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**THIS LAND IS YOUR LAND, THIS LAND IS MY LAND: ENVIRONMENTAL
EDUCATION CURRICULUM AT FEDERAL INDIAN SCHOOLS AS A CONDUIT FOR
COLONIAL VIOLENCE AND THE NATIVE RESISTANCE AND RESILIANCE WITH
WHICH IT WAS MET**

by

ISABEL EVANS

**SUBMITTED TO SCRIPPS COLLEGE IN PARTIAL FULFILLMENT OF
THE DEGREE OF BACHELOR OF ARTS**

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PROFESSOR NANCY NEIMAN**

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Introduction

As an environmental analysis major, I have long believed that environmental education represents a force for good in the world, especially under the growing threat of global climate change – a perspective I share with scholars, activists, and national and international governmental institutions alike. Without discounting that environmental education can play a pivotal role in mitigating the growing threat of global climate change¹ and in promoting happier, healthier, and more interconnected communities,² among many other tangible benefits, it is essential to recognize that environmental education nevertheless has a complicated past. Historically, those with political power have weaponized environmental education curriculum as a vehicle for maintaining control, disseminating ideology, and facilitating the systematic oppression of people whose identities and cultures oppose their dominance. American environmental education pedagogy, as this thesis will show, has been intimately intertwined with the federal government’s project of colonization and anti-Indigenous action ever since environmental education became a defined part of formal classroom learning across the United States. At federal Indian schools operating during the 1890 – 1920 period, environmental education served a mechanism through which the government attempted to suppress traditional

¹ For example, see Tamara Shapiro Ledley, Juliette Rooney-Varga, and Frank Niepold, “Addressing Climate Change Through Education,” *Oxford Research Encyclopedia of Environmental Science* (June 28, 2017); Danielle F. Lawson, et al., “Children Can Foster Climate Change Concern Among their Parents,” *Nature Climate Change* 9 (June 2019): 456 – 462; and Mark Boulet, et al., “Influencing Across Multiple Levels: The Positive Effect of a School-Based Intervention on Food Waste and Household Behaviors,” *Journal of Environmental Management* 308 (April 15, 2022).

² For example, see Jason Duvall and Michaela Zint, “A Review of Research on the Effectiveness of Environmental Education in Promoting Intergenerational Learning,” *The Journal of Environmental Education* 30, no. 4 (2007): 14 – 24; Elizabeth K. Kisbet, John M. Zelenski, and Steven A. Murphy, “Happiness is in our Nature: Exploring Nature Relatedness as a Contributor to Subjective Well-Being,” *Journal of Happiness Studies* 12 (2011): 303 – 322; Catherine O’Brien, “Sustainability, Happiness and Education,” *Journal of Sustainability Education* 1 (May 2010); and Krasny, Marianne E. Krasny, et al., “Measuring Social Capital Among Youth: Applications in Environmental Education,” *Environmental Education Research* 21, no. 1 (2015): 1 – 23.

Indigenous environmental knowledge and to supplant it in the minds of Native children with capitalist and Euro-American modes of thinking about land, while simultaneously exploiting young Indigenous people as a source of free agricultural labor. By interrogating the use of environmental education curriculum at federal Indian schools during these decades, this thesis argues that there is no objective, unbiased approach to communicating environmental knowledge; rather, the content of the dominant environmental education curriculum was and is informed by hegemonic beliefs and systems of knowledge of the powerful.

My choice to focus on the 1890 – 1920 period is neither arbitrary nor incidental. A combination of several overlapping historical factors makes this thirty-year period an ideal historical moment for interrogating the environmental education curriculum as a transmitter of colonial violence. Firstly, grounding my research in 1890 – 1920 enables me to focus on the era when environmental education became a prominent, clearly-articulated part of formal classroom learning across the United States. Most scholarship on the history of environmental education claims that the 1960s and 1970s marked the advent of the modern environmental education movement, both in the United States and abroad.³ During these decades, grassroots environmental activists launched a successful campaign to increase the availability of environmental education opportunities. In 1970, Earth Day was founded as an “environmental teach in,” which drew 20 million participants on almost 1,500 college and university campuses.⁴ At the same time, domestic and international law makers codified the importance of environmental education with several landmark pieces of legislation, including the National

³ See Robert L. Carter and Bora Simmons, “The History and Philosophy of Environmental Education,” in *The Inclusion of Environmental Education in Science Teacher Education*, ed. A.M. Bodzin, et al. (Berlin: Springer Science & Business Media, 2010): 4 and Benjamin Kline, *First Along the River: A Brief History of the U.S. Environmental Movement*, 4th ed. (Lanham, Maryland: Rowman & Littlefield Publishers, 2022): 95.

⁴ Carter and Simmons, “The History and Philosophy of Environmental Education,” 7.

Environmental Policy Act of 1969 (NEPA), the Environmental Education Act of 1970, and the Stockholm Declaration of 1972.⁵ Because of the combined efforts of activists and lawmakers, the number of schools or school districts nationwide with formal environmental education programs grew exponentially from fifty-four in 1970 until every state required an environmental education coordinator in its school system in 1979, less than a decade later.⁶ The 1960s and 1970s, however, were not the first time in American history that environmental education materials reached such a wide audience of schoolchildren.

As Sally Gregory Kohlstedt and Kevin C. Armitage have convincingly argued, environmental education emerged as an important component of the American classroom experience in the 1890s with the rise of the nature study movement.⁷ In brief, the goal of nature study was to encourage young people to understand and appreciate the natural world through hands-on learning methods like school gardens and object teaching.⁸ This push to reorient

⁵ Ibid., 5 – 7. In addition to establishing the United States Environmental Protection Agency (EPA) (Kline, 103 – 104), NEPA explicitly called for the expansion of environmental education “to enrich the understanding of the ecological systems and natural resources important to the nation” (qtd. in Carter and Simmons, 6). The Environmental Education Act of 1970 built on these efforts by creating the Office of Environmental Education as part of the United States Office of Education and by providing funding to states to develop environmental education curriculum for K-12 classrooms, until the program was cut short by President Ronald Reagan’s Omnibus Budget Reconciliation of 1981 (Carter and Simmons, 7). On an international level, the Stockholm Declaration of 1972, which came out of the first United Nations Conference on the Human Environment, encouraged “education in environmental matters, for the younger generation as well as adults” as one of its twenty-six principles (qtd. in Carter and Simmons, 5).

⁶ Ibid., 7.

⁷ See Sally Gregory Kohlstedt, “‘A Better Crop of Boys and Girls’: The School Gardening Movement, 1890 – 1920,” *History of Education Quarterly* 48, no. 1 (February 2008): 67 – 73; Sally Gregory Kohlstedt, *Teaching Children Science: Hands-On Nature Study in North America, 1890 – 1930* (Chicago and London: The University of Chicago Press, 2010); and Kevin C. Armitage, *The Nature Study Movement: The Forgotten Popularizer of America’s Conservation Ethic* (Lawrence: University Press of Kansas, 2009).

⁸ Kohlstedt, *Teaching Children Science*, 3. Developed by the Swiss pedagogue and education reformer Johann Pestalozzi during the late eighteenth and early nineteenth centuries, object teaching centers instruction around physical objects and experiences, rather than (or in addition to) more conventional and abstract learning tools like textbooks and lectures (Armitage, 22). During the education reform movement of the late nineteenth century and the Progressive Era, object teaching became one of the most popular new strategies implemented in American classrooms (Armitage, 22 – 23). Nature study was instrumental in educators’ process of introducing of object teaching into their schools because environmental education curriculum naturally lends itself to hands-on learning techniques, like gardening, observing plants and animals as part of the ecosystem during outdoor excursions, and circulating natural objects like rocks, fossils, and flowers in the classroom as part of lessons – all of which were part of mainstream nature study curriculum during the 1890 – 1920 period (Armitage, 119).

curriculum towards environmental consciousness emerged simultaneously from a movement to provide children in cities like Chicago and New York with greater access to nature in the face of increasing urbanization⁹ and from an initially separate, but complementary effort to improve educational opportunities and quality of life in rural farm communities, which was spearheaded by Cornell University's Agricultural Experiment Station and its faculty leaders, Liberty Hyde Bailey and Anna Botsford Comstock.¹⁰ Expanding outward from these points of origin, the discipline of nature study soon grew so popular that the United States Department of Agriculture was able to locate "about 75,000 school gardens" operating across the country during the year 1906 alone.¹¹ Likewise, a study published in the prominent journal *The Nature-Study Review* in 1921 found that formal nature study curriculum had been successfully implemented nationwide in "most of the state courses and in a large number of city systems" between 1905 to 1915.¹² Not immune to this national trend in education, the Office of Indian Affairs soon prescribed nature study and gardening as an essential part of the curriculum for all federal Indian schools.¹³ In Chapter 1 of this thesis, I will chart the growth of environmental education curriculum at federal Indian schools, unpack its defining characteristics, and explore how this coursework differed from materials aimed at white children in public schools and at Black children in vocational schools in the South. This will enable me to interrogate the unique ways in which the

⁹ See Kohlstedt, "Framing Nature Study for the Cities," in *ibid.*, 59 – 76.

¹⁰ See Kohlstedt, "Revitalizing Farm and Country Living," in *ibid.*, 77 – 110.

¹¹ James Ralph Jewell and United States Department of the Interior, Bureau of Education, *Agricultural Education, Including Nature Study and School Gardens* (Washington: Government Printing Office, 1907), 37 – 38.

¹² Patterson, Alice Jean, "A Survey of Twenty Years' Progress Made in the Courses of Nature Study," *The Nature-Study Review* 17 (1921): 62.

¹³ United States Commissioner of Indian Affairs, "Rules for Indian Schools," in *Fifty-Ninth Annual Report of the Commissioner of Indian Affairs* (Washington: Government Printing Office, 1890), clii; United States Office of Indian Affairs, *Rules for Indian Schools with Course of Study, List of Text-Books, and Civil Service Rules* (Washington: Government Printing Office, 1892), 24.

government weaponized environmental education as part of the colonizing project of the federal Indian school system in Chapter 2.

After reaching its peak in the first two decades of the twentieth century, nature study diminished in popularity during the 1920s.¹⁴ In *Teaching Children Science*, Kohlstedt explains this decline as the consequence of “the postwar spirit of modernity” which seized the nation in the wake of WWI, driving an increased focus on technical innovation and scientific objectivity, values many saw as at fundamentally at odds with nature study.¹⁵ Consequently, nature study was gradually supplanted by the emergent subject of “elementary science,” which integrated the biological focus of nature study into new curriculum that placed greater emphasis on “hard” sciences like physics and chemistry that many educators, scientists, and the government thought would be more useful in an increasingly industrial, urban, and modernized postwar world.¹⁶ The “farm crisis” of the 1920s,¹⁷ the stock market crash of 1929, and the subsequent onset of the Great Depression further compounded this anxiety to reconfigure the curriculum by making farming a less financially viable career choice for all but large corporations.¹⁸ In the aftermath of this shift away from nature study, children primarily accessed environmental education opportunities through extracurriculars like scouting and camping,¹⁹ though Kohlstedt identifies

¹⁴ Kohlstedt, *Teaching Children Science*, 8.

¹⁵ *Ibid.*, 202.

¹⁶ *Ibid.*, 8, 221 – 225.

¹⁷ The “farm crisis” of the 1920s was a time marked by a dramatic reduction in wheat prices that economically devastated many small farmers and agricultural communities. For a more in-depth explanation of this historical moment, see Deborah Fitzgerald, “The Industrial Ideal in American Agriculture,” in *Every Farm a Factory: The Industrial Ideal in American Agriculture* (New Haven: Yale University Press, 2003), 17 – 20.

¹⁸ Kohlstedt, *Teaching Children Science*, 202.

¹⁹ *Ibid.*, 8, 214 – 221. Although these later forms of environmental education curriculum and their intersections with colonial violence lie beyond the scope of this thesis, it is worth noting that many of the scouting organizations and summer camps that rose to prominence during these decades – including the Boy Scouts, the Woodcraft Indians, the YMCA Indian Guide and Indian Princess programs, and the Camp Fire Girls – encouraged children to learn about the natural world and gain practical environmental skills like plant identification and hiking by pretending to be Native, a phenomenon that historian Philip Deloria (Standing Rock Sioux) has described and theorized as “playing Indian” (P. Deloria, 2). For more on this, see Philip J. Deloria, *Playing Indian* (New Haven: Yale University Press,

the persistence of “window boxes, school gardens, nature walks, classroom terrariums, and hamster cages” in schools during these decades as an extended “legacy” of the nature study movement.²⁰ This confinement of environmental education to the extracurricular sphere continued until the 1960s and 1970s, when environmental education was again incorporated into formal schooling on a wide scale. By rooting my analysis in the historical moment when environmental education established itself as a prominent and widespread part of the classroom experience, I will ultimately argue in this thesis that American environmental education pedagogy has been an entrenched part of the federal government’s colonial project since the discipline’s emergence.

In addition to aligning with the rise of formal environmental education nationwide, 1890 marked a critical turning point in Tribal relations with the United States government, the history of colonization, and Native American history. During the second half of the nineteenth century, the Ghost Dance functioned as an important religious movement and form of anti-colonial resistance for many Indigenous people, especially in Plains communities. Practitioners believed that the Ghost Dance would facilitate the return of the ancestors from the dead, the defeat and removal of the white colonial presence, and the reclamation and revitalization of Native lands and cultures. Responding to the blossoming of the Ghost Dance on the Pine Ridge Reservation under the spiritual leadership of the Paiute prophet Wovoka in 1889, the United States Army launched a campaign of violent repression, disarmament, and incarceration of the Lakota people. This culminated with the Wounded Knee Massacre on December 29, 1890, when between 150 and 300 Native men, women, and children – most of whom were Miniconjou Lakota – were

1998) and Jennifer Helgren, “Native American and White Camp Fire Girls Enact Modern Girlhood, 1910 – 39,” *American Quarterly* 66, no. 2 (2014): 333 – 360.

²⁰ *Ibid.*, 203.

brutally murdered. To many historians, this tragedy signaled the end of the period of armed Indigenous struggle against colonization known as the Indian Wars, after which colonial violence and Indigenous resistance collided on new stages, including, most notably for this thesis, federal Indian schools.²¹

In 1890, the federal government also issued the first uniform curriculum for federal Indian schools in its *Fifty-Ninth Annual Report of the Commissioner of Indian Affairs*.²² Prior to this attempt at standardization, Native children's experiences in federal Indian schools varied immensely according to the school they attended, making it difficult to formulate substantiated claims about curriculum across multiple schools. For this reason, centering on the 1890 – 1920 period allows me to investigate environmental education curriculum and the violence perpetrated through it as a recognizable, shared feature of instruction in federal Indian schools. By focusing on some of the most egregious decades in the boarding school era, this essay emphasizes the extremes to which something that most envision as a force for good in the world – environmental education – can be co-opted by the powerful as a weapon for propping up their ideology.²³

Yet, even in the face of this unprecedented colonial violence, Native students at federal Indian schools continued to affirm and pass on traditional Indigenous environmental wisdom,

²¹ For more information about the Ghost Dance and Wounded Knee, see Jerome A. Greene, *American Carnage: Wounded Knee, 1890* (Norman: University of Oklahoma Press, 2014) and William S.E. Coleman, *Voices of Wounded Knee* (Lincoln and London: University of Nebraska Press, 2001).

²² United States Commissioner of Indian Affairs, "Rules for Indian Schools," in *Fifty-Ninth Annual Report of the Commissioner of Indian Affairs* (Washington: Government Printing Office, 1890), cxlvi – clxxxiii.

²³ My period of study falls within the chapter of federal Indian school history (1879 – 1928) when the most atrocious examples of abuse and attempted genocide were perpetrated on a wide scale. Carlisle Indian School was founded in 1879 as the first government-run, off-reservation boarding school for Native children. This event signaled the beginning of the "the boarding school era," which lasted through the 1960s and during which the most residential schools were in operation. According to *Empty Beds*, Jean A. Keller's study of illness, injury, and death at Sherman Institute, federal Indian schools experienced the highest death rates prior to the turn of the twentieth century, before more "preventative health measures [were] implemented by the Indian Office" (Keller, 103). While student mortality decreased in the twentieth century, the Office of Indian Affairs would not be forced to grapple with other forms of abuse (or, at least, the worst of it) until they were exposed by the publication of the Meriam Report in 1928. Jean A. Keller, *Empty Beds: Indian Student Health at Sherman Institute, 1902 – 1922* (East Lansing: Michigan State University Press, 2002).

turning to the green spaces on these institutions' campuses as a source of healing and as a site for resistance. The fight to reimagine and reclaim environmental education that these students began rages on in the aftermath of the boarding school era. Starting in the 1970s, Native activists, teachers, and parents – most of whom were federal Indian school survivors themselves – launched a successful grassroots movement in Oakland, California to increase their children's access to educational opportunities based in Indigenous knowledge and to integrate Indigenous environmental wisdom into public schools. I end my thesis by telling these stories of Native resistance from within and without federal Indian schools, which indicate that, despite its fraught past, environmental education can be, has been, and is in the process of being decolonized, often under the leadership of the very people against whom this curriculum was once weaponized.

Chapter 1

A Portrait of Environmental Education at Federal Indian Schools, 1890 – 1920

Environmental education emerged as a prominent component of federal Indian school curriculum as soon as standardized policies for federal Indian schools came into effect in the early 1890s. In “Rules for Indian Schools” (1890) – the first uniform guideline for federal Indian schools – and the 1892 revised and updated version of this document, the Office of Indian Affairs mandated, “A farm and garden, if practicable an orchard also, must be connected with each school.”²⁴ These features would become such a central part of the federal Indian school landscape that Betty Newman (Blackfeet), who attended Cutbank Boarding School in the 1940s, even described this institution as “just like a big ranch but it had a dormitory, big buildings to stay in.”²⁵ The construction of such carefully cultivated, but still natural spaces enabled federal Indian schools to give “especial attention” in their curriculum “to instruction in farming, gardening, dairying, and fruit growing,”²⁶ all of which the Office of Indian Affairs considered “useful industries” for the accomplishing the official goal of the federal Indian school system: the “assimilation [of young Native people] into the national life” and eventual “American citizenship.”²⁷

As this focus on creating new geographies of learning beyond the physical confines of the classroom (farms, gardens, orchards) begins to indicate, the Office of Indian Affairs initially

²⁴ United States Commissioner of Indian Affairs, “Rules for Indian Schools” (1890), clii; United States Office of Indian Affairs, *Rules for Indian Schools* (1892), 24.

²⁵ Betty Newbreast, Oral history, Intertribal Friendship House, October 26, 1979, Print Transcript, 2, in “Oral Histories – Transcribed Interviews: Newbreast, Betty. 1979,” American Indian Community History Center Records, Carton 3, Folder 20, BANC MSS 2008/108, The Bancroft Library, University of California, Berkeley, Berkeley, CA.

²⁶ United States Commissioner of Indian Affairs, “Rules for Indian Schools” (1890), clii; United States Office of Indian Affairs, *Rules for Indian Schools* (1892), 24.

²⁷ *Ibid.*, cxlvi; 3.

conceptualized environmental education at federal Indian schools as part of these institutions' vocational training programs (which they called "industrial instruction"),²⁸ not their academic departments (known as "literary instruction").²⁹ This distinction explains the surprising absence of this "especial[ly]" important discipline in the first federal Indian school "Course of Study" (1890), the part of "Rules for Indian Schools" that outlined the required academic coursework for every grade level.³⁰ According to the "Course of Study," only federal Indian school students in the "advanced grades" (fifth year through ninth year) were required to participate in academic study of the natural world.³¹ Specifically, these "advanced" students received formal instruction in "Animals and plants" as part of a course called "observation lessons," which was designed to "cultivate" their skill in perception:

In the spring note the thermometer, the melting of the snows, the forms of water, the first signs of vegetable life. Plant seeds and arouse and interest in the coming of the birds, the leaves, and the flowers. Watch changes in the shadows of the sun. gather cocoons and study animal life in every way possible by direct observation. In autumn study the fruits, note the changing and falling leaves, the coming of the cold, the changes in the sun's shadows.³²

Yet, even during this period, environmental education at federal Indian schools largely fell outside of the purview of academic instruction. When it did enter the classroom, it was largely restricted to "advanced" students. Nevertheless, the government's "List of Books Adopted for Use in Indian Schools" (1890) indicates that textbooks with a clear and overwhelming focus on

²⁸ Ibid., clii; 24.

²⁹ Daniel Dorchester, "Report of the Superintendent of Indian Schools," in *Fifty-Ninth Annual Report of the Commissioner of Indian Affairs* (Washington: Government Printing Office, 1890), 267.

³⁰ United States Commissioner of Indian Affairs, "Rules for Indian Schools" (1890), clvi – clxi; United States Office of Indian Affairs, *Rules for Indian Schools* (1892), 33 – 40.

³¹ Ibid., clviii; 36.

³² Ibid. In addition to "Animals and plants," the long list of subjects to be studied as part of "Observation lessons" included "the human body" (ibid.), "physiology and hygiene," and "peoples, ships, cities, and occupations" (ibid., clviii; 36).

the natural world made up about twelve percent of federal Indian school course readings.³³ This decidedly high figure attests to the important position environmental education occupied in federal Indian school academics, even at its lowest point, when it was just beginning find its place in classroom instruction.

Among the titles “List of Books Adopted for Use in Indian Schools” recommended were several of the nineteenth century’s most popular textbooks on “natural history,” a predecessor discipline for environmental studies, including Asa Gray’s *Botany for Young People and Common Schools: How Plants Grow, a Simple Introduction to Structural Botany* (1858) and Washington Hooker’s *Child’s Book of Nature* (1857).³⁴ Although published decades earlier, both of these books were taken up with renewed vigor at the beginning of the nature study movement as foundational classroom texts for public schools and federal Indian school alike, before they were largely replaced by more up-to-date texts written by self-identified nature study advocates specifically for use in nature study classes.³⁵ There is, however, a crucial distinction in the way these same books were assigned in public schools and in federal Indian schools. While these texts were originally intended for very young students (*Child’s Book of Nature*, for instance, was aimed at “children aged six to nine years”) and were used as such in public schools,³⁶ the government’s “List of Books Adopted for Use in Indian Schools” prescribed *Botany for Young People* and *Child’s Book of Nature*, respectively, for the “advanced grade, third year” (seventh

³³ Ibid., clxi – clxii; 41 – 43. Of the sixty-five unique titles assigned, eight books explicitly foregrounded the natural world in their scope and content. In arriving at this number, I counted *Child’s Book of Nature*, which was often issued in three volumes, as a single book. This figure also does not include six books that fall under the discipline of geography, which Kohlstedt identifies as an important predecessor of nature study (Kohlstedt, *Teaching*, 12).

³⁴ United States Commissioner of Indian Affairs, “Rules for Indian Schools” (1890), clxii; United States Office of Indian Affairs, *Rules for Indian Schools* (1892), 42.

³⁵ Kohlstedt, *Teaching Children Science*, 18; Orra Ervin Underhill, *The Origins and Development of Elementary-School Science* (Northbrook, Illinois: Scott, Foresman and Company, 1941), 280 -281.

³⁶ Ibid., 18n43; 280.

grade) and in the “advanced grade, second year” (sixth grade).³⁷ At federal Indian schools, students in these “advanced” levels would have been in their early adolescence, at the very least, but they could have been in their late teenage years or even early twenties. Because the age at which Native young people were forced to start attending federal Indian schools varied greatly and repeating grades was common, a single class often contained students over a decade apart in age.³⁸ This act of assigning textbooks designed for young children to the most “advanced,” much older Native students offers a first glimpse into one of the key racist assumptions of the federal Indian school system: Native children were seen as less intelligent and less capable students than their white peers. It also provides a possible explanation for the limited state of the formal, classroom environmental education for the “primary grades.” If the lowest skill level textbooks about the natural world were largely reserved for students in the “advanced grades,” then younger students had “no books but nature’s own book” to work from.³⁹

After being only minimally connected with the “literary” departments during the 1890s, environmental education firmly established itself as part of the academic sphere at federal Indian schools in 1901, a change that would last through the decline of the nature study movement in

³⁷ United States Commissioner of Indian Affairs, “Rules for Indian Schools” (1890), clxii; United States Office of Indian Affairs, *Rules for Indian Schools* (1892), 42.

³⁸ Report on Examinations of Pupils, Sixth Grade, June 15, 1917, in folder “Reports on Promotions and Examinations, 1917 – 20,” Box 125, Sherman Indian High School, Records of the Bureau of Indian Affairs, Record Group 75, National Archives at Riverside, Riverside, CA; Report on Examinations of Pupils, First Vocational Grade (Seventh Grade) in *ibid.*

³⁹ Augustus A. Gould, “On the Introduction of Natural History as a Study to Common Schools,” in American Institute of Instruction, *Lectures* (Boston: Carter, Hindee, and Co., 1835), 239, quoted in Kohlstedt, *Teaching Children Science*, 14 – 15. “No book but nature’s own book” was a popular nature study adage used to encourage fieldwork beyond the classroom as an essential part of nature study. It originally came from entomologist Augustus A. Gould’s “On the Introduction of Natural History as a Study to Common Schools” (1835). “No books” is only a slight overstatement: the “List of Books Adopted for Use in Indian Schools” assigned just two books with any direct relationship to the environment to for use in any of the “primary grades.” These were *Books of Cats and Dogs* (1884), for third year students, and *Friends in Feathers and Furs* (1884), for fourth year students, both of which came from James Johonnot’s *Natural History Series*. Study of these texts began towards the end of the “primary grades,” but was largely concentrated in the “advanced grades.” United States Commissioner of Indian Affairs, “Rules for Indian Schools” (1890), clxi – clxii; United States Office of Indian Affairs, *Rules for Indian Schools* (1892), 41 – 42.

the 1920s. This major pedagogical shift was catalyzed by the publication of the *Course of Study for the Indian Schools of the United States: Industrial and Literary* (1901), the nearly 300-page document that replaced *Rules for Indian Schools* (1892) as the new standard for federal Indian school curriculum. The sheer amount of space the 1901 *Course of Study* allotted to environmental education curriculum reflects the increasingly central position that this discipline came to occupy in all aspects of federal Indian school instruction as the nature study movement grew in popularity. Of the 269 pages in the 1901 *Course of Study* dedicated to outlining specific curriculum, seventy-six pages (or a towering twenty-eight percent of the text) are specifically devoted to subjects that could be classified as environmental education: agriculture, nature study, and gardening. Furthermore, the chapters on each of these environmental topics are among this publication's most substantial sections, in terms of both their content and their scale. At thirty-four pages, the chapter on agriculture is by far the longest part in the 1901 *Course of Study*, followed by the chapter on nature study (twenty-seven pages). After only sewing (twenty-two pages) and "Reading, Language, and Sub-primary work" (twenty-one pages), the chapter on gardening (eighteen pages) ties with carpentry for fifth longest. The scope of the government's commitment to implementing environmental education curriculum in federal Indian schools becomes even more impressive given that the median chapter length is just five pages, with other more conventionally important academic subjects (like writing, at four pages, and arithmetic, at eleven pages) and equally technical industrial areas (such as engineering, at eight pages, and shoemaking, at three pages) receiving significantly less space and attention.⁴⁰

Not content with the even the truly impressive degree of emphasis the 1901 *Course of Study* placed on these environmental topics, the Office of Superintendent of Indian Schools

⁴⁰ United States Office of Superintendent of Indian Schools, *Course of Study for the Indian Schools of the United States: Industrial and Literary* (Washington: Government Printing Office, 1901).

issued a supplemental publication called *Nature Study and Gardening: Primary Methods and Outlines for the Use of Teachers in the Indian Schools* (1906) to all federal Indian school agents, superintendents, and teachers just five years later. This document further reiterated the “importance” of these subjects and insisted that instruction in these areas “be carried out” “at least to the extent suggested” and preferably “much further as may be deemed advisable and as the circumstances will permit.”⁴¹

To ensure federal Indian schools would be staffed with employees who could effectively convey all of this environmental education curriculum to Native students, the “Application for Appointment in the U.S. Indian School Service” framed familiarity with farming and farm life as an essential prerequisite for all positions, including those seemingly unrelated to environmental education.⁴² For example, the application insisted that superintendents, the highest-ranking employees at federal Indian schools, possess extensive agriculture expertise, listing “knowledge in farming” as the very first qualification candidates should meet, before even “good executive ability” and “skill in directing the details of an extensive institution,” both of which seem more immediately relevant to the superintendent’s daily job duties.⁴³ Of the thirty-six questions every applicant was required to answer, four questions directly assessed the prospective employee’s environmental and agricultural competency – more questions than on any other topic. Relative to other prompts, the questions about farming are also more detailed, especially number twenty-four, which asked:

Are you familiar with the usual work of a well conducted farm, such a sowing[,]
cultivating, and reaping crops; mowing, curing, and stacking hay, grain, and fodder;

⁴¹ United States Office of Superintendent of Indian Schools, *Nature Study and Gardening: Primary Methods and Outlines for the Use of Teachers in the Indian Schools* (Washington: Government Printing Office, 1906), 4.

⁴² United States Commissioner of Indian Affairs, “Application for Appointment in the U.S. Indian School Service,” in *Fifty-Ninth Annual Report of the Commissioner of Indian Affairs* (Washington: Government Printing Office, 1890), clxiii – clxv.

⁴³ *Ibid.*, clxiv.

planting and cultivating trees, vines, and small fruits; breeding, caring for, and butchering stock; making cheese, storing winter fruits and vegetables, bee keeping, sheep-shearing, etc. What experience have you had as a farmer and when? Are you acquainted with methods of irrigation? Do you take an agricultural paper? If so, what one?⁴⁴

In addition to underscoring the importance of agricultural experience for successful applicants to the Indian School Service and the prominence of this curriculum in federal Indian schools, this question provides insight into the type of farming practices which constituted environmental knowledge in eyes of the federal government. The last part of the question (“Do you take an agricultural paper? If so, what one?”) suggests that environmental and agricultural knowledge ultimately comes from a formal publication that has been verified by Western academic institutions, not from the experience of working the land, when practiced in isolation from the literature.⁴⁵

In this sense, the “Application for Appointment in the U.S. Indian School Service” reflects a crucial change in environmental education pedagogy at federal Indian schools between “Rules for Indian Schools” (1890) and the 1901 *Course of Study*: government officials in charge of determining the curriculum for federal Indian schools increasingly came to believe that gaining an academic understanding of the environment better prepared Native students to run “a well conducted farm” in adulthood. However, providing academic instruction about the natural world was worthwhile only to the extent that it made Native children more skilled and

⁴⁴ Ibid., clxiii.

⁴⁵ Although the colonial violence perpetrated through environment education is the topic of the next chapter, not this one, it is worth briefly noting here that by referring to and invalidating purely experiential knowledge of the land, the government was launching a coded attack against Indigenous land management techniques that were carefully developed over time, passed down across generations, and taught through the process that activist and scholar Vine Deloria, Jr. (Standing Rock Sioux) describes as “the traditional Indian way of learning by doing.” Presenting agricultural papers as the authority on farming is itself a form of epistemic colonization, which enacts violence by dismissing oral history, experiential learning, and other traditional Indigenous methodologies of coming into and spreading knowledge, before supplanting them with Euro-American sources of information, oriented towards modernity, mechanization, and standardization. Vine Deloria, Jr., “Foreword,” in *Look to the Mountain: An Ecology of Indigenous Education* (Skyland, North Carolina: Kivaki Press, 1994), 12.

productive agricultural workers, never for the sake of promoting environmental literacy on its own. This ideological shift is apparent in a particularly revealing passage from the 1901 *Course of Study*: “Nature study and agriculture are very closely related and must be studied in conjunction. Agriculture is, in fact, practical nature study. In the case of our Indian schools it [agriculture] is the practical application on a broad scale of the principles and facts learned in the lower grades about plant life.”⁴⁶

Using academic instruction in “practical nature study” to make agricultural training more effective was a key aspect of the environmental education curriculum at federal Indian schools inherited from vocational schools in the South for Black students, after which the Office of Superintendent of Indian Schools explicitly modeled its programs in nature study, gardening, and agriculture.⁴⁷ Designed to prepare African Americans for what was perceived as their inevitable future of toiling in the fields,⁴⁸ Southern vocational schools enlisted that subject “engrossing the attention of the teaching world,” nature study, in their efforts to keep students engaged and focused on developing their agricultural knowledge and skills.⁴⁹ As Kohlstedt wrote in *Teaching Children Science*, “This emphasis on agricultural productivity left little time for the kinds of outdoor and exploratory projects enjoyed primarily by white students” that made nature study

⁴⁶ United States Office of Superintendent of Indian Schools, *Course of Study* (1901), 7.

⁴⁷ United States Office of Superintendent of Indian Schools, *Course of Study* (1901), 18 – 19, 113 – 129, 172 – 183; United States Office of Superintendent of Indian Schools, *Nature Study and Gardening* (1906), 21, 27.

⁴⁸ Before the Great Migration (1910 – 1970), most Black people in the United States lived in the South and worked in the agriculture industry, generally under conditions of extreme social, economic, and physical exploitation as tenant farmers or sharecroppers, one of the many afterlives of slavery. In 1920, when the number of farms operated by African Americans reached its historical height of 926,000 farms, or 14.3 percent of all farms in the United States and 28.6 percent of farms in the South, 98.9 percent of Black farmers lived in the South. Three quarters of them were tenants of white landowners, often the descendants of the very same plantation owners who had enslaved their ancestors. United States Department of Agriculture, Economic Research Service, *Black Farmers and their Farms (Rural Development Research Reports Number 59)*, by Vera J. Banks (Washington: Government Printing Office, 1986), 1 – 2.

⁴⁹ Charles L. Goodrich, in *Learning How to Do and Learning by Doing*, by Thomas Bengough (Toronto: Cameron, 1902), 80, quoted in Kohlstedt, *Teaching Children Science*, 107.

such an innovative and progressive educational movement.⁵⁰ In fact, developers of nature study curriculum at some vocational schools even deliberately stripped the discipline of its, in their opinion, superfluous focus on science education to give more attention to the academic principles that would best serve students as farmers.⁵¹ Following this lead, the 1901 *Course of Study* made a similar recommendation about adapting nature study for federal Indian schools: “The teacher must keep in mind that the result to be aimed at is the teaching of those things which will be an aid to the Indian in *practical* life, especially in the line of agriculture.”⁵² All other environmental knowledge, according to the government, was deemed irrelevant, counterproductive, and even – as I will show in the next chapter – threatening.

As an homage to these vocational schools and the instrumental role they played in shaping the content of federal Indian school environmental education, the *Report of Superintendent of Indian Schools 1902* referred to the new agriculture, nature study, and gardening curriculum implemented in the 1901 *Course of Study* as “the Hampton plan,”⁵³ after the particularly influential program at Hampton Institute in Virginia, a normal school “Founded in 1868 during Reconstruction [...] for the industrial education of blacks,” which continues to operate today as Hampton University, a historically Black university (HBCU).⁵⁴ Although the student body at Hampton has always been predominantly Black, 1,388 Native students attended

⁵⁰ Kohlstedt, *Teaching Children Science*, 107.

⁵¹ Ibid.

⁵² United States Office of Superintendent of Indian Schools, *Course of Study* (1901), 169, emphasis mine.

⁵³ United States Office of Superintendent of Indian Schools, *Report of Superintendent of Indian Schools 1902* (Washington: Government Printing Office, 1902), 26.

⁵⁴ Donal F. Lindsey, *Indians at Hampton Institute, 1877-1923* (Urbana: University of Illinois Press, 1995), xi. The Director of the Agriculture Department at Hampton Institute, Charles Landon Goodrich, arguably contributed more to developing the government’s agriculture and gardening curriculum for federal Indian schools than any other individual. The 1901 *Course of Study*, for example, quotes at length from the teachings of “Prof. C.L. Goodrich, the eminent teacher of agriculture at Hampton,” with his verbatim recommendations making up almost the entirety of the chapters on nature study and gardening (127). Likewise, the supplemental publication on *Nature Study and Gardening* (1906) incorporates direct quotes from the *Hampton Agriculture Leaflets* and the *Hampton Nature-Study Leaflets* into its lesson plans⁵⁴ and credits “Prof. C.L. Goodrich, of Glendale, Md., author of *The First Book of Farming*,” as providing “valuable hints” for “the preparation of this pamphlet” (27).

Hampton between 1877 and 1923 as part of the institution's segregated "Indian Program."⁵⁵ During this period, the government even classified Hampton as part of the federal Indian school system, as the *Report of Superintendent of Indian Schools 1902* confirmed when it included a highly favorable evaluation of Hampton in its "synopsis of reports"⁵⁶ for all of federal Indian schools.⁵⁷ Tellingly, this report read: "Many of the Indian pupils [at Hampton] have chosen to spend the entire day in the shops learning a trade, or in the dairy, or on the farm, obtaining their literary instruction in the evening classes," a fact that distinguished Hampton as "one of the best-equipped schools in the United States."⁵⁸ Hampton and other Southern vocational schools that primarily enrolled Black students ultimately provided the Office of Indian Affairs with a blueprint for using the discipline of "practical nature study" to induct Indigenous people into a racial under caste of agricultural workers, on whose exploitation they believed the American economy and food system depended. In the coming chapter, I will interrogate this function of the environmental education materials at federal Indian schools as one of the many forms of colonial violence this curriculum was used to enact.

⁵⁵ Ibid.

⁵⁶ United States Office of Superintendent of Indian Schools, *1902 Report*, 7.

⁵⁷ Ibid., 13.

⁵⁸ Ibid.

Chapter 2

Environmental Education Curriculum at Federal Indian Schools as a Conduit for Colonial Violence

Indigenous activists, community leaders, and thinkers; scholars of Native American history and Indigenous studies; and the BIA's Federal Indian Boarding School Initiative, which began in 2021 under the leadership of Secretary of the Interior Deb Haaland (Pueblo of Laguna), have worked to expose, document, and promote healing from the genocide that was perpetrated against Indigenous people through the federal Indian school system. While keeping in mind that these schools were the vehicles for a vast number of horrific abuses and that the time- and emotional labor-intensive process of investigating, remembering, and mourning all of them is ongoing, it is important to recognize that not enough attention has been dedicated to the role of environmental education curriculum in the federal Indian schools' project of colonization. In fact, except for Kohlstedt's brief discussion in "A Better Crop of Boys and Girls': The School Gardening Movement, 1890 – 1920," I have not been able to identify any scholarship that substantially brings together the history of environmental education with the history of the federal Indian school system.⁵⁹ My research bridges this gap, uncovering a previously untold narrative of environmental education being weaponized by the federal Indian school system as a conduit for three key types of colonial violence: epistemic colonization, policing of knowledge by gender, and physical abuse in the form of forced labor. With this chapter, I undertake the essential work of starting to reckon with this important, under-researched legacy of the federal Indian boarding school system, in hopes of facilitating the healing process for survivors who

⁵⁹ Kohlstedt, "A Better Crop of Boys and Girls," 67 – 73.

endured atrocities in the name of environmental education and for their descendants, while grieving the loss of those children who never returned home.

Epistemic Colonization Through Environmental Education

Federal Indian schools' environmental education curriculum represented a mechanism through which the government strove to eradicate traditional Indigenous environmental knowledge and to supplant it in the minds of Native children, their families, and their communities with capitalist and Euro-American modes of imagining the natural world. The 1901 *Course of Study* begins to articulate this vision for environmental education in its opening chapter on "Agriculture":

As it is one of the main objectives of our work to get the Indians to cultivate more land, and as the old Indians, from custom and want of knowledge and experience, cultivate so little, it is desired that the students obtain such a knowledge of an experience in irrigating methods that they will not only have a *desire* and ambition to irrigate more land and largely increase their acreage under cultivation, but that they will have the *ability to carry out their desires* and earn a good living out of their lands.⁶⁰

Why, the reader might wonder, would the government want Indigenous people to "cultivate more land?" And what could be so important about this goal that the government determined it was "one of the main objectives" of the federal Indian school system? To answer these questions, we must consider the central role that the agricultural industry played in the growth of the American economy. In the nineteenth century, a confluence of legislation, including the Homestead Act of 1862, the Swamp Lands Act of 1850, the Desert Lands Act of 1877, and the Dawes Act of 1887, worked together to transform the landscape of the American West into an essential part of the machinery of American capitalism. By providing incentives for settlers and, in the case of the Dawes Act, Indigenous people to farm these territories, these laws converted

⁶⁰ United States Office of Superintendent of Indian Schools, *Course of Study* (1901), 9 – 10 (emphasis in original).

areas perceived as wastelands or as wasted lands into productive sites for generating agricultural goods to supply the domestic and international market and, ultimately, improve the standing of the United States in the increasingly interconnected global economy.⁶¹ Inciting in Native people the “*desire* and ambition to irrigate more land” would, the government believed, recast a population whose economic potential they saw as wasted, much like the land itself, into a new workforce.

To achieve this goal, federal Indian schools needed to induct Native children, the *new* counterparts of the “old Indians” who “cultivate[d] so little,” into the capitalist modes of thinking and living that drove such “a *desire* and ambition” to contribute economically to American society. Commissioner of Indian Affairs Francis Leupp succinctly summed up this mission in a 1907 lecture at Sherman Institute, during which he remarked on how fitting it was that the overlapping letters “S” and “I” on Sherman’s school banner looked “pretty near to being a dollar mark.”⁶² To Leupp, this design reflected what the government envisioned as “the most important” learning outcome for Native children at federal Indian schools: “it is the dollar that makes the world go around, and we have to teach the Indians at the outset of their careers what a dollar means.”⁶³ My research reveals that environmental education curriculum represented a key mechanism through which the government sought to impress capitalist values of individual property ownership, economic efficiency, free market ideology, and the importance of profit into the minds of Native people and, thus, make productive agricultural laborers out of them.

⁶¹ Greg Bradsher, “How the West Was Settled: The 150-year-Old Homestead Act Lured Americans Looking for a New Life and New Opportunities,” *Prologue* 44 (Winter 2012): 29 – 32, 34.

⁶² Qtd. in David Wallace Adams, *Education for Extinction: American Indians and the Boarding School Experience, 1875 – 1928* (Lawrence, Kansas: University Press of Kansas, 1995), 155.

⁶³ *Ibid.*

School gardens, among the most wide-spread and influential tools for conveying environmental knowledge in the late nineteenth and early twentieth century, were deliberately organized at federal Indian schools to facilitate instruction in these essential capitalist principles. In her annual report for the 1905 fiscal year, Superintendent of Indian Schools Estelle Reel highlighted the practice of subdividing school gardens in federal Indian schools into “individual plots,” with one “plot” “allott[ed]” to each “each child.”⁶⁴ This method of structuring the gardens, Reel insisted, would “instill into each pupil a pride in his garden and a feeling of ownership – that it belongs to him individually.”⁶⁵ By appropriating the language of “allotments” from the Dawes Act to describe these “individual plots,” Reel explicitly framed school gardens as a model for the individual land ownership practices Native students would be expected to follow in adulthood, after finishing school.⁶⁶ Because such a claim to “ownership” only increases a person’s sense of connection to the land and their determination to labor on it, according to a capitalist viewpoint, the government boasted that “allotting” “individual plots” to students effectively promoted “a spirit of emulation and friendly rivalry [between peers], which has led them to put forth their best efforts”⁶⁷ in improving the land and in “compet[ing] [...] for the honor of the most productive and neatest garden.”⁶⁸ “Honor” and “pride,” however, were not the

⁶⁴ Estelle Reel, “Report of Superintendent of Indian Schools,” in *Annual Reports of the Department of the Interior for the Fiscal Year Ended June 30, 1905: Indian Affairs, Part I* (Washington: Government Printing Office, 1906), 394.

⁶⁵ Estelle Reel, “Report of Superintendent of Indian Schools,” in *Annual Reports of the Department of the Interior for the Fiscal Year Ended June 30, 1904: Indian Affairs, Part I* (Washington: Government Printing Office, 1905), 395.

⁶⁶ Also known as the General Allotment Act, the Dawes Act used the word “allotment” to refer to Indigenous land once held communally that was converted by the federal government into individual pieces of property and assigned to single Indigenous men or the male head of a household. In addition to working to assimilate Native people into the American system of private property ownership and Euro-American nuclear family structures, the Dawes Act effectively redistributed Indigenous peoples’ land to white settlers by claiming excess Native land left over from the allotment process. Because of this policy, 90 million acres of land were wrenched from Native Nations, already confined to just 138 million acres in 1887, before the Dawes Act was repealed in 1934. Alan Trachtenberg, *Shades of Hiawatha: Staging Indians, Making Americans, 1880-1930* (New York: Hill and Wang, 2004), 39.

⁶⁷ Reel, “Report of the Superintendent of Indian Schools” for the 1904 Fiscal Year (1905), 395.

⁶⁸ United States Office of Superintendent of Indian Schools, *Course of Study* (1901), 170.

primary incentives for students to apply themselves to making their gardens efficient and fruitful; government documents repeatedly instructed teachers and administrators to remind Native students that these plots could earn them money, the marker of success the government believed its pupils should aspire to above all else. Although Native children were far from the main financial benefactors of the school gardens and farms, as I will explain later in this chapter, the 1901 *Course of Study* permitted surplus “vegetable and flowers grown” in each child’s garden plot to “be marketed, the profits going to form the nucleus a bank account.”⁶⁹ The intended “lesson” of this exercise – “those who work hardest are the best paid”⁷⁰ – reinforces the “pull yourself up by your bootstraps” myth that remains central to capitalist ideology, while erasing the intersecting structures of power and privilege that would inform the harsh reality of unemployment and poverty many of these students faced after leaving school, as they struggled to find reliable sources of income to support themselves and their family, much less turn a profit, due to systemic racism and the outdated training they received at federal Indian schools.⁷¹

On their “individual plots” and the larger school farm, Native children were required to use Euro-American farming techniques to grow the same staple crops, which would later be prepared to eat in Euro-American style dishes.⁷² By standardizing agricultural products and the

⁶⁹ Ibid., 163.

⁷⁰ Ibid., 170.

⁷¹ Margaret Connell Szasz, *Education and the American Indian: The Road to Self Determination Since 1928*, 3rd ed. (Albuquerque: University of New Mexico Press, 1999), 2.

⁷² At Sherman Institute during the 1911 – 1912 school year, girls in the “Domestic Science” course were instructed to make “fritters and croquetts [sic],” “chicken pie,” “rice and bread pudding,” and “soft and baked custards,” among other dishes. “Domestic Science: Course of Instruction from September to December 1911,” in folder “Vocational Course Lecture Outlines, 1911 – 1912,” Box 114, Sherman Indian High School, Records of the Bureau of Indian Affairs, Record Group 75, National Archives at Riverside, Riverside, CA. “Domestic Science: Course of Instruction from December to March 1912,” in *ibid.* Denying young Native people at federal Indian schools the right to make and eat culturally specific foods and instead forcing them to produce those valued by their oppressors is undeniably an example of the colonization of the food cultivation, preparation, and consumption practices. Diné (Navajo) poet Esther G. Berlin denounces and mourns this specific form of colonial violence when she labels the “cook[ing of] roast beef and not mutton” and the “eat[ing of] white bread and not frybread” at federal Indian school as acts of indoctrination into “the rituals of Euro-American women” in her poem “Euro-American Womanhood

meals they were converted into, the government believed it could better assimilate Native students into Euro-American foodways. In these efforts, the government even went so far as to insist upon the cultivation of water-intensive crops in arid regions with climates antithetical to their growth. This desire for uniformity was a residual of the Desert Lands Act and other nineteenth century legislation, which encouraged the irrigation of the West to create more predictable, standardized American landscape in the mold of the dense greenery of the East.⁷³ The “Report of Superintendent of Indian Schools” for the 1904 fiscal year celebrates Rice Station Boarding School as an admirable example of the successful execution this, in the government’s eyes, financially and morally beneficial strategy for transforming of arid land, praising the fact that “a large amount of garden products were raised by the 200 full-blood Apaches, notwithstanding that this school is located in an almost arid region [Arizona], which shows what can be accomplished through industry and perseverance.”⁷⁴

As this anecdote about Rice Station begins to illuminate, the terrible irony – and one of the many great tragedies – of the environmental education materials taught at federal Indian schools is that many of the practices the government forwarded as the only acceptable mode of cultivation ultimately proved to be unsustainable, resulting in more ecological harm than good. Although historians and scientists continue to debate the causes of the Dust Bowl,⁷⁵ the systematic denuding of the Great Plains of its native grasses, so that land could be converted into productive agricultural fields, has been widely recognized as an important factor contributing to

Ceremony” (1999). Esther G. Berlin, “Euro-American Womanhood Ceremony” (1999), in *The Diné Reader: An Anthology of Navajo Literature.*, ed. Esther G. Berlin, et al. (Tuscon: The University of Arizona Press, 2021), 164.

⁷³ Bradsher, “How the West was Settled,” 32.

⁷⁴ Reel, “Report of the Superintendent of Indian Schools” for the 1904 Fiscal Year (1905), 397.

⁷⁵ See William Cronon, “A Place for Stories: Nature, History, and Narrative,” *The Journal of American History* 78, no. 4 (March 1992): 1347 – 1376.

this devastating ecological and sociopolitical disaster of the 1930s.⁷⁶ On this land, already made vulnerable to soil erosion by the removal of native plants, farmers used techniques like deep plowing and monocropping that promoted further deterioration of soil health.⁷⁷ These practices also produced greater quantities of loose soil that fueled massive dust storms, which occurred with a frequency and intensity unprecedented in the Great Plains region's recent environmental history, giving the Dust Bowl its name.⁷⁸ As in the case of deep plowing methods prescribed as part of the curriculum in the 1901 *Course of Study*, Federal Indian schools actively trained Native children in many of these destructive techniques, mandating students give up the land management and farming practices of their peoples and their cultures, which are often more sustainable because they are rooted in environmental wisdom meticulously developed over generations and fitted to local climatic conditions, for modes of engaging with the land that were eventually shown to be destructive.⁷⁹ In this pernicious way, the violence that federal Indian schools perpetrated against Native peoples through environmental education curriculum reverberated even beyond the human world, altering the very fate of the land itself.

Changing attitudes towards the purpose of Arbor Day in federal Indian schools over the course of the 1890 – 1920 period reveal that these capitalist and Euro-American epistemologies of land grew only more entrenched in learning outcomes and teaching methodology as environmental education came to occupy a more prominent position in the curriculum at federal Indian schools. Both the 1890 “Rules for Indian School” and its 1892 revision designated Arbor Day as one of eight holidays that should “be appropriately observed” at federal Indian schools.⁸⁰

⁷⁶ Susan Borowski, “The Dust Bowl: A Wake-Up Call in Environmental Practices,” AAAS (American Association for the Advancement of Science), December 3, 2012.

⁷⁷ Ibid.

⁷⁸ Ibid.

⁷⁹ United States Office of Superintendent of Indian Schools, *Course of Study* (1901), 26 – 27, 121 – 125.

⁸⁰ United States Commissioner of Indian Affairs, “Rules for Indian Schools” (1890), clii; United States Office of Indian Affairs, *Rules for Indian Schools* (1892), 22.

While Arbor Day has since waned in popularity, it is difficult to overstate the importance of this holiday during the end of the nineteenth century and the beginning of the twentieth century.

Urged on by an explosion of literature promoting tree appreciation and conservation by private organizations like the American Forestry Association and local, state, and federal government entities alike, Americans celebrated Arbor Day by embarking on a mass tree planting movement every spring.⁸¹ The prominent position Arbor Day occupied in the late nineteenth century American imagination is reflected in the language that “Rules for Indian Schools” (1890) and its 1892 revision use to describe this holiday, assuming their audience’s intimate familiarity with it. Unlike three other holidays – Franchise Day, Washington’s Birthday, and Decoration Day (now called Memorial Day) – for which both documents inserted a parenthetical clarifying when they should be celebrated, both the 1890 “Rules for Indian Schools” and the updated 1892 version did not feel the need to remind administrators when to observe Arbor Day.⁸² This can be partially explained by the nature of Arbor Day itself. Because the ideal time for tree planting varied according to the climate where each school was located, federal Indian schools were not required to celebrate Arbor Day on the same fixed calendar date as other institutions. In a circular dated January 30, 1890, Commissioner of Indian Affairs T.J. Morgan gave Superintendents permission

⁸¹ Armitage, *The Nature Study Movement*, 180 – 181.

⁸² In 1889, Commissioner of Indian Affairs T.J. Morgan proposed a new holiday called Franchise Day, during which Native children at federal Indian schools would celebrate the Dawes Act as “the possible turning point in Indian History, the point at which the Indians may strike out from tribal and reservation life and enter American citizenship and nationality” and learn more about the allotment system that their training in farming, gardening, and nature study was designed to prepare them for. T.J. Morgan to United States Indian Agents, circular, January 24, 1890, in *Fifty-Ninth Annual Report of the Commissioner of Indian Affairs* (Washington: Government Printing Office, 1890), clxvii – clxviii. Although it predates the establishment of Franchise Day as a holiday, the poem “A New Citizen” (1887) written by Hampton Institute student Elsie Fuller (Omaha) and published in the student paper *Talks and Thoughts of the Hampton Indian Students* reveals that school administrators were successful in reframing Native student’s perspectives around the Dawes Act to match the official government narrative through this type of programming. While the entire poem assumes a decidedly celebratory attitude, the final stanza stands out in its unreserved embrace of the Dawes Act: “Now we are citizens, / We all give him applause – / So three cheers, my friends, / For Senator Dawes!” Elsie Fuller, “A New Citizen” (1887), in *Changing is Not Vanishing: A Collection of American Indian Poetry to 1930*, ed. Robert Dale Parker (Philadelphia: University of Pennsylvania Press, 2011), 228.

to select the date when their institution would observe Arbor Day annually, expecting them to “report to this office how it was celebrated, inclosing a programme of the exercises” and making recommendation for future improvements each year.⁸³ The fact that Morgan felt no need to remind Superintendents that they made this commitment months, then years later when “Rules for Indian Schools” (1890) and its 1892 revision were respectively published speaks to the cultural importance of Arbor Day in federal Indian schools, placing Arbor Day among an exclusive group of the most culturally significant holidays – New Year’s Day, Fourth of July, Thanksgiving Day, and Christmas – for which an explanatory parenthetical was seen as unnecessary.



Figure 1: *Planting Trees*. Circa 1930 – 1960. Photograph. Box 96, Folder 2, Sherman Indian Museum, Riverside, California. *Calisphere*, <https://calisphere.org/item/ark:/86086/n2h131xm/>.⁸⁴

⁸³ T.J. Morgan to Indian Agents and Superintendents of Indian Schools, circular, January 30, 1890, in *Fifty-Ninth Annual Report of the Commissioner of Indian Affairs* (Washington: Government Printing Office, 1890), clxviii – clxix (spelling in original). The policy of allowing individual federal Indian school administrators to choose the specific date on which their institution would observe Arbor Day might be misinterpreted as a commitment to more sustainable agricultural practices tailored to local environmental conditions. This was certainly not the case. Even federal Indian schools in regions with few native trees, like arid desert areas, were required to participate in Arbor Day; they were not permitted to use this holiday as an opportunity to celebrate other plant species better adapted to the local climate. In this respect, Arbor Day represented an opportunity for the government to encourage federal Indian school students to transform diverse landscapes until they conformed to a single standardized ideal of “nature,” much as federal Indian schools sought to “Americanize” Native children.

⁸⁴ While nearly all the primary sources I analyze were created between 1890 – 1920, it is important to acknowledge that most of the photographs from Sherman Institute that I integrated into this chapter were taken during the

Initially, Arbor Day festivities at federal Indian schools were more inclined to recognize and celebrate the intrinsic value of nature, to use the language of ecocriticism for the belief that the natural world has inherent worth in and of itself, apart from its usefulness to humans.⁸⁵ According to Morgan's circular, the purpose of Arbor Day during the 1890s was to underscore "the value and importance of forest and fruit tree culture" by having students plant trees and learn to care for them, a goal in alignment with the most progressive environmental movements of the time.⁸⁶ Yet, even this curriculum was not without its serious problems. The context in which Morgan made this claim ("It is important that that the Indians under your supervision be properly instructed as to the value and importance of forest and fruit tree culture") implies that the Office of Indian Affairs viewed Indigenous children as entirely ignorant of trees and their "value and importance" until coming to federal Indian schools.⁸⁷ This might have been true to a very limited extent for Native children whose ancestral homelands or, in the case of removal, whose reservations were located in ecosystems with few trees, but certainly would not have been the case for the vast majority of federal Indian school students, many of whom came from densely forested areas and from Nations with rich and complex cultural practices related to trees. Even further, administrators failed to fully extricate the Arbor Day curriculum and learning

decade(s) immediately after my period of study. Because of the relative the novelty and inaccessibility of photography during this period, especially in the rural context of federal Indian schools, fewer photographs were taken at Sherman between 1890 and 1920, and these were mostly formal portraits or pictures of buildings, not candid shots of students in classes or at work. Sherman Indian Museum's digital photo archive includes 308 total pictures that were likely taken between 1890 and 1920, 16 of which have some relationship to farming, although they are mostly pictures of animals, buildings, and farm equipment and all of them were taken in the 1910s. Compare this to 653 total photographs (40 of which relate to farming) from the 1920s and 2,621 total pictures (288 of which relate to farming) from the 1930s. It is also worth acknowledging that very few of these pictures are dated exactly, and most were retrospectively assigned a range of several decades in which they might have been taken, making including photographs of environmental education curriculum at Sherman only from my 1890 – 1920 period of study an even more difficult, if not impossible, task.

⁸⁵ For more on the theory of the intrinsic value of nature, see Donald Worster, "The Intrinsic Value of Nature," *Environmental Review* 4, no. 1 (1980): 43 – 49.

⁸⁶ Morgan to Indian Agents and Superintendents of Indian Schools, circular, January 30, 1890, clxviii.

⁸⁷ *Ibid.*

outcomes from the capitalist agenda of federal Indian schools, which compromised its ability to affirm the intrinsic value of nature. In the same circular where he emphasized “the value and importance of forest and fruit tree culture,” Morgan contradicted himself by forwarding an anthropocentric perspective of the value of nature: “When each child plants a tree it may be known as belonging to him.”⁸⁸ The key word here is “belonging,” which suggests that Arbor Day was used as an occasion to reiterate the ideas of individual property rights and personal responsibility under capitalism.

However, when compared to the recommendations for observing Arbor Day issued a decade later in the 1901 *Course of Study*, Morgan’s language of “belonging” seems remarkably subtle. Asserting that “Arbor Day will afford an opportunity for impressing upon the pupils the value of shade trees *to the farmer* and the importance of forests *to his welfare*,”⁸⁹ the 1901 *Course of Study* assumed a much more instrumentalist view of nature than its predecessors, framing trees as “valu[able]” and “important[t]” only as they assisted the farmer in making his land productive and profitable.⁹⁰ This vision of nature becomes even more explicit in a later section of the 1901 *Course of Study* about horses, which compelled instructors to “Teach that it is usefulness that gives value to an animal,” such as in the case of work horses (“How useful”), but not “Wild unbroken horses” (which “are of no value”).⁹¹

Outlines of the units taught in the “Junior and Senior Vocational Courses in Agriculture” during the 1911 – 1912 academic year at Sherman Institute reveal that these capitalist values were not merely an implicit part of environmental education curriculum, apparent in the

⁸⁸ Ibid., clxix.

⁸⁹ United States Office of Superintendent of Indian Schools, *Course of Study* (1901), 9 (emphasis mine).

⁹⁰ For an explanation of the instrumentalist theory of the value of nature, see Worster, “The Intrinsic Value of Nature,” 45.

⁹¹ United States Office of Superintendent of Indian Schools, *Course of Study* (1901), 168.

underpinning pedagogical framework that government officials like Leupp, Reel, and Morgan articulated to each other away from the gaze of Native students; the actual lectures and course materials given to students emphasize these economic principles, first and foremost, as the foundation of their environmental literacy. At Sherman, students specializing in “Agriculture” began their advanced study with a course on “General Horticulture.” The very first unit of this class opened with the topic “economics of the fruit industry,” including the “cost of establishing the orchard, maintenance and production costs; fields and returns.” Notably, these financial concerns came even before the more intuitive starting place for the course – “Definition of fruits” and “Kinds of fruit, their history and development,” which were taught later in the same unit.⁹² This organizational structure for the coursework is telling because it indicates that, in the eyes of the government, environmental education was not inherently valuable. The land was primarily worth learning about as a way to make money, as an entry point into becoming an economically productive member of American society under capitalism.

This philosophy – that environmental knowledge is less important than the associated ideologies the government could convey through it – is also reflected in the use of environmental education as a critical part of English language instruction in federal Indian schools. Eradicating Native languages by forcing Indigenous children to communicate only in English was a primary aim of the federal Indian school project, and the devastating impact of this practice on the prevalence and survival of Indigenous languages remains one of the most enduring genocidal impacts of the federal Indian school system.⁹³ These schools are directly implicated in the

⁹² “Junior and Senior Vocational Courses in Agriculture, Sherman Institute, Riverside, Calif.,” in folder “Vocational Course Lecture Outlines, 1911 – 1912,” Box 114, Sherman Indian High School, Records of the Bureau of Indian Affairs, Record Group 75, National Archives at Riverside, Riverside, CA.

⁹³ United States Bureau of Indian Affairs, *Federal Indian Boarding School Initiative Investigative Report* (2022), 40, 51 – 54.

dramatic loss of Indigenous languages that Amy M. Gantt (Chickasaw), Assistant Professor of Native Studies and Art at Southeastern Oklahoma State University, synthesized so concretely and with stark succinctness in her 2015 paper “Native Language Revitalization”:

Before the arrival of the European colonists, North America was home to around 300 distinct languages (Perlin, 2014). Approximately 155 indigenous languages are spoken in North America today, with 135 of those languages only spoken by elders (Paskus, 2013). Currently, at least 50 of the languages still spoken have fewer than ten speakers each (Perlin, 2014). In Oklahoma [for example], there were once 37 indigenous languages spoken. Of those languages, 22 have become extinct (Baines, 2012).⁹⁴

Although surprisingly little scholarly attention has been dedicated to documenting its role in this particularly vicious form of colonial violence, federal Indian school environmental education curriculum represented an important avenue through which the government worked to achieve this goal of forcing Native children to “abandon their tribal language[s]” and speak use only English, as the government so bluntly articulated its objective in “Rules for Indian Schools” (1890) and its 1892 revision.⁹⁵

In a circular mailed to all federal Indian school instructors and later reprinted for emphasis in her annual report for the 1904 fiscal year, Reel insisted, “Teachers will find garden work *one of the best methods* in developing English in backward pupils, as the child when working with his hands unconsciously overcomes timidity and naturally endeavors to imitate all that he sees done.”⁹⁶ The next year, Reel elaborated on this claim and provided a model for teachers to follow as they attempt to “develop” Native children’s English language skills through environmental education curriculum when the Office of Superintendent of Indian Schools issued

⁹⁴ Amy M. Gantt, “Native Language Revitalization: Keeping the Languages Alive and Thriving” (paper presented at the Native American Institute 2015 Native American Symposium, “Native Leadership: Past, Present, and Future History, Culture, and Customs,” Southeastern Oklahoma State University, November 5, 2015): 13, <https://www.se.edu/native-american/wp-content/uploads/sites/49/2019/09/AAA-NAS-2015-Proceedings-Gantt.pdf>.

⁹⁵ United States Commissioner of Indian Affairs, “Rules for Indian Schools” (1890), cli; United States Office of Indian Affairs, *Rules for Indian Schools* (1892), 19.

⁹⁶ Reel, “Report of the Superintendent of Indian Schools” for the 1904 Fiscal Year (1905), 395 (emphasis mine).

Nature Study and Gardening: Primary Methods and Outlines for the Use of Teachers in the Indian Schools (1906). Based on its title, readers might assume that this publication centers primarily on the environmental knowledge the government deemed essential for Native children to learn, but *Nature Study and Gardening*, instead, presents its nominal subject as a mechanism for English language accession, a learning outcome it treats as equally, if not more important than ensuring students become environmentally literate and understand the material content of their nature study, agriculture, and gardening courses.

To this effect, *Nature Study and Gardening* proposes that teachers “repeat” the same lectures and experiments⁹⁷ on a few simple facts of plant life (such as “seed requires moisture in order to sprout”⁹⁸ or “for plants to come up successfully the seed must not be planted too deep”⁹⁹) every year of primary school, “giving variety by [introducing] more words for reading and language work as the vocabulary increases, and using this work as the subject for compositions.”¹⁰⁰ This repetitive mode of teaching illuminates the utter lack of confidence federal Indian school administrators had in the intellectual abilities of Native children, taking low rates of English language proficiency as an indicator of ignorance about the natural world among Indigenous people and as evidence of an inability to process complex ideas, not as the result of linguistic and cultural difference. The first lesson for “non-English speaking pupils” offers a particularly revelatory example of this:

Holding up a bean, say “bean” several times very slowly and distinctly before the class. Give each member of the class a bean, saying “bean” a number of times to each one, urging him to try to say the word. By the time every child has a bean and has attempted to say the word the class will be somewhat familiar with it. Call on all to say the word in

⁹⁷ United States Office of Superintendent of Indian Schools, *Nature Study and Gardening* (1906), 7.

⁹⁸ *Ibid.*, 11.

⁹⁹ *Ibid.*, 16.

¹⁰⁰ *Ibid.*, 7 – 8.

concert, repeating it many times. This will be as much as can be accomplished in the first lesson.¹⁰¹

By claiming that “the old Indians” suffer from “custom and want of knowledge and experience” in the 1901 *Course of Study*, then condescending to provide such an insultingly low-level lesson on beans for children who would have been at least five years old, but could have been in their teens, certainly old enough to speak in compound and complex sentences, the government figured the heads of the Native people entering federal Indian schools as completely empty of information and language, blank slates into which the right “desire[s]” could easily be implanted, when, in fact, their minds were sites of intense epistemological contestation, where contradictory ideologies clashed violently against each other. This reveals that, on its most fundamental level, federal Indian school environmental education curriculum was predicated on the denial of the existence of all Indigenous wisdom – and not just wisdom about the environment. Through such an act of total negation, the government preemptively shielded itself from accusations that its treatment of Native children was unethical, eliminating even the possibility that it was wrongly imposing its values on other cultures because Indigenous people, in their eyes, did not have a knowledge system to be infringed upon. Federal Indian schools were, to the government, a vehicle for educating Native children for the first time, not *re*-educating them. Unpacking the way in which government documents like *Nature Study and Gardening* weaponized environmental education to suppress Indigenous languages and substitute them with English ultimately reveals that this curriculum was more than just an attack on Indigenous modes of imagining and living with the land. Environmental education materials spearheaded the government’s siege against Indigenous wisdom and the means through which it was

¹⁰¹ Ibid., 8.

communicated and passed on: through conversations between Native people in their Native languages.

Intersections of Colonial, Racial and Gender-Based Violence in Environmental Education Curriculum

Unlike most natural science subjects in the late nineteenth and early twentieth centuries, which were primarily or only offered to boys and men, nature study classes in public schools were aimed at students of all genders.¹⁰² If anything, this early disciplinary predecessor of environmental analysis was female dominated. The *Handbook of Nature-Study* (1911) – arguably the most important publication to come out of the nature study movement, which became so popular in classrooms and personal libraries alike that it appeared in twenty-four different editions by 1939 and was even called the “nature bible” – was written by a woman, Anna Botsford Comstock, the first female professor at Cornell University.¹⁰³ Likewise, most teachers of nature study in public schools were women.¹⁰⁴ The unusually prominent position women occupied in the field even led a group of academics and social scientists anxious about the so-called “feminization of education” to criticize nature study using implicitly gendered language as an overly “sentimental” discipline.¹⁰⁵ However, at the same time as nature study became known in the American mainstream for its progressive gender politics, access to environmental education curriculum like nature study in federal Indian schools was highly segregated by gender, or completely restricted to male students – a paradox that I will investigate as evidence

¹⁰² Armitage, *The Nature Study Movement*, 127.

¹⁰³ Sally Gregory Kohlstedt, “Comstock, Anna Botsford,” in *American Women Writers: A Critical Reference Guide from Colonial Times to the Present*, vol. 1, ed. by Lina Mainiero. New York: Ungar, 1979, pp. 389-390.

¹⁰⁴ Kohlstedt, *Teaching Children Science*, 2.

¹⁰⁵ *Ibid.*, 7 – 8.

of the intersecting structures of colonial, racial, and gender-based violence which were central to the ideological project of the federal Indian school system.

Starting with “Rules for Indian Schools” (1890) and its 1892 revision, the government mandated a gendered division of instruction and labor to ensure that “Neither girls nor boys [would] be compelled to perform duties unsuitable to their sex.”¹⁰⁶ In fact, so as not to confuse Native children about appropriate gender roles during the instruction process, these texts even encouraged “a man and wife [...] be employed as teacher and assistant teacher” in federal Indian schools, “the man teaching industries to the boys and the woman to the girls.”¹⁰⁷ While boys at federal Indian schools could enroll in vocational courses with an environmental focus, such as “Agricultural Engineering,”¹⁰⁸ “Landscape Gardening,”¹⁰⁹ “Deciduous Fruits,”¹¹⁰ “Citriculture,”¹¹¹ and several different kinds of animal husbandry (including the study of poultry, horses, hogs, sheep, beef cattle and dairying),¹¹² all girls were required to specialize in “Domestic Science,” taking classes like “Sewing,” “Laundry,” and “Dining Room.”¹¹³ The only access to the natural world Native girls had in these classes was filtered through a staunchly imposed framework of domesticity and housewifely duty. For instance, the “outline[s] of lectures given” during the 1911 – 1912 academic year as part of the “Course of Instruction for Domestic

¹⁰⁶ United States Commissioner of Indian Affairs, “Rules for Indian Schools” (1890), cliii; United States Office of Indian Affairs, *Rules for Indian Schools* (1892), 25.

¹⁰⁷ *Ibid.*, clv., 29.

¹⁰⁸ Outline for Course on Agricultural Engineering for 12th Year Students (40 Weeks Long), in folder “Vocational Course Lecture Outlines, 1911 – 1912,” Box 114, Sherman Indian High School, Records of the Bureau of Indian Affairs, Record Group 75, National Archives at Riverside, Riverside, CA.

¹⁰⁹ Outline for Course on Landscape Gardening for 8th Year Students (40 Weeks Long), in folder “Vocational Course Lecture Outlines, 1911 – 1912,” in *ibid.*

¹¹⁰ Outline for Course on Horticulture (Deciduous Fruits) for 11th Year Students (14 Weeks Long), in folder “Vocational Course Lecture Outlines, 1911 – 1912,” in *ibid.*

¹¹¹ Outline for Course on Horticulture (Citriculture) for 11th Year Students (13 Weeks Long), in folder “Vocational Course Lecture Outlines, 1911 – 1912,” in *ibid.*

¹¹² Outlines for Courses on Animal Husbandry (Hog Raising, Poultry, Beef Cattle, Sheep, Dairying) for 10th Year Students (Each 8 Weeks Long), in folder “Vocational Course Lecture Outlines, 1911 – 1912,” in *ibid.*

¹¹³ Course of Instruction and Lectures for Domestic Science, in folder “Vocational Course Lecture Outlines, 1911 – 1912,” in *ibid.*

Science” at Sherman Institute indicate that female students were confined to working with plants exclusively after flora had been removed from the soil, such as when they were making “clothing from plants” in the “Sewing” class,¹¹⁴ learning how to “remove fruit stains” in the “Laundry” class,¹¹⁵ or processing crops into food by “preparing and dressing salad plants, cleaning and preparing lettuce, tomatoes, celery, etc.” in the cooking class.¹¹⁶ This type of coursework surely provided Native girls with few opportunities to acquire new environmental knowledge in school – even if such knowledge would have subscribed to capitalist and Euro-American modes of understanding the land – or through the process of exchanging the environmental wisdom they brought with them from their homes, their families, and their communities as they crouched over the gardens and agricultural fields together.



Figure 2: This image shows an agricultural instruction class at Sherman Institute. The teacher, standing on the left, gestures at pictures of livestock displayed on the board. Notice that all the

¹¹⁴ “Sewing: Outline of Lectures Given in November, 1911,” in folder “Vocational Course Lecture Outlines, 1911 – 1912,” in *ibid.*

¹¹⁵ “Laundry: Outline of Lectures Given in November, 1911,” in folder “Vocational Course Lecture Outlines, 1911 – 1912,” in *ibid.*

¹¹⁶ “Domestic Science: Course of Instruction from December to March, 1912,” in folder “Vocational Course Lecture Outlines, 1911 – 1912,” in *ibid.*

students listening to this lecture are boys, evidence of an enforced gender-based segregation of environmental knowledge at federal Indian schools. Source: *Students in Class*. Circa 1920 – 1940. Photograph. Box 122, Folder 2, Sherman Indian Museum, Riverside, California. *Calisphere*, <https://calisphere.org/item/ark:/86086/n2930tvx/>.

This deliberate exclusion of Native girls from environmental education at federal Indian schools represented a mechanism through which the government tried to impose a hyperbolized version of patriarchal Euro-American gender roles on Indigenous children. In the colonial imagination, Native men and boys were often perceived as unnaturally feminized, a condition the government saw themselves as remedying through the federal Indian school system. Long hair, an important cultural practice shared by many Native peoples of North America, was not just “a symbol of savagery,” as S.M McCowan, the founding Superintendent of Fort Mohave Boarding School from 1890 – 1896, referred to long hair worn by men in a letter to one of the institution’s former students;¹¹⁷ it was also visual marker of femininity, which emasculated Native boys and men in the eyes of the government, and, therefore, had to be violently shorn in a universal federal Indian school ritual David Wallace Adams accurately describes as an “assault on cultural identity.”¹¹⁸ Native people were also viewed as untowardly feminine because many Nations, such as the Pawnee people, are traditionally matriarchal and view responsibilities coded as masculine in the Euro-American imagination like agriculture and land management as women’s work or as labor that could be performed regardless of gender. Even some tribes that are not necessarily matriarchal, like the Seneca and other Anishinaabe speaking people of Great Lakes region, see women as the rightful practitioners of agriculture and gardening or as keepers of knowledge about the land, especially when compared to their Euro-American counterparts in the

¹¹⁷ Adams, *Education for Extinction*, 101 – 102.

¹¹⁸ *Ibid.*, 100.

late nineteenth century and early twentieth century.¹¹⁹ By barring or restricting Native girls' access to environmental, especially agricultural, knowledge, federal Indian schools constructed gender-segregated instructional spaces where more "suitable" gender roles and modes of gender expression could be prescribed and enforced, overcorrecting for cultural differences perceived as perverse.¹²⁰

In their jointly written poem "Our Cottage" (1917), Maude Cooke (Mohawk) and Agnes Hatch (Chippewa), both students at Carlisle Indian School at the time, provide further insight into this gender-based segregation of knowledge from a students' perspective:

'Neath the shade of the trees, in the campus breeze,
Stands our Model Home Cottage for profitable ease;
With dwellers that vary in size and in manner,
But vow to live up to our Model Home banner –

This Model Home banner which teaches so true,
The ways of plain home life and happiness, too, –
The planning and serving of different foods,
That would set grouchy people in pleasurable moods.

In this Model Home Cottage are furnishings plain –
The reason for this we shall later explain.
It is not with rich trappings we aim to thrive,
But towards plain economy we patiently drive.

The flickering shadows that dance on our hearth,
Delight us with joy and laughter and mirth.
The fairy tales told by our teacher, Miss Keck,
We are storing away in our hearts by the peck.

The days come and go like swift aeroplanes,
But this is no reason why one should complain;
For with each fleeting moment we all hope to gain,
A knowledge which may be both useful and sane.¹²¹

¹¹⁹ Stephen Lewandowski, "Diohe'ko, The Three Sisters in Seneca Life: Implications for a Native Agriculture in the Finger Lakes Region of New York State," *Agriculture and Human Values* 4 (1987): 81.

¹²⁰ United States Commissioner of Indian Affairs, "Rules for Indian Schools" (1890), cliii; United States Office of Indian Affairs, *Rules for Indian Schools* (1892), 25.

¹²¹ Maude Cooke and Agnes Hatch, "Our Cottage" (1917), in *Changing is Not Vanishing*, ed. Parker, 237 – 238.

On its most basic level, Cooke and Hatch's poem reinforces the pattern that the Outlines for Courses in the Domestic Sciences at Sherman Institute revealed: for Native girls, education at a federal Indian school largely consisted of training in the domestic duties that they would be expected to perform in adulthood as housewives or as house servants for white families. Like the environmental education curriculum generally reserved for their male peers, this coursework compelled female students to aspire to capitalist ideals, like efficiency, thrift, and private ownership, in their work, steadfastly managing domestic spaces with "plain economy" to make them as "profitable" as possible.

Yet, "Our Cottage" also subtly illuminates the limited relationship that federal government expected Native girls to maintain with the natural world that lies beyond the confines of their "Home." While the "Model Home Cottage" is nestled "'Neath the shade of the trees" – a line that establishes proximity to the natural world – the girls never venture out into this green space to enjoy, experience, or learn about it. Rather, "the trees" serve as an aesthetic backdrop for an education and a worldview entirely contained by the walls of the "Model Home Cottage," which enclose the girls and prevent them from accessing the environment at the same time as they keep the environment out. Because the adjective "model" has multiple meanings and can be used to refer to an "example; serving or intended to serve as a pattern for imitation" or to describe something that is "exemplary, ideal," the poem prescribes this distanced relationship to nature as a necessarily defining feature of the best "Home[s]." ¹²² This means that, when the girls leave the "Model Home Cottage" and run their own households as adult women, the domestic space they are supposed to create should be continue to be closed off to nature, according to the instruction Cooke and Hatch received at Carlisle.

¹²² *Oxford English Dictionary*, s.v. "Model, n. and adj.," def. B1, December 2022, <https://www-oed-com.ccl.idm.oclc.org/view/Entry/120577?rskey=cWi9ym&result=1&isAdvanced=false#eid>.

It is also important to recognize the words “Home” and “Cottage” do not suggest a version of domesticity that exists in a vacuum. Reminiscent of the language of the Homestead Act and other nineteenth century legislation encouraging the process of westward expansion of white Americans into unceded Indigenous territory known as “Homesteading,” the act of making a “Home” and “Cottage” in a system of settler colonialism requires untamed wilderness be transfigured into carefully domesticated spaces. In other words, the “Model Home Cottage” might not sit “Neath the shade of the trees” for very much longer, as its surroundings are converted from forests into productive agricultural land sheltered by only as many trees as could be afforded to make the farmer’s work more efficient and profitable.¹²³ One of the rare photographs depicting a group of girls performing agricultural work that I found in my examination of the photo archives at the Sherman Indian Museum uses the same language of the “home” in its title, *Students’ Home Garden*, to justify these female students’ labor in the fields as part of their domestic training (see Figure 3). While images showing boys or mixed gender classes working in the fields or gardens at Sherman were typically given titles like *Gardening*¹²⁴ or *Farmers*,¹²⁵ photographs, like this one, that include only girls are more likely to be saddled in their titles with qualifying adjectives like “home,” which carry with them the additional weight of an association with settler colonialism and which simultaneously negate girls’ agricultural

¹²³ United States Office of Superintendent of Indian Schools, *Course of Study* (1901), 9.

¹²⁴ For example, see *Gardening*, Circa 1920 – 1950, Photograph, Box 96, Folder 2, Sherman Indian Museum, Riverside, California, *Calisphere*, <https://calisphere.org/item/ark:/86086/n2736qvb/>; *Gardening*, Circa 1930 – 1960, Photograph, Box 96, Folder 2, Sherman Indian Museum, Riverside, California, *Calisphere*, <https://calisphere.org/item/ark:/86086/n2z0383f/>; *Gardening*, Circa 1930 – 1950, Photograph, Box 124, Folder 4, Sherman Indian Museum, Riverside, California, *Calisphere*, <https://calisphere.org/item/ark:/86086/n2wh2qpm/>; and *Winter Gardening at Sherman*, Circa 1930 – 1960, Photograph, Box 96, Folder 1, Sherman Indian Museum, Riverside, California, *Calisphere*, <https://calisphere.org/item/ark:/86086/n2dj5fmj/>.

¹²⁵ For example, see *Farmers*, Circa 1910 – 1920, Photograph, Box 116, Folder 4, Sherman Indian Museum, Riverside, California, *Calisphere*, <https://calisphere.org/item/ark:/86086/n24x58cn/> and *Farmers*, Circa 1930 – 1950, Photograph, Box 133, Folder 5, Sherman Indian Museum, Riverside, California, *Calisphere*, <https://calisphere.org/item/ark:/86086/n2mc90vz/>.

labor as a way through which they engage with nature by instead framing these acts as part of a feminized, domestic sphere.



Figure 3: *Students' Home Garden.* Circa 1930 – 1940. Photograph. Box 116, Folder 4, Sherman Indian Museum, Riverside, California. *Calisphere*, <https://calisphere.org/item/ark:/86086/n2pn967r/>.

Although “Our Cottage” paints the time the authors spent learning in their “Model Home Cottage” as a largely positive experience, there is a notable dissonance in the poem between the source of Cooke and Hatch’s “joy and laughter and mirth” and the federal Indian school curriculum. While the rehearsal of newly learned domestic duties in the second stanza might be read as the reason for the girls’ “happiness,” this interpretation is predicated on a reading of its fourth line as containing a misplaced modifier. Rather than describing the process of “planning and serving” as a source of renewed joy for even the most cantankerous sorts, as readers might assume, the appositive in the fourth line (“That would set grouchy people in pleasurable moods”) should refer to the noun that immediately precedes it (“food”). Correcting this misreading – which is based in a racist and misogynistic assumption that Cooke and Hatch, as schoolgirls and as young Native people at federal Indian schools, cannot be expected to know enough to write a

grammatically correct sentence – allows the second stanza to be reinterpreted as a celebration of food and its ability to spark “happiness” and strengthen community bonds, instead of as a presentation of domestic chores as bliss. Even more suggestively, the teacher is not giving her students a government-approved lesson on “The plain ways of home life” in stanza four, the place in the poem where the girls’ happiness is most concentrated; rather, she is telling them “fairy tales” as they sit around the fire. This scene is more reminiscent of Indigenous storytelling traditions than of the Euro-American classroom experience. Recognizing that the girls’ “delight” is rooted in a method of sharing knowledge, intergenerational storytelling that is coded as Indigenous draws attention to the telling uncertainty of the last two lines of the poem. When Cooke and Hatch wrote, “For with each fleeting moment we all hope to gain, / A knowledge which may be both useful and sane,” it is important to recognize that they were simply making explicit a “hope” for practical skills and “knowledge,” not indicating that the “Model Home” fulfilled this desire, as the reader might be tempted to imply. By leaving the question of whether the “Model Home Cottage” taught them anything “useful and sane” up to audience interpretation, Cooke and Hatch allowed Carlisle administrators to read satisfaction with the curriculum into their poem, while also subtly calling attention to a longing for “knowledge” that might not have been satiated by a federal Indian school education, a potential form of encrypted resistance made even more powerful by the fact that it was able to slip past the censor’s gaze and be printed for their classmates to uncover between the lines.¹²⁶

¹²⁶ While I have not been able to uncover any affirmative evidence whether Cooke and Hatch, specifically, felt like their desire for “knowledge” was met by a federal Indian school education, it is worth noting that these institutions operated under the racist and paternalistic assumption that Native children were less capable students and intellectually inferior to white children. Because of this underlying belief, federal Indian schools deliberately stripped down the curriculum and gave Indigenous children fewer opportunities to, in Cooke and Hatch’s words, “gain a / Knowledge which may be both useful and sane.” The 1890 “Rules for Indian Schools,” for instance, tells teachers that Native young people finishing the fourth year of primary school “will have accomplished about what is usually expected of children who have attended the white public schools two years” because of “the difficulty of learning the English language, to them a foreign tongue, and the need of giving the pupils some industrial training in

In “Euro-American Womanhood Ceremony” (1999), Diné (Navajo) poet Esther G. Berlin eloquently speaks to the specific violence of being denied a “useful and sane” education, a form of abuse which she contends disproportionately affected girls at federal Indian schools:

Some say the boardings school experience wasn't that bad
because they learned a trade
at least the men did

The women
they were trained to specialize in domestic household work
to mimic the rituals of Euro-American women
to cook roast beef and not mutton
to eat white bread and not frybread
to start a family and not an education
to be happy servants to doctors' families in Sierra Madre
and then to their own

The young women who never really became women because they
were taken off the rez before they could go through a
womanhood ceremony
the young women who adapted to the Euro-American version of a
womanhood ceremony

Instead of fasting and sweating and praying and running
They set the table and vacuumed and ironed and nursed and fed
and gave birth and birth and birth to a new nation of mixedbloods
and urban Indians
And they were mothers/providers/wives
They were strong and loved and made love and sobered up
and organized weekend road trips back to the rez
Back to the rez where we all came from
and where we need to return
to heal our wounds

addition to school-room studies” (clviii). What “Knowledge” they did manage to “gain,” as Margaret Connell Szasz emphasizes in *Education and the American Indian*, was likely not “useful” in their lives after leaving boarding school because curriculum “was usually unrelated to the environment and culture” of reservations, from which the majority of students came and to which they mostly returned, and “vocational training was not sufficiently advanced to enable the student to find an urban job” (Szasz 2). Many former federal Indian school students picked up on this differential treatment, including Betty Newbreast (Blackfeet), who described how “far ahead of me” her public-school classmates were after she ran away during her sixth year at Cutbank Boarding School as “the traumatic difference between the Indian government boarding schools and the public school system.” Newbreast, Betty, “Intertribal Friendship House Community History Project: Interview with Betty Newbreast,” oral history interview by Susan Lobo, Intertribal Friendship House, September 18, 1979, print transcript, 6, in “Oral Histories – Transcribed Interviews: Newbreast, Betty. 1979,” American Indian Community History Center Records, Carton 3, Folder 20, BANC MSS 2008/108, The Bancroft Library, University of California, Berkeley, Berkeley, CA.

from the Euro-American womanhood ceremony.¹²⁷

Even though Indigenous children were undeniably harmed by federal Indian school environmental education curriculum, Berlin's poem reminds us that the alternative – being excluded from nature study and vocational training in agriculture, as many female students were – did not allow Native girls to escape the genocidal impact of federal Indian schools. Instead, these girls faced a unique form of abuse that was simultaneously gendered, racialized, and colonial. Simultaneously stripped of opportunities to access to Indigenous wisdom (about the natural world and womanhood) and refused training in the practical skills that would allow them to support themselves and their families (even if they were the skills valued and used by the colonizer to “Americanize” Native people and to seize their land and resources), Native girls who survived federal Indian schools had few options for their futures, on “the rez” or anywhere else, a unique form of abuse that could be just as pernicious and “wound[ing]” as colonial violence perpetrated through environmental education.

*Physical Abuse and the Exploitation of Native Children for Free Labor in the Name of
Environmental Education*

Decades before the passage of the Keating-Owen Child Labor Act of 1916, the first national legislation restricting child labor,¹²⁸ the federal government dissuaded the school

¹²⁷ Berlin, “Euro-American Womanhood Ceremony,” 164 – 165.

¹²⁸ Michael Schuman, “History of Child Labor in the United States—Part 2: The Reform Movement,” *Monthly Labor Review*, U.S. Bureau of Labor Statistics, January 2017. While it was a landmark piece of legislation in the curtailing of child labor, the Keating-Owen Child Labor Act of 1916 only addressed child labor in the mining, quarrying, canning, milling, and factory industries, excluding children working in the agricultural industry, the relevant sector for my analysis, and in many of the other largest employers of children at the time (Schuman). This act also did not have much legal staying power because it was overturned by Supreme Court just two years later in 1918 (Schuman). Comprehensive federal legislation against child labor would not be go into effect and be maintained by the Supreme Court until the Fair Labor Standards Act of 1938 (Schuman). Until then, child labor was legislated on a state-by-state basis, leading to vast discrepancies in policy in different parts of the country (Schuman). It is worth putting the federal government's standpoint against children doing hard labor in school gardens in conversation with this wider history of child labor laws because this context reveals the progressive

gardening movement from using schoolchildren to complete hard agricultural labor as part of environmental education curriculum. For example, the *Report of the Commissioner of Education for the Year 1898-1899*, among the earliest government documents to address the growing school gardening movement, reprinted and reaffirmed a claim by German education theorist E. Gang: “All the heavy labor that is required to arrange the [school] garden must be done by adults at the expense of the community, as it is not adapted for children.”¹²⁹ Despite this government mandate safeguarding public school children, protections against “heavy labor” were not extended to Indigenous children at federal Indian schools. In fact, the Superintendent Reel directly contradicted the recommendation of the Commissioner of Education and prescribed a different policy for federal Indian schools in her annual report for the 1904 fiscal year: “We are also endeavoring to have children, under the direct supervision of the class-room teacher, *do the actual work* of laying out the garden, preparing the soil, planting, tending the growing plants, and harvesting the crops.”¹³⁰

philosophy behind school gardens, which would not be transferred into gardens at federal Indian schools, as the government selectively incorporated the teachings of the movement to fit its own aims.

¹²⁹ E. Gang, “Chapter XX. School Gardens,” in *Report of the Commissioner of Education for the Year 1898-1899*, vol. 1 (Washington: Government Printing Office, 1900), 1072.

¹³⁰ Reel, “Report of the Superintendent of Indian Schools” for the 1904 Fiscal Year (1905), 395 (emphasis mine).



Figure 4: *Gardening*. Circa 1920 – 1950. Photograph. Box 96, Folder 2, Sherman Indian Museum, Riverside, California. *Calisphere*, <https://calisphere.org/item/ark:/86086/n2736qvb/>.

In practice, this policy translated into young Native people at federal Indian schools – including “very small children,” later described in the *Meriam Report* (1928) as “much too young for heavy industrial labor” – being exploited as unpaid agricultural workers by the federal government in the name of their education.¹³¹ Both the *Meriam Report* (1928) and the *Federal Indian Boarding School Initiative Investigative Report* (2022), two later government documents that exposed the forced child labor at federal Indian schools, highlighted the particularly egregious treatment of students at Leupp Boarding and Day School, most of whom were Navajo. At this institution, 100 of the 191 girls required to carry much of the burden of the institution’s industrial operations were just “11 years of age or younger.”¹³² Likewise, “work” was one of the

¹³¹ Institute for Government Research, *The Problem of Indian Administration: Report of a Survey Made at the Request of Honorable Hubert Work, Secretary of the Interior, and Submitted to Him, February 21, 1928*, by Lewis Meriam, et al. (Baltimore, Maryland: The Johns Hopkins Press, 1928), 375. Here, the government uses “industrial labor” as a catchall term for all forms of vocational labor, including agricultural work, much like the various courses of study labeled vocational training coursework as “industrial instruction.”

¹³² Institute for Government Research, *Meriam Report* (1928), 375; United States Bureau of Indian Affairs, *Federal Indian Boarding School Initiative Investigative Report* (2022), 62 – 63.

two words Betty Newbreast (Blackfeet) used to sum up the six years she spent at Cutbank Boarding School, starting when she was seven years old. The other was “punishment.”¹³³ According to Newbreast, these two defining features of her federal Indian school experience were often combined: “You’d learn how to work,” she recalled later in her oral history, because the instructors and matrons would “punish” students with additional labor, such as “one time in the dining room” when she was forced “to scrub on your hands and knees the whole dining room floor.”¹³⁴

Although it is difficult to make a definitive claim about the age at which children were made to begin doing hard, unpaid labor, the updated version of the “Course of Study” published in 1916 provides information about the type and amount of work required of students in each grade level, standardized for the first time in this document, from which a rough approximation can be made.¹³⁵ The 1916 “Course of Study” prescribed 240 minutes of “industrial work” every day at boarding schools for students in primary and prevocational grades (grades one through six) and four hours of “industrial work” for students in the vocational grades (grades seven through ten).¹³⁶ This is longer than the amount of time spent in any grade level on all academic subjects combined in a system where, quite explicitly, the length of “time assigned to a subject indicates its relative importance” in the eyes of the government.¹³⁷ If the instructional time dedicated to teaching students the skills they applied during “industrial work” time is included,

¹³³ Newbreast, oral history (September 18, 1979), 14. Born in 1938, Newbreast was a federal Indian school student during the second half of the 1940s, several decades after the end of my 1890 – 1920 research period. However, her story sheds light on the extreme abuses Native children endured in federal Indian schools, even after the Meriam Report brought the most egregious of them to an end, as well as the ingenious and resilient ways young people found of coping with them, making her oral history an essential, albeit slightly anachronistic source for this thesis.

¹³⁴ *Ibid.*

¹³⁵ United States Commissioner of Indian Affairs, “Education,” in *Report of the Commissioner of Indian Affairs to the Secretary of the Interior for the Fiscal Year Ended June 30, 1916* (Washington: Government Printing Office, 1916), 9 – 26.

¹³⁶ *Ibid.*, 13 – 21.

¹³⁷ *Ibid.*, 11.

then at least half of the school day at federal Indian schools was dedicated to “industrial” labor and training.¹³⁸ Only students in the first and second primary grades were eligible to be excused from laboring the entire “industrial work” period, and then only if administrators determined that they met the subjective designation of being too “small and young.”¹³⁹ Taking a closer look at the language the 1916 “Course of Study” uses to authorize this exemption – “Small and young pupils should not be required to work the full time” – reveals that the federal government nevertheless mandated that even the youngest and smallest children participate in the “industrial work” for as long as they could, or, more accurately, for as long as they were perceived as being able to by their instructors.¹⁴⁰

While students in the same class year ranged widely in age, my research with Bureau of Indian Affairs records at the National Archives at Riverside indicates that the average age in the third primary grade, when all students would be required to work for the full “industrial work” period, during the 1916 – 1917 school year at Sherman Institute was sixteen for boys and fifteen for girls.¹⁴¹ However, many students at this level were as young as ten years old,¹⁴² several years younger than the age at which even the strictest state child labor laws allowed workers to be hired.¹⁴³ To this effect, the *Meriam Report* (1928) characterized “the labor of [Native] children as carried on in Indian boarding schools” as “a violation of child labor law in most states,” a telling statement that serves as evidence of the exceptional physical abuse that young Indigenous

¹³⁸ United States Commissioner of Indian Affairs, “Rules for Indian Schools” (1890), clii; Adams, *Education for Extinction*, 149.

¹³⁹ *Ibid.*, 13 – 14.

¹⁴⁰ *Ibid.*

¹⁴¹ Report on Examinations of Pupils, Third Grade, June 15, 1917, in folder “Reports on Promotions and Examinations, 1917 – 20,” Box 125, Sherman Indian High School, Records of the Bureau of Indian Affairs, Record Group 75, National Archives at Riverside, Riverside, CA.

¹⁴² *Ibid.*

¹⁴³ Schuman, “History of Child Labor.”

people suffered in the gardens and fields at federal Indian schools, considered extreme even by the standards of the time.¹⁴⁴



Figure 5: *Group Portrait of Students on School Farm.* Circa 1920 – 1930. Photo negative. Box 144, Sherman Indian Museum, Riverside, California. *Calisphere*, <https://calisphere.org/item/ark:/86086/n21n82s0/>.

Not only were Native children at federal Indian schools like Leupp, Cutbank, and Sherman forced to do hard labor on the school gardens and farms, but the “Report of the Superintendent of Indian Schools” for the 1904 Fiscal Year suggests that they were even “encouraged to enjoy the work, and not look upon it as drudgery.”¹⁴⁵ It then cites the example of the Native students at Haskell Institute, who were “carefully instructed in the cultivation of strawberries, and under proper supervision were allowed to gather the fruit and enjoy strawberry suppers.”¹⁴⁶ Though Reel likely intended this anecdote as a celebration of the occasional

¹⁴⁴ Institute for Government Research, *Meriam Report* (1928), 376.

¹⁴⁵ Reel, “Report of the Superintendent of Indian Schools” for the 1904 Fiscal Year (1905), 396.

¹⁴⁶ *Ibid.*, 396.

indulgences Native students were permitted at federal Indian schools in exchange for their hard work, her language here ultimately reveals that the government did not see Indigenous children as entitled to eat, monetarily profit from, or even decide what to do with the crops they grew. Instead, these young people were forced to toil over producing commodities at the government's will and for the government's benefit. This is underscored by the fact that the same Leupp students whose experience of hard labor was documented in the *Meriam Report* (1928) and *Federal Indian Boarding School Initiative Investigative Report* (2022) also proved to be "malnourished" when they were examined by "competent" health care providers.¹⁴⁷ Quite literally, these children were denied the fruits of their labor to the degree that they lacked proper subsistence. Much like the conditions the children at Leupp faced, Newbreast recounts that she and her classmates at Cutback had to "sneak" into the containers where "they'd put in all the vegetables for winter storage" and steal "the fresh sweet carrots" and "apples" they grew in the garden so that they would have the opportunity to eat them.¹⁴⁸

These conditions of malnourishment and starvation were not coincidental, nor were they an inevitable reality of federal Indian school life. The schools and the federal government stood to benefit materially from restricting students' access to the food they cultivated because excess produce was sold for profit. As Adams writes in *Education for Extinction*, "Products of the farm and shop, when not consumed by the school, were sold on the open market."¹⁴⁹ These sales generated a considerable source income for the school (see Figure 6),¹⁵⁰ while also saving the institution money because it did not see itself as obligated to pay wages to the Native children

¹⁴⁷ Institute for Government Research, *Meriam Report* (1928), 375.

¹⁴⁸ Newbreast, oral history (September 18, 1979), 4 – 5.

¹⁴⁹ Adams, *Education for Extinction*, 149.

¹⁵⁰ W.B. Backus. "Report of School in Genoa, Nebr.," in *Fifty-Ninth Annual Report of the Commissioner of Indian Affairs* (Washington: Government Printing Office, 1890), 296.

who provided, in the language of the 1922 “Course of Study,” “an amount of labor that has in the aggregate a very appreciable monetary value.”¹⁵¹ Thus, in effect, federal Indian schools were not only inducting Native children into capitalist modes of thinking through environmental education curriculum; they were also converting the products these children produced through hard, unpaid labor on the farm and in the gardens as part of this education into saleable commodities, from which the institution could profit under capitalism.

200 bushels beets, at 50 cents	\$100.00
5,000 head cabbage, at 3 cents.....	150.00
3 tons sorghum cane, 65 gallons, at 50 cents.....	32.50
200 bushels carrots, at 50 cents.....	100.00
4,500 bushels corn, at 25 cents.....	1,125.00
2 tons broom corn, at \$80.....	160.00
100 tons hay, at \$4.....	400.00
300 bushels onions, at \$1.....	300.00
250 bushels parsnips, at 50 cents.....	125.00
1,500 bushels potatoes, at 30 cents.....	450.00
300 bushels turnips, at 30 cents	90.00
3,000 watermelons, at 5 cents	150.00
1,500 bushels oats, at 25 cents	325.00
41 sets double harness, at \$17 (estimated)	697.00
425 dozen brooms, at \$1.75 (estimated)	743.00
15 hogs (sold for cash).....	144.00
6 cows (killed for use, estimated)	125.00
18 cattle (increase, estimated).....	540.00
6 hogs (killed for use, estimated)	100.00
45 tons ice, at \$10	450.00
Various small vegetables not taken up on property papers, sweet corn, squashes, etc. (estimated).....	700.00
Proceeds repairing done in shops for outsiders	250.00
Total.....	7,256.50

Figure 6: This table shows the estimated profit (\$7,256.50, equivalent to \$239,895.11 today) that Genoa U.S. Indian Industrial School made from the products of student labor during the 1890 fiscal year.¹⁵² According to the calculations of W.B. Backus, the institution’s superintendent, a year of student work provided Genoa with enough earnings to nearly be able to pay off the debt of around \$8,000 to \$10,000 (or between \$264,474.73 and \$330,593.41 in today’s money) that the school assumed during a period of mismanagement by previous leadership.¹⁵³ Although the *Federal Indian Boarding School Initiative Investigative Report (2022)* reminds us that “the economic contribution of Indian and Native Hawaiian children to the Federal Indian boarding school system and beyond remains unknown” and might never be able to be pinned down, these figures from Genoa suggest that forced student labor was a lucrative source of income, which had the potential to have a sizable impact on the institution’s finances.¹⁵⁴ Source: Backus, “Report of School in Genoa, Nebr.,” 296, unnumbered table.

¹⁵¹ United States Office of Indian Affairs, *Course of Study for United States Indian Schools* (Washington: Government Printing Office, 1922), 1.

¹⁵² Backus, “Report of School in Genoa, Nebr.” (1890), 296.

¹⁵³ *Ibid.*, 294.

¹⁵⁴ United States Bureau of Indian Affairs, *Federal Indian Boarding School Initiative Investigative*

Margaret Connell Szasz claims the federal government subjected Native children at federal Indian schools to exploitative and harsh working conditions because it was unable and unwilling to shoulder additional expenses on behalf of the Indigenous children, who they deliberately separated from the “community” the Commissioner of Education said should be looking after them.¹⁵⁵ In *Education and the American Indian*, Szasz writes, “Since Congressional appropriations were meager, boarding-school pupils, including a significant percentage of preadolescent children, were forced to provide almost all essentials [to sustain their basic survival needs and those of instructors and administrators] by working long hours in the shops, the gardens, and the kitchens.”¹⁵⁶ Szasz’s interpretation is certainly grounded in the historical record. The first “Rules for Indian Schools” (1890), for instance, reminds federal Indian school administrators that:

The farm, garden, stock, dairy, kitchen, and shops should be so managed as to make the school as nearly self-sustaining as practicable, not only because government resources should be wisely and carefully utilized as private resources, but also because thrift and economy are among the most valuable lessons which can be taught Indians. Waste in any department must not be tolerated.¹⁵⁷

However, as she makes this point, Szasz fails to unpack the ideological underpinnings of this type of argument made by the federal government. Here, the government drew on conservation ethics, capitalist anxieties about inefficiency, and the racist stereotype that Indigenous people are inherently lazy – which dominated the nineteenth century Euro-American imagination – in order to justify child labor as a practice that was not merely “necessary” to “maintain” the school “on the amounts appropriated by Congress for their support,” as the 1922 *Course of Study* put it, but

Report (2022), 63.

¹⁵⁵ Gang, “Chapter XX. School Gardens,” 1072.

¹⁵⁶ Szasz, *Education and the American Indian*, 2.

¹⁵⁷ United States Commissioner of Indian Affairs, “Rules for Indian Schools” (1890), clii.

that was essential to converting Native people into productive members of American society.¹⁵⁸ The 1902 *Annual Report* of the Commissioner of Indian Affairs made this function of hard labor at federal Indian schools even more explicit when it explained that to “educate the Indian is to prepare him for the abolishment of tribal relations, to take his land in severalty, and in the sweat of his brow and by the toil of his hands to carve out, as his white brother has done, a home for himself and family,” all aims of the Dawes Act.¹⁵⁹ Examining these two lines together ultimately reveals that the hard labor Native children were subjected at federal Indian schools was not an unintended, unfortunate consequence of maintaining the gardens and agricultural fields with limited federal financial support. Rather, making Indigenous people work was a primary goal of environmental education curriculum. By forcing Native young people do hard work on the farm and in the garden as students, the federal government saw themselves as preparing students for what they envisioned as the only suitable path for Indigenous people: performing backbreaking agricultural labor in hopes of assimilating into the capitalist, Protestant world of “his white brother,” but inevitably falling short. Because of a perceived unbreakable racial affinity for nature, Native people – in this vision - would “sweat” and “toil” on the land forever, always estranged, confined to the periphery of modern life and its only increasing orientation towards urban spaces and industrialization. In other words, the hard agricultural labor that Indigenous children were obligated to complete at federal Indian schools would not end with graduation or in returning to their communities. This burden, the government hoped, would follow them for the rest of their lives.

¹⁵⁸ United States Office of Indian Affairs, *Course of Study* (1922), 1.

¹⁵⁹ Qtd. in United States Bureau of Indian Affairs, *Federal Indian Boarding School Initiative Investigative Report* (2022), 60.

Chapter 3

“Crawl Through Those Slats and Hand Out Carrots and Apples”: Native Resistance from within Federal Indian Schools and the Struggle to Decolonize Environmental Education in their Aftermath

And the stories that exists are not about them, but rather about the violence...that seized hold of their lives, transformed them into commodities and corpses.... The archive is, in this case, a death sentence, a tomb, a display of the violated body.... But I want to say more than this. I want to do more than recount the violence that deposited these traces in the archive.

—Saidiya Hartman¹⁶⁰

In her landmark essay “Venus in Two Acts” (2008), Saidiya Hartman theorizes the concept of “the violence of the archive,” a term which posits that the historical record is filled with gaps because colonized, enslaved, and otherwise marginalized peoples have been systematically denied the ability to record, preserve, and share their stories. Often all that survives are the fleeting, insubstantial glimpses that peek through an archive ultimately made up of the versions of these peoples’ lives told by their oppressors and of the accounts of the violence they endured.¹⁶¹ This is the crisis that my thesis inevitably comes up against: how can I even begin to tell the history of abuse perpetrated through environmental education at federal Indian schools when the stories of the young Native people who experienced this curriculum firsthand have been deliberately suppressed – another, ongoing form of colonial violence? Throughout this thesis, I have striven to incorporate and foreground the perspectives of the Native children subject to this curriculum whenever possible, but in the final chapter, I aim to make their voices

¹⁶⁰ Saidiya Hartman, “Venus in Two Acts,” *Small Axe* 12, no. 2 (2008): 2.

¹⁶¹ *Ibid.*, 1.

even more visible. Although only fragments of these children’s stories remain, a narrative of agency, resilience, and resistance nevertheless emerges from the “traces” that have miraculously found their way into the archive. Despite the government’s attempts to make environmental education inextricable from colonialism, Native students, parents, and teachers have reimagined learning in and about the natural world as a process subversion, healing, and community-making.

Resistance from within Federal Indian Schools

The majority of the surviving firsthand accounts from Native children who attended federal Indian school during the 1890 – 1920 period are writings published in school newspapers and magazines, such as Carlisle Indian School’s *The Red Man* and *The Arrow*.¹⁶² This medium poses an additional difficulty in retrieving the stories of the young Indigenous people and their perspectives on environmental education – or any other topic, for that matter – because the contents of these publications were subject to administrators’ approval. Under these conditions, student authors may not have been able to express their authentic feelings. However, determining *when* and *to what extent* the writer’s underlying intentions do not match with the published piece proves a slippery and sometimes impossible task. Robert Dale Parker, who selected and edited a series of “Boarding School Poems” dating to this period for reissue in *Changing is Not Vanishing: A Collection of American Indian Poetry to 1930*, proposes a way to come closer to approximating these students’ authentic voices: sit with “the contradictions and pressure swirling around and within them,” he urges readers.¹⁶³ Following Parker’s suggested methodology, I will turn to two “Boarding School Poems,” one written by a student and the other by a teacher, which provide insight into the ways in which Native people at federal Indian schools responded to and

¹⁶² Parker, *Changing is Not Vanishing*, 9.

¹⁶³ *Ibid.*, 36.

challenged the epistemologies of land these institutions forwarded through environmental education curriculum.

In “To Class ’95” (1895), Samuel Rasmus Sixkiller (1877 – 1958), a Cherokee student at Carlisle and the official class poet for the graduating class of 1895, explored his simultaneous, opposing desires to assimilate into mainstream (white) American society and to unabashedly embrace his Indigenous identity by figuring them as a conflict between rejecting or accepting the natural world:

Farewell to dear class, to friends and to strangers,
 Assembling here in our honor today,
 To help Nature’s children – the wildflower rangers,
 And make pure Americans from ocean to bay.

At last we have roamed from woodland and mountain;
 From the murmur of pines and the emerald sea,
 To drink of the pure – that life-giving fountain,
 And bask in the sun of the noble and free.

Away from the plains where often in childhood,
 From deep slumber waked by the music of rills;
 Away from the glory and pleasure of wildwood,
 Away from the perfume of flower-clad hills.

And still to our hearts, Nature clings as a brother;
 We dream of repose by the streams we yet love.
 Can light and advancement, our thoughts of these smother?
 Of joys placed here by the Father above?

When shall the culture, the art and refinement
 Drive from our minds, roving thoughts of the past?
 Shall broad education, or savage confinement,
 Conquer the Red Man now fading so fast?

Too soon are those features the emblems of power.
 Too soon are they leaving his countenance bold.
 Alas, they shall fade or to fierce foeman cower,
 And die with the past as a tale that is told.

Sad be the day when the sun in his glory,
 Shall shine on the last of the noble Red Man

Or set for this race whose life is a story,
The true, the only American.

And now we must part, may it not be forever!
But if on this earth we can ne'er share our love.
God grant that the ties we have here to sever,
May be reunited in that kingdom above.¹⁶⁴

On its surface, Sixkiller's poem traffics in many of the racist tropes that dominated the nineteenth century imagination and that were central to the premise of the federal Indian school system, including the myths of the "vanishing Indian" and the "noble savage"; the presentation of Native people as part of the natural, not the human, world; and the belief that Native people were inherently childlike.¹⁶⁵ Parker understands Sixkiller's heavy use of stereotypes as a manifestation of internalized racism.¹⁶⁶ Although it is impossible to know how "wholeheartedly" Sixkiller subscribed to "the full range of demeaning views that were drummed in the ears of Carlisle students," which he then "repeated" in "To Class '95," Parker proposes two possibilities: either Sixkiller earnestly believed in these tropes,¹⁶⁷ or he appropriated the rhetoric of Carlisle to convey a subtle critique of the institution – albeit one that, in Parker's interpretation, still largely reinforced colonial ideologies.¹⁶⁸ To provide evidence for the latter of these readings, Parker highlights the ambiguous subject of the lines "Shall broad education, or savage confinement, / Conquer the Red Man now fading so fast?" Because federal Indian school curriculum focused primarily on industrial training and English language acquisition, making it decidedly limited,

¹⁶⁴ Samuel Sixkiller, "To Class '95" (1895), in *Changing is Not Vanishing*, ed. Parker, 229 – 230.

¹⁶⁵ This last stereotype was even codified in law. In the 1831 decision *Cherokee Nation v. Georgia*, the Supreme Court ruled that Tribes were "domestic dependent nations" "in a state of pupilage" or "ward[s]" to the federal government, using language that explicitly defined Native people and Nations as childlike. This ruling remained in effect until 1924, when the Indian Citizenship Act was passed, granting citizenship to all Indigenous people born on land considered part of the United States by the federal government. *Cherokee Nation v. Georgia*, 30 U.S. 5 Pet. 1 1 (1831).

¹⁶⁶ *Ibid.*, 33.

¹⁶⁷ *Ibid.*

¹⁶⁸ *Ibid.*, 34.

not broad,” in scope, Parker argues that “To Class ’95” could be figuring the federal Indian school experience itself as the form of “savage confinement” that doomed Native people, threatening their future survival.¹⁶⁹

However, I contend that “To Class ’95” is more subversive than Parker gave Sixkiller credit for. The poem’s potentially radical implications – which exist regardless of and alongside Sixkiller’s unknown intentions – can only be gleaned by situating it in the context of the environmental education curriculum taught at federal Indian schools. As this thesis has demonstrated, the government’s project of inducting young Native people at federal Indian schools into Euro-American and capitalist epistemologies of the land was dependent upon the denial of Indigenous environmental wisdom and the presentation of the United States government as the ultimate source of knowledge about the natural world. “To Class ’95” undercuts the authoritativeness federal Indian school environmental education and, by extension, the government itself by framing the process of assimilating into Euro-American culture as necessarily a rejection of the natural world and by representing environmental wisdom as a decidedly Indigenous mode of knowing.

To become “pure Americans,” the first stanza immediately establishes, Sixkiller and his fellow Carlisle graduates must cease to be “Nature’s children – the wildflower rangers.” They must willingly give up any knowledge of and connection with the land, described with such tenderness in the second through fourth stanzas as a source of profound happiness, peace, and nobility (“the glory and pleasure of wildwood”; “the perfume of flower-clad hills”; “We dream of repose by the streams we yet love”). “To Class ’95” presents the process of exchanging “the glory and pleasure” of the natural world for the “culture, the art and refinement” promised by

¹⁶⁹ Ibid.

assimilation as a violent act of betrayal, a denial of kin and even God. According to the fourth stanza, the process of assimilation requires a Native person to “smother” “thoughts” of the natural world, explicitly framed as “a brother,” and to revoke “joys placed here by the Father above.” Yet, at the same time it mourns this loss, “To Class ’95” also ostensibly thanks the “friends and strangers” at Carlisle for their “help” in providing Sixkiller and his peers with the opportunity to make the difficult decision to revoke the natural world, a contradiction that confuses the poems’ argument about what choice it thinks Carlisle graduates should make. Regardless of whether Sixkiller decided it worth making this sacrifice for the “light and advancement” assimilation, it is impossible to ignore that his poem, in linking Native people and a traditional Indigenous way of life to nature, figures assimilation, “Americanness,” and the teachings of federal Indian schools as antithetical to environmental consciousness, appreciation, and knowledge. Rather than imparting a better understanding of the natural world, as the Office of Indian Affairs claimed it was doing environmental education curriculum, “To Class ’95” suggests that federal Indian schools beget the destruction of environmental consciousness in Native young people, demanding students violently “smother” their “love” and knowledge of the land. This certainly a damning referendum on federal Indian school environmental education and the government’s ability to effectively convey the goal of this curriculum to Native students.

Laura “Minnie” Cornelius (Oneida)’s “A Tribute to the Future of my Race” (1903)¹⁷⁰ demonstrates that the same rhetoric which unsettled the government’s claim to be an authority on the natural world and which undermined federal Indian school environmental education curriculum in “To Class ’95” could be used by Indigenous activists as part of their critique of the

¹⁷⁰ Laura “Minnie” Cornelius, “A Tribute to the Future of my Race” (1903), qtd. in *Changing is Not Vanishing*, ed. Parker, 253 – 257. At 157 lines in length, this poem is too long to quote in full in this thesis. Instead, I excerpt the most pertinent sections.

federal Indian school system and their campaign for the autonomy of Indigenous Nations. Born in 1880, Cornelius¹⁷¹ was one of the Progressive Era's most prominent advocates for the sovereignty and self-determination of Native people over their reservations¹⁷² as well as one of the fiercest critiques of the Office of Indian Affairs and the federal Indian school system.¹⁷³ In a 1913 speech given to the Society of American Indians (SAI), a Pan-Indian reform organization which campaigned for the rights of Indigenous people and of which Cornelius was a cofounder, Cornelius expressed her for-the-time radical beliefs: "There are old Indians who have never seen the inside of a classroom whom I consider far more educated than the young Indian with his knowledge of Latin and Algebra."¹⁷⁴ Although Cornelius was never a federal Indian school student, she taught at Sherman Institute from 1902 until 1904, during which she wrote the poem "A Tribute to the Future of my Race" and delivered it as a speech as part of the school's 1903 commencement ceremony.¹⁷⁵

Like "To Class '95," "A Tribute to the Future of my Race" repeatedly depicts Indigenous people as inextricable from the natural world and, in doing so, it vacillates between presenting a stereotypical view of Native people and celebrating Indigenous environmental wisdom. Yet,

¹⁷¹ Primary source documents and historians alike variously refer to Cornelius by her married name: Laura Cornelius Kellogg. For example, in *Talking Back to Civilization: Indian Voices from the Progressive Era*, an annotated collection of the writings of Native people from this period, editor Frederick E. Hoxie consistently calls her "Kellogg," as do co-editors Kristina Ackley (Oneida) and Cristina Stanciu in their introduction to the 2015 reissue of her most famous work, *Our Democracy and the American Indian* (1920). Meanwhile, Stanciu interchangeably uses "Cornelius" and "Kellogg" in her article "An Indian Woman of Many Hats: Laura Cornelius Kellogg's Embattled Search for an Indigenous Voice." Because I primarily focus on "A Tribute to the Future of my Race," which was written before her marriage to Orrin J. Kellogg (Seneca) in 1912, I refer to Cornelius by her maiden name in this thesis.

¹⁷² Cristina Stanciu, "An Indian Woman of Many Hats: Laura Cornelius Kellogg's Embattled Search for an Indigenous Voice," *American Indian Quarterly* 37, no. 3, *The Society of American Indians and Its Legacies: A Special Combined Issue of SAIL and AIQ* (Summer 2013): 88.

¹⁷³ Frederick E. Hoxie, ed., *Talking Back to Civilization: Indian Voices from the Progressive Era* (Boston, New York: Bedford/St. Martin's, 2001), 53.

¹⁷⁴ Laura Cornelius Kellogg, "Some Facts and Figures on Indian Education," *Quarterly Journal* 1 (1913), 36, qtd. in *ibid.*

¹⁷⁵ Stanciu, "An Indian Woman of Many Hats," 89.

Cornelius provided a clue that she was not necessarily expressing her own views when employing racist tropes. The most racially essentialist lines in the poem are, in fact, not Cornelius's own words, but language borrowed verbatim from Henry Wordsworth Longfellow's *The Song of Hiawatha*.¹⁷⁶ By interspersing her own words with Longfellow's, intermingling genuine representation of Indigenous people with racist tropes, Cornelius was able to smuggle in the same dissenting opinion as "To 'Class 95" did: federal Indian schools were not the ultimate purveyors of environmental knowledge, as this wisdom originated with and continues to be practiced by Native people. A series of pointed rhetorical questions offers an apt illustration of this methodology:

Did they [Indigenous people] enter nature's gardens –
 In her temples of the forest –
 With their warrior's hearts unmelted?
 Did they tread her wreathed pathways
 Without learning tenderness?
 Did they see the roses' dew-drop
 And not wonder whence it came from?
 And traced savage eyes the hemlock
 Without learning majesty?
 Is it nature's law to teach not?
 Ah, too often do we think not¹⁷⁷

Here, the word "savage" – repeated from an earlier line in the poem, a line copied from *Hiawatha* – gives Cornelius with the cover she needed to make a subversive argument. Federal Indian schools were not Native peoples' primary teachers; that honor was held by "nature" herself, though "too often do we think not." Instead of coming from highly mediated interactions with the natural world in federal Indian school gardens, farms, and classrooms, these lines figure the practices of direct engagement with the land, honed and passed down over generations, as ultimately responsible for Indigenous people's environmental knowledge.

¹⁷⁶ Cornelius, "A Tribute to the Future of my Race" (1903), 257.

¹⁷⁷ *Ibid.*, 254 – 255.

While Sixkiller and Cornelius each negotiated and contested the epistemologies of land the government attempted to instill in Native children through environmental education at federal Indian schools, Betty Newbreast (Blackfeet), a survivor of Cutbank Boarding School grappled more directly with the type of curriculum used to convey this ideology. Born in 1938,¹⁷⁸ Newbreast attended Cutbank during the 1940s, after the end of the 1890 – 1920 period on which this thesis focuses.¹⁷⁹ However, her oral history remains the only firsthand account I was able to uncover in my research that comes from the perspective of a Native student and that extensively discusses gardening at federal Indian schools, making it an invaluable source.¹⁸⁰ Throughout this thesis, I have argued that gardening, like other environmental education coursework implemented at federal Indian schools, represented a conduit for colonial violence. Yet, Newbreast’s story introduces an additional layer of complexity. For Newbreast, the campus gardens provided a rare “happy”¹⁸¹ moment in between the “real awful, awful things that they’d do to the children” at federal Indian school.¹⁸² Despite the government’s intentions for these natural spaces, Newbreast reimagined and reclaimed the gardens as a site for healing the traumas of boarding school, for creating community with her classmates, and for asserting her agency through acts of defiance and solidarity.

Along with the “pork crackling” from the dairy and the “fresh baked bread with real butter” and “great big peanut butter cookies” from the bakery, Newbreast presented the campus

¹⁷⁸ Newbreast, oral history (September 18, 1979), 1.

¹⁷⁹ *Ibid.*, 2.

¹⁸⁰ Of course, this does not mean that Newbreast’s oral history was the only account of this type to be made or the only one that survives to the present. I emphasize the elusive nature of stories like Newbreast’s as a tangible reminder of the violence of the archives.

¹⁸¹ *Ibid.*, 4.

¹⁸² *Ibid.*, 14.

gardens as the only respite from the “really harsh loneliness, [...] the loneliness of a small child without her parents” she experienced at the beginning of her time at Cutbank:¹⁸³

And I remember the gardens. I think I’ve always had a very distinct love of the earth, I’d love to see things grow, and the big gardens down there. Even at home, my folks always had gardens in the summer. I didn’t like the part of picking potato bugs or hoeing the vegetables, but I liked to harvest. I like the fresh sweet carrots that grew, and they had those at boarding school.¹⁸⁴

While each of the foods Newbreast described appealed to her because of their novelty, the gardens offered solace in their familiarity. In this excerpt from her oral history, Newbreast framed the campus gardens as restorative in their ability to call up memories of past joy (“I’ve always had a very distinct love of the earth, I’d love to see things grow”) and memories of her home (the “fresh sweet carrots that grew” in the campus garden were recognizable from the gardens her parents planted). As I have demonstrated through this thesis, the government prized gardens at federal Indian schools as a means of introducing new ideas, practices, and systems of belief to Native students, including the English language, capitalist ideology, and Euro-American land management techniques. Yet, for Newbreast, the campus gardens had the opposite effect: they brought her closer to who she was, what she loved, and how she lived before coming to federal Indian school.

The gardens offered another salve for Newbreast’s “loneliness” by furnishing her with an opportunity to build life-sustaining relationships with her classmates. Returning to the story of Newbreast and her fellow students stealing vegetables that I introduced in Chapter 2 reveals that “raiding” the gardens and root cellars was more than an act of desperation, an instinct-driven

¹⁸³ Ibid., 3.

¹⁸⁴ Ibid., 3 – 4 (grammar in original).

attempt to survive.¹⁸⁵ It was also a process of community making. In her oral history, Newbreast describes the “raid[s]”:

We used to have root collars [cellars] that they dug in the hillside, and they had big bins in there and they’d put in all the vegetables for winter storage. Then for ventilation, the outdoor had a big door on it, but it was made of slats, so air could come through, but they didn’t consider that a real skinny Indian kid could fit through there, so we’d all sneak up there and one of the smallest kids would crawl through those slats and hand out carrots and apples they had stored in the cellar. I always remember that, that was a happy one.¹⁸⁶

Here, Newbreast figured the “raid[s]” as a collective activity, always executed by a group of children of various ages together, in solidarity. The implicit difference in age between the participants (“we’d *all* sneak up there and *one of the smallest kids* would crawl through those slats”) is crucial because, later in her oral history, Newbreast details the “really abusive” behavior of the “older kids at the boarding school” towards “the small children” like herself, making them fight each other for sport, “smother[ing]” them with a pillow if they refused, and “taking the good stuff away from the little ones [in the dining room] and eating it.”¹⁸⁷ During the “raid[s],” these older students stopped misdirecting their anger and pain – understandable and natural emotional responses to the trauma of federal Indian school system – onto those with even less power, the youngest and smallest children. Instead, smallness became an asset, transforming younger children into allies with the unique ability to retrieve the food and creating a community out of people who previously saw themselves as disconnected individuals, who had to “either get tough or [...] die.”¹⁸⁸ Although Newbreast does not provide affirmative evidence of doing so in her oral history, one might also suppose that she even dared to share her prior knowledge of “the sweet carrots” she “liked” so much with her classmates during these “raid[s],” exchanging the

¹⁸⁵ Newbreast, oral history (October 26, 1979), 2.

¹⁸⁶ Newbreast, oral history (September 18, 1979), 4 (grammar and spelling in original).

¹⁸⁷ *Ibid.*, 13 – 14.

¹⁸⁸ *Ibid.*, 3, 11.

environmental wisdom she learned from her parents and from her past gardening experience with others and receiving new ideas in return. When Newbreast emphasized that “the children always participated [in growing vegetables] and that was really happy,” must we assume that the children’s “participat[ion]” was purely physical?¹⁸⁹ Couldn’t the word “participat[ion]” also encompass the act of contributing to a collective body of knowledge?

In addition to engendering a new sense of solidarity among Cutback students, these “raid[s]” also functioned as a form of communal defiance, through which Native children enacted their agency and resisted against the oppressive strictures of the federal Indian school system. Confronted with the injustice of having the crops they labored in the garden and on the farm to produce wrenched from them, these students asserted their right to the fruits and vegetables they grew and demonstrated their ability to seize what was theirs. Through the “raid[s],” these children ultimately proved that they would not passively endure colonization; they would face it fighting. In this sense, the “raid[s]” signified far more for these children than an extra bit of food in their bellies. Recovering the fruit and vegetables stolen from them was the first step towards reclaiming everything else United States government had tried to take from them: their languages, their cultures, and their unceded ancestral homelands.

*The Fight Continues On: Reappropriating and Reimagining Environmental Education in the
Aftermath of the Boarding School Era*

Newbreast’s story is instructive not only because it illuminates the ways in which Native children resisted and carved out their own spaces for environmental learning even within the oppressive environmental education programs at federal Indian schools, but also because

¹⁸⁹ Newbreast, oral history (October 26, 1979), 2.

Newbreast went on to dedicate her life to creating better educational opportunities for her children and for future generations of young Indigenous people. Like many other Native people during the Termination and Relocation Period (1945 – 1965), Newbreast left the reservation where she spent her early life and moved to an urban area, eventually finding a new home in Oakland, California.¹⁹⁰ As a parent active in her children’s schools¹⁹¹; a mental health counselor at Oakland’s Urban Indian Child Resource Center¹⁹²; and the Director of the Intertribal Friendship House,¹⁹³ the “focal point”¹⁹⁴ of Oakland’s Native community and one of “the oldest still-operating urban Indian organizations in the United States,”¹⁹⁵ Newbreast played an essential role in the successful grassroots campaign to reimagine the Oakland public school system until it centered Indigenous wisdom and Indigenous voices. Led by Indigenous educators, parents, and activists – many of whom were, like Newbreast, boarding school survivors – this movement serves as a powerful case study of the transformative, ongoing work being done within Native communities in the aftermath of the boarding school era to disentangle environmental education from the colonial violence of its past and to promote new models of learning about the natural world grounded in Indigenous knowledge.¹⁹⁶

¹⁹⁰ Newbreast, oral history (September 18, 1979), 8 – 9.

¹⁹¹ *Ibid.*, 11 – 13.

¹⁹² *Ibid.*, 18 – 21.

¹⁹³ Jan Silverman, “Indians: The Eastbay’s ‘Invisible’ Minority,” *Oakland Tribune*, April 13, 1980, p. D-1, in “Oral Histories – Transcribed Interviews: Newbreast, Betty. 1979.” American Indian Community History Center records, Carton 3, Folder 20, BANC MSS 2008/108, The Bancroft Library, University of California, Berkeley, Berkeley, CA.

¹⁹⁴ Bill Wahpepah, “Intertribal Friendship House Community History Project: Interview with Bill Wahpepah,” oral history interview by Susan Lobo and Marilyn LaPlante St. Germaine, Intertribal Friendship House, October 15, 1979, print transcript, 21, in “Oral Histories – Transcribed Interviews: Wahpepah, Bill. 1979.,” American Indian Community History Center Records, Carton 3, Folder 30, BANC MSS 2008/108, The Bancroft Library, University of California, Berkeley, Berkeley, CA.

¹⁹⁵ Susan Lobo, et al., eds., *Urban Voices: The Bay Area American Indian Community* (Tucson: The University of Arizona Press, 2002), xix.

¹⁹⁶ Oakland also represents an ideal subject for studying the movement to decolonize environmental education because the stories of its robust, diverse, and thriving Native community have been uniquely preserved in the American Indian Community History Center Records, the only “archive in the United States that is community based and that focuses on an urban Indian community” (Lobo, et al., *Urban Voices*, xx – xxi). Newbreast’s oral

In the early 1970s, Native parents, educators, and community members in Oakland grew increasingly disturbed by the complete absence of classroom materials reflecting Indigenous values and cultures in the local public schools, which they understood as directly contributing to the high dropout rate among Native young people.¹⁹⁷ During these years, “virtually no” Native children stayed in school long enough to earn a high school diploma, with “many” leaving “as early as third grade.”¹⁹⁸ Determined to resolve these issues and to provide their children with an education that centered and celebrated their Indigenous identities, much as Big Rock School had done during the Occupation of Alcatraz, albeit on a temporary basis,¹⁹⁹ these activists banded together to establish the Native American Parent Preschool, also known as the American Indian Preschool, in the fall of 1973.²⁰⁰ Now under the name Hintil Kuu Ca, a Pomo phrase meaning “Indian Children’s House,” this school is still operation today, a testament to their success.²⁰¹

As the inclusion of the word “parent” in its original name suggests, the Native American Parent Preschool was designed as a “parent participation preschool,” a model under which parents were actively involved in every aspect of their child’s education.²⁰² In the context of the Native American Parent Preschool, this meant “each parent worked one day a week in the

history and all the materials in the following section of this thesis were collected and preserved because of this ambitious archiving project, which is itself a radical form of resistance against the violence of the archive.

¹⁹⁷ Dora Pulido, “Hintil Kuu Ca: House of Children,” *California Perspectives* (n.d., at least 1992): 89, in folder on “Hintil Kuu Ca (Preschool/American Indian Children’s Center) 1980-1999, undated,” American Indian Community History Center Records, Carton 37, Folder 1, BANC MSS 2008/108, The Bancroft Library, University of California, Berkeley, Berkeley, CA.

¹⁹⁸ Ibid.

¹⁹⁹ Ibid., 90. Big Rock School was founded on Alcatraz Island for children whose families were participating in the Occupation of Alcatraz (1969 – 1971), a major turning point in the land back movement, during which nearly 100 Native people reclaimed Alcatraz Island as Indigenous land under the Treaty of Fort Laramie (1868), which required vacated federal land be returned to its original inhabitants. In its curriculum, Big Rock School sought to center Native perspectives, values, and teaching methodologies. For more on Big Rock School and how it influenced the founding of the Native American Parent Preschool/Hintil Kuu Ca, see *ibid.*, 89 – 90.

²⁰⁰ Ibid., 90; Susan Lobo, “Urban American Indian Preschool,” *Cultural Survival Quarterly* 10, no. 4 (December 31, 1986): 12.

²⁰¹ Lobo, “Urban American Indian Preschool,” 12.

²⁰² Lobo, “Urban American Indian Preschool,” 12.

classroom and attended a weekly one-day parent workshop,” during which they “made materials for the school representing different tribes” and gave “demonstrations for the children” on skills like pottery, cooking, beading, and weaving.²⁰³ Beyond the clear benefit of their child being able to attend the Native American Parent Preschool, parents were compensated financially for this labor and honored with a formal title, “cultural consultant,” that officially recognized and celebrated their expertise.²⁰⁴ By including and centering parent perspectives, the Native American Parent Preschool inverted the federal Indian school practice of deliberately separating Indigenous young people from their families and their cultures, which most of the parents and teachers involved would have been intimately familiar with, as a number of them were boarding school survivors themselves.²⁰⁵ The result was an institution that had precisely the opposite function of federal Indian schools: ensuring that “Native American children [were] bathed in an environment that values spirituality and harmony with nature, emphasizes cooperative learning, and honors elders for their knowledge and wisdom.”²⁰⁶

Though “harmony with nature” had been a core value of the school since its founding, the Native American Parent Preschool affirmed the centrality of environmental education to its mission in 1977. That year, the school, now under the new name Hintil Kuu Ca, relocated to a site more conducive to learning about and within the natural world after receiving additional

²⁰³ Ibid.

²⁰⁴ Ibid. Providing parents with a stipend allowed the Native American Parent Preschool to begin achieving its goal prioritizing students and families with the most marginalized backgrounds. This aim was later made explicit in an August 5, 1992 letter from Ruth Buchanan, the Site Administrator of the school, then called Hintil Kuu Ca: “First priority [for admission] goes to four year olds whose families have the lowest income at the time of enrollment. Children from families whose special circumstances may diminish the children’s opportunities for normal development also qualify.” Letter from Ruth Buchanan (Site Administrator) to “Friends of Hintil Kuu Ca Child Development Center,” dated August 5, 1992, in folder on “Hintil Kuu Ca (Preschool/American Indian Children’s Center) 1980-1999, undated,” American Indian Community History Center Records, Carton 37, Folder 1, BANC MSS 2008/108, The Bancroft Library, University of California, Berkeley, Berkeley, CA.

²⁰⁵ Ibid.

²⁰⁶ Pulido, “Hintil Kuu Ca,” 88.

funding from and being incorporated into the Oakland Public Schools Child Center program.²⁰⁷ An *Oakland Tribune* article from April 13, 1980 explained: “The children’s center was recently moved from Oakland’s flatlands to a hill area near Carl Munck Elementary School because the staff wanted a location with a good outdoor atmosphere, with lots of space and the opportunity to do nature studies, basic to the Indian culture.”²⁰⁸ Although the school largely left the responsibility of teaching tribally specific cultural practices to students’ families, this explicit link between “nature studies” and (pan) “Indian culture” reveals that environmental education curriculum at Hintil Kuu Ca nevertheless remained grounded in traditional Indigenous environmental wisdom, regardless of the changes the school underwent.²⁰⁹ Much like Newbreast when she was at Cutbank Boarding School, Hintil Kuu Ca staff envisioned the natural world as a restorative space for Native young people. In the words of Linda Aranaydo (Creek), one of the school’s founding teachers and previously the only Indigenous educator in Oakland Unified Public School District,²¹⁰ Hintil Kuu Ca offered Native children in Oakland “someplace to get outdoors,” so that they would not “feel lost.”²¹¹

²⁰⁷ Pulido, “Hintil Kuu Ca,” 90.

²⁰⁸ Jan Silverman, “Center Introduces Young Ones to their Culture,” *Oakland Tribune*, April 13, 1980, p. D-1, in “Oral Histories – Transcribed Interviews: Newbreast, Betty. 1979.” American Indian Community History Center Records, Carton 3, Folder 20, BANC MSS 2008/108, The Bancroft Library, University of California, Berkeley, Berkeley, CA.

²⁰⁹ Native American Parent Preschool/Hintil Kuu Ca teacher Linda Aranaydo (Creek) claimed that the diversity of the Oakland Native community and the subsequent number of Nations represented in the student body made it infeasible for the school to “begin to deal with all the different cultures” individually to the extent that they each deserved, leading much of this work to be “done at home” instead (qtd. in *ibid.*). After Hintil Kuu Ca became part of Oakland Unified in 1977, the school also had to begin following state rules for enrolling students, meaning “parents had to either be working full-time or attending school” themselves, so could not be as directly involved in consistently bringing learning materials from their own cultures into the classroom (Pulido, 90). Although some parents feared that this signified “a move away from the community-based decision making and control that had characterized the pre-school from the beginning,” the archive reveals that the school has continued to emphasize family involvement, including through developing new alternatives for parents and community members to participate, such as through “a class in parent education” that “makes classroom materials that reflect tribal values and orientation” (Lobo, “Urban American Indian Preschool,” 12).

²¹⁰ Pulido, “Hintil Kuu Ca,” 90.

²¹¹ Aranaydo, qtd. in Silverman, “Center Introduces Young Ones to their Culture,” D-1.



Figure 7: This image shows a group of students learning at Hintil Kuu Ka in 1980. *Left to right:* Kevin Arnold (Pomo/Paiute), Marty Aranaydo (Papago/Pima/Creek), Gary Joe (Navajo/Pomo), *in chair* teacher Lois Oakes with an unidentified Hintil student in her lap, Marla Want, unidentified Hintil student, community member and guest teacher Elmer St. John, Sr. (Dakota). *Source:* Stinnett, Robert. *Indian ‘Elder’ Elmer St. John Sr. Talks of the Traditional Way of Life to Lois Oakes and a Group of Children.* 1980. Photograph. *Oakland Tribune*, p. D-1, April 13, 1980. In “Oral Histories – Transcribed Interviews: Newbreast, Betty. 1979,” American Indian Community History Center Records, Carton 3, Folder 20, BANC MSS 2008/108, The Bancroft Library, University of California, Berkeley, Berkeley, CA.

Rather than being told explicitly how they should think about and experience the natural world, as in federal Indian schools, Native children at Hintil Kuu Ca were also encouraged to come to their own conclusions through experimentation, activities, art, and by pursuing their passions. The American Indian Community History Center Records, an archive of the Oakland Native community, preserves drawings made by Hintil Kuu Ca students in 1978 after a visit to the Natural Science Center at Lake Merritt in Oakland (see Figure 8).²¹² Accompanying materials describe the students’ artwork: “Their drawings graphically illustrate the creatures

²¹² By then, Hintil Kuu Ca had expanded its services for older children. In addition to the preschool, Hintil Kuu Ca offered tutoring and before- and after-school programming for students in kindergarten through sixth grade. This explains the inclusion art by a fourth grader, Delray Traversi, in Figure 8. Lobo, “Urban American Indian Preschool,” 12.

which made the strongest impressions on the children.”²¹³ This activity, the students’ drawings, and the way they were framed afterwards as a product of each young person’s individual curiosities and interests underscores the child-centric character of the environmental education curriculum at Hintil Kuu Ca, in many ways the antithesis of the ideology-driven, highly prescribed coursework used at federal Indian schools for teaching about the natural world.

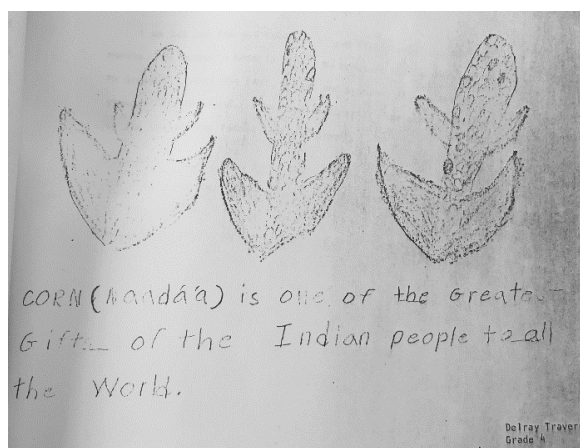
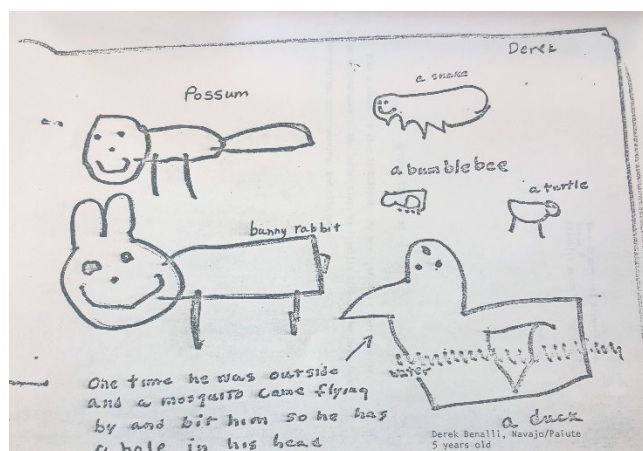
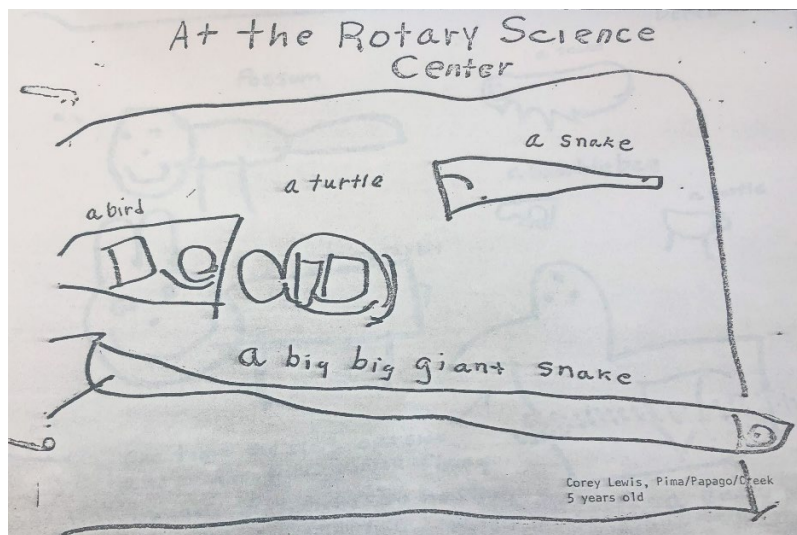


Figure 8: Made by students at the Native American Children’s Center (Hintil Kuu Ka) during a school visit to the Natural Science Center at Lake Merritt in Oakland, these drawings were among the student work published as a tribute to Dr. Annie Dodge Wauneka (Navajo), who visited Oakland Unified Public Schools on September 26, 1978 through the district’s

²¹³ Children’s Writings and Drawings for Dr. Annie Dodge Wauneka’s Visit to Oakland Unified Public Schools, 1978, in folders on “Oakland Unified School District (OUSD)/Office of Indian Education, including General, Language Arts Curriculum Guide for Elementary School, Native American Week 1978-2000,” American Indian Community History Center Records, Carton 37, Folder 34, BANC MSS 2008/108, The Bancroft Library, University of California, Berkeley, Berkeley, CA.

Scholar/Artist Program. *Clockwise from top*: drawings by Corey Lewis (Pima/Papago/Creek), 5 years old; by Delray Traversi, Grade 4; and by Derek Benalli (Navajo/Paiute), 5 years old. *Source*: Children's Writings and Drawings for Dr. Annie Dodge Wauneka's Visit to Oakland Unified Public Schools, 1978. In folders on "Oakland Unified School District (OUSD)/Office of Indian Education, including General, Language Arts Curriculum Guide for Elementary School, Native American Week 1978-2000." American Indian Community History Center Records, Carton 37, Folder 34, BANC MSS 2008/108, The Bancroft Library, University of California, Berkeley, Berkeley, CA.

As the first classes of Hintil Kuu Ca students grew older and began attending elementary, middle, and high school, their families and teachers fought to continue providing them with educational opportunities rooted in Indigenous knowledge, including occasions to learn about and within the natural world. Their efforts transformed Oakland Unified School District into a system that, by the end of the 1970s, placed greater value on Indigenous wisdom and environmental education than most public schools in America, even today. As early as the 1978 – 1979 academic year, Oakland Unified implemented "Native American Education Week," which billed itself as celebration of "the values and traditions held by Native Americans living in Oakland."²¹⁴ Curricula was designed by Indigenous parents in the community and included numerous activities that also promoted environmental consciousness in students, such as a field trip to the University of California Botanical Gardens, where students learned about Native California plants through "visual, tactile, and tasting experiences" and how they both were and are used by California Indians.²¹⁵ By 1987, the district issued an "American Indian Language Arts Curriculum Guide for the Elementary School," which posed thoughtful questions ("If all people from Europe and other continents left and only the Indian people remained in North America, do you think the Indian people could or would they go back to their earlier way of life?" "Write a new ending for the story [of Pontiac's Rebellion] as you would like it to have had

²¹⁴ David Maiers, et al., *Native American Education Week: A Curriculum Material Packet, K-12* (Oakland: Oakland Unified School District, 1978), in *ibid.*, folder 33.

²¹⁵ *Ibid.*

it happen”) that encouraged students to begin thinking complex issues like decolonization and the land back movement from a young age.²¹⁶ To these types of prompts, Native young people generated equally thoughtful responses, responses which showcased their intelligence and their creativity and which emphasized that they saw these traits as inexplicable from their Indigenous identities. Finally, almost exactly a century after the first federal Indian boarding school was founded, Native children understood that, through the resilience, resistance, and perseverance of their elders before them, they were not just allowed, but encouraged to be, in the words of Oakland elementary school student and Hintil Kuu Ca graduate Camelia Addison (Navajo/Arapaho), “myself forever and ever.”²¹⁷

²¹⁶ Wilson, Ramona and Cathy Moran, *American Indian Language Arts Curriculum Guide for the Elementary School* (Oakland: Oakland Unified School District, 1987), 61, in *ibid*, folder 36.

²¹⁷ Camelia Addison, “I am a plant that grows in the desert,” in “Lighting the Day with Joy: Student Writings, American Indian Elementary Summer Program, Title VII Basic Transitional Project, Hintil Kuu Ca Child Development Center” (Oakland: Oakland Unified School District, 1986), American Indian Community History Center Records, Carton 28, Folder 25, BANC MSS 2008/108, The Bancroft Library, University of California, Berkeley, Berkeley, CA. This line is taken from a longer poem written in 1986 by Camelia Addison (Navajo/Arapaho), five years after she graduated from Hintil Kuu Ca in 1981, as part of the American Indian Elementary Summer Program. The full poem reads:

I am a plant that grows in a desert,
with dust flowing around and around.
I am a horse shining in the fields,
with flowers and trees growing in the middle.
I am a sun so bright,
that it hurts your eyes when you look at it.
I am a star shining in the sky.
I am a round pizza at at [sic] Round Table.
I am a cat and a dog,
that like to eat a lot.
I am myself for ever and ever.

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