its 2014 Task Force Report, the AAA has added a new exhibition program, “World on the Move: 100,000 Years of Human Migration,” to its Public Education Initiatives, which formerly was defined largely by the highly successful exhibition, “RACE: Are We So Different?”.

Global Competence and Global Citizenship

The emphasis among many education leaders on global competence as a critical 21st century skill continues to offer an opening for anthropology and archaeology education in grades K-12. The United Nations Educational, Scientific and Cultural Organization (UNESCO) has established a global indicator to measure how well countries are meeting Target 4.7 of Sustainable Development—with a focus on [Global Citizenship Education](#) (GCED) and [Education for Sustainable Development](#) (ESD). The Target specifies: *“By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture’s contribution to sustainable development.”*

<https://en.unesco.org/themes/gced/sdg47progress>

The indicator UNESCO will use to measure progress toward this goal is the “extent to which (i) global citizenship education and (ii) education for sustainable development, including gender equality and human rights, are mainstreamed at all levels in (a) national education policies (b) curricula (c) teacher education and (d) student assessment.”

One US organization working to help our schools meet this target is the Asia Society, which has long been an innovator in global education; its current efforts

through the Center for Global Education reflect increased focus on this area. The Society has been known for its excellent curriculum materials and teacher training efforts. Its current website is full of opportunities for teachers to cultivate global competence in their students by helping them develop the knowledge and skills to:

“Investigate the World: Globally competent students are aware, curious, and interested in learning about the world and how it works.

Recognize Perspectives: Globally competent students recognize that they have a particular perspective, and that others may or may not share it.

Communicate Ideas: Globally competent students can effectively communicate, verbally and non-verbally, with diverse audiences.

Take Action: Globally competent students have the skills and knowledge to not just learn about the world, but also to make a difference in the world.”

(<https://asiasociety.org/education/what-global-competence>).

These four domains of global competence should sound familiar to any anthropology or archaeology educator; clearly there is much these fields could contribute to global competency efforts.

The International Baccalaureate (IB) programmes for K-12 also are aligned with the goals of developing global citizens, affirming that “The aim of all IB programmes is to develop internationally minded people who, recognizing their common humanity and shared guardianship of the planet, help to create a better and more peaceful world.” (IBO 2015). Again, anthropology and archaeology perspectives and approaches would work well in this environment, and the IB has long offered a Social and Cultural Anthropology course as part of its diploma programme for high school students. Unfortunately, the most recent data is not encouraging as fewer rather than more IB schools in the US are offering this course, with 64 offering it in 2018, down from 193 in 2012 (Duffy O’Brien pers. com. 2018).

Archaeology

As was true in 2012, there continue to be many archaeology education experts creating transformative learning experiences and resources in and out of classrooms across the country. Fortunately, the archaeology education community has initiated a number of commendable programs that make these resources more accessible for classroom teachers and each other.

For example, the Archaeological Institute of America has convened archaeology educators at four annual Heritage Educators Conference meetings, and in 2011, it initiated International Archaeology Day, held on the third Saturday of October, an effort that has grown to include some 900 events hosted by 600 organizations in more than

24 countries (<https://www.archaeological.org>). For the last two years, the Smithsonian's National Museum of Natural History has been one of these participating organizations, collaborating with a number of local and national archaeology partners to offer exciting opportunities for DC area families to talk with archaeologists, try out experimental archaeology, do hands-on activities, and learn how to get involved in archaeology in their communities (Figure 4). Such efforts are powerful catalysts for bringing together archaeology educators to produce, test, and share perspectives and approaches, while highlighting for the public and policy makers the value of archaeology as a lens for exploring the past, both at the local and global levels.



Figure 4. Families learn together with archaeologists at Archaeology Family Day at the Smithsonian's National Museum of Natural History, in celebration of International Archaeology Day. Photo credit: Juan Pablo Hurtado Padilla, Smithsonian Institution.

The Society for American Archaeology has updated and significantly enhanced its education pages on its website to help educators more readily incorporate archaeology into their curricula. The web pages feature common misconceptions about archaeology; key archaeological concepts, method and theory; and a carefully curated collection of teaching activities geared for various levels across the K-12 spectrum (<https://www.saa.org>).

Another recent effort to bolster this type of sharing among archaeology and heritage education professionals is the newly launched The Heritage Education Network

(THEN), “an alliance for those who use, manage, teach, or create information about past or present peoples and cultures” (<https://theheritageeducationnetwork.org>). This network is designed to connect heritage professionals with those who use and create educational resources. Members receive access to the professional network as well as a large, searchable biography of resources.

Recent publications, like this journal, reflect new energy in archaeology education among both practicing archaeologists and archaeology educators. The 2019 book *Public Engagement and Education: Developing and Fostering Stewardship for an Archaeological Future* (Studies in Social Analysis Book 7) bodes well for future efforts in archaeology education. The volume, edited by Katherine M. Erdman (2019), is divided into three sections: Part I: Inspiring and Developing an Interest in the Past; Part II: Fostering a Deeper Respect for Archaeological Heritage; and Part III: The Future of Archaeology, Education, and Preservation. It includes a chapter on involving graduate students in heritage education by Phyllis M. Messenger, as well as Jeanne M. Moe’s chapter, *Best Practices in Archaeology Education: Successes, Shortcomings and the Future*.

The long successful Project Archaeology program from the Bureau of Land Management (today in cooperation with Montana State University) continues to offer modules for elementary school teaching and supports teacher workshops to train teachers to implement a growing suite of archaeology project modules.

New Resources

As digital platforms continue to mature, they offer more varied and better quality original content that can be incorporated into classroom lessons about archaeology. Yale University’s Human Relations Area Files has produced two searchable online databases—eHRAF World Cultures and eHRAF Archaeology—of ethnographic collections and documentation of archaeological traditions around the world (<https://hraf.yale.edu>). Beyond making these documents available, however, the eHRAF website publishes a blog that demonstrates the vast capability of its infrastructure to pull together compelling cross-cultural narratives, as well as a guide to show high school teachers how they can incorporate the databases into classroom lessons. Other standouts online include the digital magazine *SAPIENS* (<https://sapiens.org>), which brings a fresh anthropological lens to all things human, past and present, and podcasts, like those found on the Archaeology Podcast portal (<https://www.archaeologypodcastnetwork.com>), which offer more voices and ways to connect to archaeology and anthropology. For the motivated K-12 classroom teacher, already convinced of the value of anthropology and archaeology, it is an exciting time, as more organizations find resources to produce the rich, accessible, and relevant interpretations of anthropology and archaeology scholarship.

Conclusion

Despite the growth of new and exciting programs and resources, most efforts to put archaeology and anthropology into schools remain diffuse, sporadic, and under-resourced. Clearinghouses of resources are well-intentioned, but until more teachers and administrators understand the value of teaching anthropology and archaeology in K-12 classrooms, those resources will continue to be underutilized.

As was discussed in the 2014 AAA Task Force Report, school districts are understaffed and under pressure to improve test scores on career and college readiness tests and, therefore, they continue to fill limited school time with core curriculum subjects. We believe that the National Academies Workshop Summary's conclusion remains on target: "in developing a strategy for increasing the presence of the social and behavioral sciences in K-12, more focus is essential on the ...goals of stakeholders rather than on the interests and goals of the SBS community."

Reviewing the last several decades of efforts, the 1980s and early 1990s appear to be the high watermark of school inclusion of anthropology and archaeology, during a time before the widespread adoption of state and national standards and high-stakes standardized testing. Today there appears to be less opportunity and actual presence of anthropology and archaeology in the educational landscape, whether one looks at teacher training, certification requirements, curriculum subjects, or classroom resources. Professional anthropology and archaeology organizations appear to be redirecting their attention to specific initiatives and providing useful resources rather than aiming for lofty but unattainable goals such as College Board Examinations.

We believe the anthropology and archaeology community should continue its efforts to show persuasively how their disciplines can make improvements in students' and teachers' lives. Future efforts could aim to 1) understand discrete and specific needs and opportunities for anthropology and archaeology in the current education landscape, and 2) develop specific programs, exhibitions and curriculum materials that uniquely meet these needs at various education stages -- early elementary, late elementary, middle school, and high school. Such initiatives can clearly demonstrate the value and potential of anthropology and archaeology to improve student outcomes in STEM practices, global competency, critical thinking, empathy development and other challenges to teaching the 21st century skills while also enhancing the teaching environment for teachers.

Archaeology and anthropology will always captivate and enhance students' understanding of their world. It is encouraging to learn about the increasing number of programs that involve professional anthropologists and archaeologists, as well as their students, in outreach efforts and heritage preservation education. It remains their responsibility to make their disciplines understandable and compelling to students, teachers, and administrators within the educational ecosystem of 21st century America.

References

AAA Task Force

2014. *Anthropology Education: An Investigation into the Teaching of Anthropology in Schools of Education and in K-12, Community College, and Museum Settings*. Submitted to AAA leadership by the AAA's Anthropology Education Task Force, Washington, D.C. Electronic document, <http://s3.amazonaws.com/rdcms-aaa/files/production/public/Anthropology-Education-Task-Force-Report-2015-FINAL2.pdf>

American Anthropological Association website: <https://www.americananthro.org>

American Museum of Natural History website: <https://www.amnh.org/about-the-museum/richard-gilder-center-for-science-education-and-innovation/education-at-the-museum> . [The current website updates the 2012 article description of AMNH programs.]

AnthroNotes digital repository: <http://repository.si.edu/dspace/handle/10088/2706>

Archaeological Institute of America website: <https://www.archaeological.org>

Archaeology Podcast portal: <https://www.archaeologypodcastnetwork.com>

Asia Society Center for Global Education website: <https://asiasociety.org/education>

Dow, Peter B.

1991 *Schoolhouse Politics: Lessons from the Sputnik Era*. Harvard University Press, Cambridge, Massachusetts.

Duffy O'Brien, Colleen

2018 Personal communication from the Communications and Marketing Manager Americas at the International Baccalaureate Organization.

Dynneson, Thomas L., and Fred Coleman

1986 Pre-collegiate Anthropology in the U.S.: Anthropology in Pre-College Education, edited by Ruth O. Selig and Patricia J. Higgins. *Practicing Anthropology* 8 (3-4): 4-5.

Erdman, Katherine M. (editor)

2019 *Public Engagement and Education: Developing and Fostering Stewardship for an Archaeological Future*. Studies in Social Analysis, Berghahn Books, New York, New York.

Erickson, Paul A.

1992 AAA Pre-College Anthropology Status Report. *Teaching Anthropology Newsletter* 19–20:1.

2000 Selected History of AAA Efforts to Promote Anthropology Education. *Anthropology Newsletter* 42(9):31.

Haanstad, Eric

1997 Assessing the Status of Anthropology in K-12 Curriculum. *Anthropology Newsletter* 11:6.

Hewett, Edgar Lee

1904 Anthropology and Education. *American Anthropologist* 6:574-575.

Higgins, Patricia J.

1986 Special Programs in Anthropology for Pre-College Teachers. *Anthropology in Pre-College Education*, edited by Ruth O. Selig and Patricia J. Higgins. *Practicing Anthropology* 8(3-4):7-8, 29.

1993 Anthropological Programs in Education. In *International Encyclopedia of Education*, 2nd ed. Pergamon Press, Oxford, UK.

Human Relations Area Files website: <https://hraf.yale.edu>

International Baccalaureate Organization

2015 Education for a Better World. Electronic document, <https://www.ibo.org/globalassets/digital-toolkit/brochures/corporate-brochure-en.pdf>

K12 website: <https://www.k12.com>

Kottak, Conrad P., Jane J. White, Richard H. Furlow and Patricia C. Rice (editors)

1997 *The Teaching of Anthropology: Problems, Issues, and Decisions*. Mayfield Publishing, Mountain View, California.

National Research Council

2009 *Learning Science in Informal Environments: Peoples, Places, and Pursuits*. The National Academies Press, Washington, DC.

National Academies of Sciences, Engineering, and Medicine

2017 *The Social and Behavioral Sciences in K-12 Education: Past, Present, and Future: Proceedings of a Workshop—in Brief*. The National Academies Press, Washington, D.C. <https://doi.org/10.17226/24774>

National Council for the Social Studies (NCSS)

2013 *The College, Career, and Civic Life (C3) Framework for Social Studies State Standards: Guidance for Enhancing the Rigor of K-12 Civics, Economics, Geography, and History*. National Council for the Social Studies, Silver Spring, Maryland.

National Museum of Natural History Education website:

<https://naturalhistory.si.edu/education>

National Museum of Natural History Human Origins Program website:

<http://humanorigins.si.edu>

National Museum of Natural History's Smithsonian Science How Webcast online archive: <https://naturalhistory.si.edu/education/distance-learning>

Partnership for 21st Century Skills/Battelle For Kids website: <http://www.P21.org>

Pobiner, Briana L., Paul M. Beardsley, Constance M. Bertka, and William A. Watson

2018 Using Human Case Studies to Teach Evolution in High School A.P. Biology Classrooms. *Evolution: Education and Outreach* 11:1-14.

Popson, Colleen, and Guven Witteveen

2010 Grassroots Dedication and Opportunism: The Pre-University Anthropology Education Movement in the United States. *Anthropology in Action* 17(2&3):34-43. Berghahn Books and the Association for Anthropology in Action, Oxford, UK.

Popson, Colleen and Ruth O. Selig

2012. Putting Anthropology Into Schools. *AnthroNotes*. 33 (2):9–15. <https://doi.org/10.5479/10088/22472>. [*AnthroNotes* cartoon illustrations © by Robert L. Humphrey].

Project Archaeology website: <https://projectarchaeology.org>

Rice, Marion J.

1986 Curriculum Artefacts: The Remains of Three Anthropology Projects. Anthropology in Pre-College Education. In *Practicing Anthropology*, edited by Ruth O. Selig and Patricia J. Higgins 8(3- 4):6, 19.

1993 Precollege Anthropology/Archaeology. In *Teaching Social Studies: Handbook of Trends, Issues, and Implications for the Future*, edited by V. S. Wilson, J. A. Litle and G. L. Wilson, pp. 201-226. Greenwood Press, Westport, Connecticut.

SAPIENS digital magazine: <https://sapiens.org>

Selig, Ruth O

1997 The Challenge of Exclusion: Anthropology, Teachers, and Schools. In *The Teaching of Anthropology: Problems, Issues, and Decisions*, edited by Conrad P. Kottak, Jane J. White, Richard H. Furlow and Patricia C. Rice, pp. 299-307. Mayfield Publishing, Mountain View, California.

2000 Brokering Cultures: Archaeologists Reach Out to Teachers. In *The Archaeology Education Handbook: Sharing the Past with Kids*, edited by Carolyn Smardz and Shelley Smith, pp. 151-164. Alta Mira Press, Walnut Creek, California.

2001 Professional Associations and Educational Advocacy: The Behavioral Sciences in K-12 Education. In *Sea Changes in Social Science Education: Woods Hole 2000, The Social Science Education Consortium Conference Series*, edited by Charles S. White, pp. 146–170. Social Science Education Consortium, Boulder, Colorado.

Selig, Ruth O. and JoAnne Lanouette

1983 "A New Approach to Teacher Training." *Museum News* 61(6):44–48.

Selig, Ruth O., Marilyn R. London, and P. Ann Kaupp (editors)

2004 *Anthropology Explored: The Best of Smithsonian AnthroNotes, Revised and Expanded*. Smithsonian Books, Washington, DC. [1st edition, Ruth O. Selig and Marilyn R. London, eds. Smithsonian Books, 1998.]

Smardz, Carolyn E., and Shelley J. Smith (editors)

2000 *The Archaeology Education Handbook: Sharing the Past with Kids*. AltaMira Press, Walnut Creek, California [in cooperation with the Society for American Archaeology].

Smith, K. C.

1998 "Pathway to the Past: Archaeology Education in Precollegiate Classrooms." *Social Studies* 89(3):112–115.

Smith, K. C., and Francis P. McManamon (editors)

1991 *Archaeology and Education: The Classroom and Beyond*. Archeological Assistance Study, # 2, October 1991. U.S. Department of the Interior, National Park Service, Cultural Resources, Washington, D.C.

Society for American Archaeology website: <https://www.saa.org>

The Heritage Educators' Network (THEN) website:

<https://theheritageeducationnetwork.org>

UNESCO Learning to live together sustainably (SDG4.7): Trends and Progress web page: <https://en.unesco.org/themes/gced/sdg47progress>

Wilson, Matthew

2012 Personal communication from Management Information Coordinator at the International Baccalaureate Organization.