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Growing Agriculture Literacy's Presence in America's Classrooms

Emily Stone

“Americans, as a whole, were at least two generations removed from the farm and did not understand even the most rudimentary of processes, challenges, and risks that farmers and the agricultural industry worked with and met head-on every day.”¹ This quote perfectly describes the mindset of agriculture stakeholders in 1981 as they began to realize the drastic steps our education system had taken away from using principles of agriculture in K-12 education. As they saw it, Americans were moving out of rural America, away from farms, and becoming less connected to the food they daily consumed. Simultaneously, the education system did nothing to preserve the use of agriculture principles as tools for teaching. If they were worried in 1981, just imagine what they would say if they saw American society in 2023! Today, most school-aged children are very limited in the knowledge of their food's origin. The lack of attention given to agriculture in schools is especially problematic when combined with the number of food systems issues the next generation is bound to face. This article seeks to demonstrate the food systems-related dangers facing the next generation and explain the benefits of teaching agriculture literacy to school-aged children; to describe the origins of the Agriculture in the Classroom program and evaluate its success; and to propose new ways to improve and incentivize agriculture literacy's presence in K-12 schools.

I. The Need for Agriculture Literacy in America's Classroom

Related to the production and consumption of food, there are many problems that we have been quick to categorize as a “crisis,” such as the obesity and climate crisis. In name alone, those two crises

¹ *A Trend Analysis of National Agriculture in the Classroom Program Data: 2006 – 2010*, NAT'L AGRIC. IN THE CLASSROOM ORG. (quoting *Agriculture in the Classroom White Paper*, NAT'L AGRIC. IN THE CLASSROOM ORG. (2011)), https://cdn.agclassroom.org/nat/data/get/trend_analysis_poster.pdf [hereinafter *Trend Analysis*]

may not seem related, but to an agriculturally literate person they are. There are many on-going issues related to the food system that prior generations have created, and thus left for the next generation to inherit. As our population continues to grow in the upcoming years, humans will have to make difficult decisions about the future of agriculture. These decisions will require an understanding of agriculture production, natural plant and animal lifecycles, climate change, food processing, nutritional values, food access, economic and cultural factors, and much more. To face the challenges ahead, it is imperative that today's students are conscious of agriculture, and its impact on their health, the economy, and the environment. Because of this, the need for agriculture literacy has never been as great as it is now.

A. Defining Agriculture Literacy

Agriculture literacy has been defined by many in various ways. The first documented definition describes an agriculturally literate person as one who would understand the “food and fiber system...its history and current economic, social, and environmental significance to all Americans.”² Later, researchers began adding that an agriculturally literate person should be able to go beyond mere understanding, and competently “synthesize, analyze, and communicate basic information about agriculture.”³ Despite the various definitions, most researchers and educators would probably agree that the agriculturally literate person is one who knows and can communicate the value of agriculture, while using that knowledge to analyze the impact of agriculture on their daily life and make informed decisions with that knowledge.

This article recognizes that agriculture affects every single person—we all eat, we all wear clothes, and we all live in an ecosystem. Agriculture literacy is not a program designed with the sole intention of convincing students to go into careers in agriculture. Agriculture literacy programs can be great tools for teaching students about potential careers in agriculture, but they are not designed to be a course of workforce training. Instead, they are designed to give

² *Understanding Agriculture: New Directions for Education*, NAT'L RSCH. COUNCIL (1988), <http://www.nap.edu/catalog/766/understanding-agriculture-new-directions-for-education>.

³ Martin J. Frick et al., *A definition and the concepts of agricultural literacy*, J. OF AGRIC. EDUC., 32(2), 49-57 (1991), <https://jae-online.org/index.php/jae/article/view/2197>.

students a foundational knowledge about the food they daily consume, and the impact that food can have on their health, society, and the environment. Agriculture literacy promotes the use of agriculture topics and themes to teach core subjects in K-12 schools. Among the curriculum this article will evaluate, are lesson plans using agriculture to teach math, science, social studies, reading, history, and the arts.

B. The Danger in Failing to Teach Agriculture Literacy

After learning about the definition of agriculture literacy, most Americans, especially those living outside of rural areas with no connection to food production, would probably ask why they should care about students having the ability to analyze and communicate information about agriculture. This article argues that agriculture literacy is important because agricultural decisions affect every person alive every day. Furthermore, it is important for our education system to prepare the next generation to be informed voters and policy makers with the ability to rationally determine what is truth. Often, when misinformation is spread, citizens vote for lawmakers who support policies that could be harmful to the agriculture industry, the food supply, the economy, and the personal health and nutrition choices made each day. It is not the intention of this article to advocate for one side or another of specific agricultural policy decisions, but to show the importance of preparing an electorate with the abilities to form opinions on their own.

In recent years, there has been a multitude of circumstances that prove the need for agriculture literacy has never been more prominent than it is now. There is a startling disconnection today between consumers and the food production industry. This disconnection is never more evidenced than when a new health fad or emotionally triggering agriculture-related campaign becomes popular. For example, a hot topic in the past decade stemmed from consumer confusion about Genetically Modified Organisms (GMOs). GMOs are organisms “whose genetic material has been altered by means of genetic engineering.”⁴ The term genetic engineering generally means altering the genetic makeup of cells which can be done through a wide variety of methods, including pest or weed control, crossbreeding, enhancing a trait to improve nutrient

⁴ Jessica Eise & Whitney Hodge, *THE COMMC'N SCARCITY IN AGRIC.* 32 (2017).

content, and more.⁵ The methods of genetic engineering are complex and can be difficult for those without scientific training to understand. Because of its complexity, the media created confusion about the true nature and impact of GMOs. Everyone had their “take” on whether GMOs were safe—news stories from reputable sources like *Fox Business*, *Time*, and *Forbes*, along with opinions found on social media or blogs, flooded the consciousness of Americans daily.⁶ Unfortunately, though, the public conversation was mostly driven by sources without a scientific background.⁷ While most of the public concern against GMOs came from moral opposition and disgust at the thought of food being poked, prodded, and injected with unnatural substances, the scientific community generally agreed that GMOs were safe for consumption.⁸

GMO confusion did not just produce an outcry of public concern, but it also created discrepancies and confusion in the labeling of food products. Because of the public distrust of GMOs, many foods, including those that derive from agricultural products for which there is no GMO variety, slapped on a label claiming “non-GMO.” Though this claim is objectively true, the agriculturally literate person would be able to recognize the label as a mere marketing tool, because a “non-GMO” label on a product that could not actually have GMOs is confusing. This created a misconception of the prominence of GMOs in foods and allowed food companies to prey on consumer confusion. The GMO labeling issue is noteworthy because it speaks to the importance of preparing our population to read and understand the labels placed on their food products. It is also noteworthy because the GMO labeling issue sparked debate among policymakers about the regulation of GMO products and the duty of a private company to inform consumers about the contents of their food products.

However, the GMO controversy is an important example of how an uneducated population could be easily confused in today’s information-saturated world. Because agriculture affects everyone, and because of the prominence of confusing information in a social media dominated world, it is imperative that agriculture literacy becomes a more prominent fixture in the American classroom, so the students of today can become the informed electorate of tomorrow.

⁵ See *id.*

⁶ See *id.* at 33.

⁷ See *id.* at 33-34.

⁸ See *id.*

Next, this article will look at the current Agriculture in the Classroom system and evaluate its effectiveness as a tool to teach agriculture literacy.

II. National Agriculture in the Classroom

A. Background of Agriculture in the Classroom

In prior generations, most of the United States' population lived in rural areas and interacted with farms on a regular basis.⁹ Because the farming operation was something most children understood, agriculture was used commonly in primary and secondary education as a tool for teaching math, science, the arts, and other subjects.¹⁰ With the urbanization of society and the mass move of our populations away from the farm, education stepped away from this practice and agriculture generally stopped being discussed in the classroom other than for occupational training. In recognition of America's unfortunate move away from the inclusion of agriculture in K-12 education, in 1981 the United States Department of Agriculture (USDA) invited representatives from various agricultural and education groups to Washington, D.C. to talk about agriculture literacy.¹¹ The 1981 meeting was an attempt to remedy this reality. Following the meeting in 1981, a national task force was created with representatives from various industries including agriculture, business, education, and government.¹² The task force recommended the creation of a national agriculture classroom literacy program with USDA coordinating to fund and assist the creation of programs on a state level.¹³ This was the birth of Agriculture in the Classroom.

Officially, Agriculture in the Classroom was established in 1982 by the Secretary of Agriculture, John Block.¹⁴ Though the task force determined the USDA should serve as the coordinator of the agriculture literacy initiative, they believed the programs should be created and maintained on the state level.¹⁵ With this in mind,

⁹ See *History of Agriculture in the Classroom*, NAT'L AGRIC. IN THE CLASSROOM ORG., <https://agclassroom.org/get/history/> (last visited Nov. 22, 2023) [hereinafter AITC History].

¹⁰ See *id.*

¹¹ See *id.*

¹² See *id.*

¹³ See *Trend Analysis*, *supra* note 1.

¹⁴ See *id.*

¹⁵ See *id.*

Secretary Block encouraged each state's governor and department of agriculture officials to establish a committee for organizing the state's agriculture literacy program.¹⁶ This decision led to the unique and state-specific system of Agriculture in the Classroom programs seen today. Presently, a majority of states, the District of Columbia, and Puerto Rico have state Agriculture in the Classroom programs.¹⁷ Each state program varies in structure and operation—some operate as a part of the state's agriculture department, some are maintained through the state's farm bureau, some independently operate as a non-profit, and some are run through a university or institution of higher education.¹⁸ For example, California's program is run through a 501(c)(3) non-profit organization called the California Foundation for Agriculture in the Classroom.¹⁹ Conversely, Texas runs their program through the Texas Farm Bureau,²⁰ and Oklahoma runs their program through a three-pronged partnership between the Oklahoma Department of Agriculture, Food and Forestry, the Oklahoma Department of Education, and the Oklahoma Cooperative Extension Service.²¹ Additionally, each state program is tailored to the state where it sits, meaning the curriculum is based on that state's agriculture industry and resources offered to teachers and students vary from state to state.

Though the current system of Agriculture in the Classroom (AIRC) programs are maintained at the state level, the USDA still serves in its designated coordinator role by both providing grants to AIRC programs and resources through the National Agriculture in the Classroom Organization. As it operates today, the National Agriculture in the Classroom Organization (NAITCO) is a non-profit that works to "increase agricultural literacy through K-12 education."²² NAITCO is a national organization that provides membership to state and territory programs through the payment of

¹⁶ *See id.*

¹⁷ *See Affiliates – Programs*, NAT'L AGRIC. IN THE CLASSROOM ORG., <https://agclassroom.org/affiliates/programs/> (last visited Nov. 17, 2023).

¹⁸ *See Get Involved – Mission*, NAT'L AGRIC. IN THE CLASSROOM ORG., <https://agclassroom.org/get/mission/> (last visited Nov. 17, 2023) [hereinafter *NAITCO Mission*].

¹⁹ *See LEARNABOUTAG.ORG*, <https://learnaboutag.org/> (last visited Nov. 17, 2023) [hereinafter *California AIRC website*].

²⁰ *See Ag in the Classroom*, TEX. FARM BUREAU, <https://texasfarmbureau.org/youth/ag-in-the-classroom/> (last visited Nov. 17, 2023).

²¹ *See About Us*, OKLA. AG IN THE CLASSROOM, <https://oklahoma.agclassroom.org/about/> (last visited Nov. 22, 2023).

²² *NAITCO Mission*, *supra* note 18.

dues.²³ To NAITCO, agriculture literacy is defined as the ability to communicate and understand “the source and value of agriculture as it affects our quality of life,”²⁴ and through providing lesson plans, teacher workshops, and other educational resources they strive to educate students “about the importance of agriculture.”²⁵

NAITCO is funded through state and territory program membership dues, sponsorships from agribusiness companies and organizations, and grants from the USDA’s National Institute of Food and Agriculture (NIFA).²⁶ With the support of the USDA, NAITCO provides an annual national conference for state and territory AITC programs to attend.²⁷ In 2021, over 800 teachers participated in the annual conference in Iowa, where they visited local farms and agribusinesses, and attended workshops focused on using agriculture to teach core subjects.²⁸

Additionally, USDA funds an online curriculum map provided to the state programs through the NAITCO website.²⁹ Created by NIFA, NAITCO, and the National Center for Agriculture Literacy located at Utah State University, the National Agriculture Literacy Curriculum Matrix contains a vast collection of Pre-K-12 lesson plans and companion resources that meet national educational standards and align with the National Agriculture Literacy Outcomes.³⁰ USDA also funds professional development opportunities for teachers, and awards various grants to AITC programs and projects.³¹

B. Literacy Outcomes

After years of having various definitions and standards for agriculture literacy, in 2013, stakeholders recognized the need to

²³ See *Annual Report 2021*, NAT’L AGRIC. IN THE CLASSROOM ORG., 3 (2021) https://cdn.agclassroom.org/nat/data/affiliates/report_annual.pdf [hereinafter *NAITCO Annual Report 2021*].

²⁴ *NAITCO Mission*, *supra* note 18.

²⁵ *NAITCO Annual Report 2021*, *supra* note 23, at 3; see *NAITCO Mission*, *supra* note 18.

²⁶ See *NAITCO Annual Report 2021*, *supra* note 23, at 3.

²⁷ See *id.* at 6.

²⁸ See *id.*

²⁹ See *id.* at 3.

³⁰ See *Feeding the World Through User-Inspired Sci.*, U.S. DEP’T OF AGRIC. NAT’L INST. OF FOOD AND AGRIC., 29 (2015).

³¹ See *Agric. in the K-12 Classroom*, U.S. DEP’T OF AGRIC. NAT’L INST. OF FOOD AND AGRIC., <https://www.nifa.usda.gov/grants/funding-opportunities/agriculture-k-12-classroom> (last visited Nov. 24, 2023).

identify key outcomes for agriculture literacy programs.³² The stakeholders realized they needed to establish a national standard for what the “agriculturally literate” student should know at each level of their education.³³ In 2013, stakeholders adopted NAITCO’s current definition for agriculture literacy—the ability to “understand and communicate the source and value of agriculture as it affects our quality of life.”³⁴ Soon after, using NAITCO’s definition and various other frameworks and research such as The National Agricultural Literacy Logic Model,³⁵ the National Agriculture Literacy Outcomes (NALO) were created.³⁶

NALO is aligned with national education standards and organized by both theme and grade-level benchmarks.³⁷ NALO identifies five themes that should be present in a curriculum to sufficiently prepare an agriculturally literate person.³⁸ Additionally, NALO highlights the key outcomes that each theme should convey to students at every level in K-12 education.³⁹ The themes include, Agriculture and the Environment; Plants and Animals for Food, Fiber, and Energy; Food, Health, and Lifestyle; Science, Technology, Engineering, and Math; and Culture, Society, Economy, and Geography.⁴⁰ The NALOs are benchmarked by using four grade level bands, Early Elementary (K-2), Upper Elementary (3-5), Middle School (6-8), and High School (9-12).⁴¹ The NALOs have played a key role in the formation of materials available on the National Agriculture Literacy Curriculum Matrix.⁴² The lesson plans and corresponding resources found on the Curriculum Matrix were created to meet the standards outlined in the NALOs.⁴³ To clearly understand the impact of AITC programs and the resources they provide, this article will further discuss each curriculum theme and

³² See Debra M. Spielmaker & J.G. Leising, *Nat’l Agric. Literacy Outcomes*, UTAH STATE UNIV., SCH. OF APPLIED SCIS. & TECH., 1-2 (2013).
<https://cdn.agclassroom.org/nat/data/get/NALObooklet.pdf> [hereinafter *Literacy Outcomes*].

³³ See *id.* at 1.

³⁴ *Id.*

³⁵ See RESEARCH Logic Model, NAT’L. CTR. FOR AGRIC. LITERACY,
<https://www.agliteracy.org/research/logic/> (last visited Nov. 22, 2023).

³⁶ See *Literacy Outcomes*, *supra* note 32.

³⁷ See *id.* at 2.

³⁸ See *id.* at 3, 5, 7, 9, 11.

³⁹ See *id.* at 4, 6, 8, 10, 12.

⁴⁰ See *id.* at 3, 5, 7, 9, 11.

⁴¹ See *Literacy Outcomes*, *supra* note 32, at 4, 6, 8, 10, 12.

⁴² See *id.* at 2.

⁴³ See *id.*

the highlighted outcomes they should be teaching each grade band of students.

i. Agriculture and the Environment

The first theme examines the relationship between agriculture and the environment. A student who has completed an AITC program in the Early Elementary grades should be able to identify natural resources; describe the roles water and soil play in the raising of crops and animals; explain how farmers use land to grow crops and support livestock; and show the effect weather patterns have on plant and animal growth for food.⁴⁴ Upper Elementary students should be able to list the similarities and differences between natural and managed ecosystems; explain the impact the interaction of the sun, soil, water, and weather has on agricultural production; and recognize the natural resources used in agricultural production.⁴⁵ Additionally, Upper Elementary students are expected to identify conservation methods used in farming and recognize the difference between natural and agricultural ecosystems in their region.⁴⁶

The outcomes highlighted for Middle School students advance past the point of mere recognition and move to holding conversations about the pros and cons of many agricultural decisions. For example, the agriculturally literate student leaving middle school should be able to discuss land and water use by various agricultural groups; the sourcing of food locally versus globally; the pros and cons of converting a natural ecosystem into an agricultural ecosystem; and the migration of people groups to different environments for the purpose of meeting their basic needs.⁴⁷ Additionally, Middle Schoolers should recognize how climate and natural resources determine the crops and livestock that can be grown in a regional area; recognize the factors that determine an agricultural system's sustainability; describe the benefits and challenges of using conservation practices for natural resources in agriculture systems; and explain how natural resources are used and conserved in agriculture.⁴⁸ High School students should be able to describe the maintenance and importance of farmer-created wildlife habitats;

⁴⁴ See *id.* at 4.

⁴⁵ See *id.*

⁴⁶ See *Literacy Outcomes*, *supra* note 32, at 4.

⁴⁷ See *id.*

⁴⁸ See *id.*

identify non-native or invasive species in their state which impact agricultural ecosystems; understand the natural cycles that govern the flow of nutrients in both farming and natural ecosystems; evaluate the various definitions of sustainable agriculture; consider the potential impacts of climate change on agriculture; and discuss the value of agricultural land.⁴⁹ Additionally, students should be able to discuss the scientific basis for regulating the spread of potentially harmful organisms and the methods of control in place, and describe the resource and conservation management practices used in agricultural systems.⁵⁰

ii. Plants and Animals for Food, Fiber, and Energy

The second theme teaches students the importance of stewarding our natural resources by sustainably delivering high quality food, fiber, and energy while maintaining a quality environment. Early Elementary students should be able to identify food products eaten by animals and people, food safety practices to follow at home, the importance of natural resources in farming, animals involved in agricultural production and their uses.⁵¹ Additionally, they should be able to compare types of plants and animals found on farms with plants and animals found in the wild, and explain how farmers work with the lifecycle of plants and animals to harvest a crop.⁵² Agriculturally literate students leaving Upper Elementary should be able to recognize the similarities and differences in food, clothing, shelter and fuel sources among world cultures; distinguish between renewable and non-renewable resources used in agriculture production; explain the impact of soil nutrients on plant growth; provide specific examples of farmers meeting the needs of animals; and understand the concept of stewardship in farming.⁵³

Middle School students are expected to identify farm practices used for plant protection and the harvest of safe products for consumers; recognize renewable and nonrenewable energy sources; highlight strategies used for animal housing that protects animal welfare and the safety of animal products; and determine

⁴⁹ *See id.*

⁵⁰ *See id.*

⁵¹ *See Literacy Outcomes, supra* note 32, at 6.

⁵² *See id.*

⁵³ *See id.*

where labels indicate the origin of food and fiber.⁵⁴ Additionally, Middle School students should be able to describe the effect European settlement of the Americas had on agriculture production, and explain the role of ethics in the production and management of food, fiber, and energy sources.⁵⁵ High School students should be able to identify food safety inspection processes; discuss the purpose of government involvement in agriculture; compare the effect both organic and inorganic nutrients have on plants; explain the differences between natural plant and animal lifecycles and agricultural systems; and evaluate different perspectives on agriculture production.⁵⁶

iii. Food, Health, and Lifestyle

The third theme explores the interactions between health, food consumption decisions, and food storage and preparation processes. Early Elementary students are expected to identify healthy food options; understand where different types of foods should be stored at home; and recognize agriculture's role in the creation of our most basic necessities like food, fiber, energy and shelter.⁵⁷ Upper Elementary students should learn to identify careers in food, nutrition, and health, and identify the sources of nutrients found in food.⁵⁸ They should additionally be able to use the current dietary guidelines to describe the necessary food components that form a healthy diet; diagram a processed food product's path from farm to table; distinguish between processed and unprocessed food; explain the costs associated with both producing and purchasing food; and highlight practices of safe food handling, preparation, and storage.⁵⁹

Middle School students should be able to evaluate food labels and serving size related to meeting nutritional needs; explain the benefits and disadvantages of food processing; and identify foods that provide valuable nutrients for a balanced diet.⁶⁰ Additionally, they should be able to demonstrate safe methods for handling food in the home; identify forms and sources of food contamination; explain the factors that affect food choices; describe the role ethics play in agriculture production; recognize the sources of agricultural

⁵⁴ *See id.*

⁵⁵ *See id.*

⁵⁶ *See Literacy Outcomes, supra* note 32, at 6.

⁵⁷ *See id.* at 8.

⁵⁸ *See id.*

⁵⁹ *See id.*

⁶⁰ *See id.*

products for their community, state, and nation; and name careers in the food system which are essential for a healthy food supply.⁶¹ The agriculturally literate student leaving High School should be able to accurately read and explain food labeling terminology, its nutritional content, and the effect it has on consumer choices.⁶² The students should understand the changing nutritional needs of humans over their lifespan; describe the nutritional value that can be added by processing foods; evaluate the cost of food in the US compared with other countries; explain the influence consumer choices has on food production; identify the effect various foods have on a healthy diet; and provide examples of foodborne contaminants and the policies in place to protect consumers.⁶³

iv. Science, Technology, Engineering, and Math

The fourth theme seeks to prepare students to understand the role science, engineering, technology, and mathematics play in improving the health of plants, animals, people, and our environment, and providing food to a growing population. Early Elementary students will be able to explain the tools and materials used by farmers to reduce temperature in plant and livestock structures, and recognize examples of simple tools used in agriculture settings.⁶⁴ Upper Elementary students should be able to describe how technology helps farms increase their outputs with fewer inputs; explain the impact complex modern machines have had on efficiency in agriculture; provide examples of science being applied in farming; and identify how the knowledge of inherited traits is applied to plants and animals in order to meet specific objectives.⁶⁵

Middle School students should understand the historic impact agriculture technology has had on society by describing our development from hunting and gathering to farming; explaining the influence of agriculture innovation on economic systems; identifying specific technologies that have reduced labor in agriculture; and recounting the increase in food yield resulting from technology.⁶⁶ Additionally, Middle Schoolers should be able to identify science

⁶¹ See *Literacy Outcomes*, *supra* note 32, at 8.

⁶² See *id.*

⁶³ See *id.*

⁶⁴ See *id.* at 10.

⁶⁵ See *id.*

⁶⁶ See *Literacy Outcomes*, *supra* note 32, at 10.

careers related to the production and consumption of agricultural products; provide examples of science and technology used in agricultural systems; and detail the social, economic, and environmental impacts of agriculture technologies.⁶⁷ Agriculturally literate middle school students can also explain the impacts and technology developed to influence various organisms related to agriculture production, and describe how biological processes can be leveraged in agricultural production and processing.⁶⁸ High School students should be able to provide examples of how processing adds value to agricultural goods and fosters economic growth; identify potential agricultural uses for emerging scientific discoveries and technologies; evaluate both the benefits and concerns related to the application of technology to agricultural systems; and describe how agricultural practices have contributed to changes in societies and environments over time.⁶⁹ High Schoolers should also be able to discuss population growth, and the impact of science and technology applied in agriculture to increase yields and maintain sustainability; predict the types of careers and skills agriculture scientists will need in the future; and correlate historical events, discoveries in science, and technological innovations in agriculture with day-to-day life in various time periods.⁷⁰

v. Culture, Society, Economy, and Geography

The fifth theme explores the impact economics, geography, and consumer demands of agriculture products have on the evolution of societies in both the United States and the world. Early Elementary students should be able to discuss what a farmer does; explain why farming is important to communities; trace the sources of agricultural products; identify locally raised plants and animals for agriculture; recognize local places and methods of exchange for agricultural products; and name the people involved from production to consumption of agricultural products.⁷¹ Upper Elementary students are taught to describe the impact of supply and demand on the price of agricultural goods; explain the effect historic agricultural events and inventions have on life today; provide examples of non-local agricultural products; list jobs available in the agriculture industry;

⁶⁷ *See id.*

⁶⁸ *See id.*

⁶⁹ *See id.*

⁷⁰ *See id.*

⁷¹ *See Literacy Outcomes, supra* note 32, at 12.

detail the importance of agriculture in daily life; and understand the agricultural history of their specific community.⁷²

Middle School students should be able to explain how agricultural production and trade led to the development of industrialized societies; how prices for agricultural goods are determined; and how exploration and trade sustained early societies.⁷³ Additionally, Middle Schoolers should be able to distinguish between careers that involve agriculture production and those that involve consumers; highlight the significance of state agricultural historic events on governmental and economic development; describe the economic value of agriculture in America; identify agricultural products that are exported and imported; and explain farm ownership in relation to processor ownership.⁷⁴ High School students should be able to provide examples of how changes in cultural preferences can influence the production, processing, marketing, and trade of agricultural products; explain the role of government in the production, distribution, and consumption of food; discuss the impact of major agricultural events and inventions on both world and U.S. history; compare and contrast the economic challenges facing developed and under-developed countries; and communicate how the global agricultural economy influences the sustainability of communities and societies.⁷⁵ High Schoolers should also be able to compare the advantages and disadvantages of having fewer farmers; describe essential agricultural careers; discuss how agricultural practices have increased food yield and impacted the development of the global marketplace; consider the relationship between geography, politics and global economics in the distribution of food; and explain how comparative and absolute advantage in agriculture impacts supply and demand in relation to trade.⁷⁶

C. Numerical Evaluation of National Agriculture in the Classroom

On paper, Agriculture in the Classroom sounds like an incredibly effective program. It has a large number of research-backed resources available through the Curriculum Matrix, good attendance at the National Conference, and fantastic funding support

⁷² See *id.*

⁷³ See *id.*

⁷⁴ See *id.*

⁷⁵ See *id.*

⁷⁶ See *Literacy Outcomes*, *supra* note 32, at 12.

from USDA and various agribusiness companies. However, looking at the numbers, Agriculture in the Classroom seems to fall short. According to the recent 2021 Annual Report, only 916,000 Pre-K-12 students were reached in 2021 by only 22,000 teachers.⁷⁷ While that number may seem impressive, per the National Center for Education Statistics, 49.4 million K-12 students enrolled in public schools at the start of school in the fall of 2021.⁷⁸ This means that roughly less than two percent of students gained exposure to Agriculture in the Classroom teaching methods and resources.⁷⁹ This is poignant because, while only 916,000 of the 49.4 million students enrolled in K-12 received Agriculture in the Classroom training, all of those 49.4 million children eat food and will be affected in the future by issues surrounding climate, health, and food production. If Agriculture in the Classroom truly wants to be an effective program for preparing agriculturally literate students to go into the world and make informed decisions, more classrooms and school systems need to be incentivized to participate.

D. Uniformity Issues in National Agriculture in the Classroom

Another issue that inhibits the efficiency of the AITC programs is a lack of uniformity across states. There are benefits and disadvantages to the established structure of AITC. The state and territory led programs are beneficial because they allow students to engage with local agriculture and understand agriculture's historic impact on their states and regional communities. Every state and territory is different—each with a unique history, culture, climate, soil type, and more. It is incredibly important that students learn about the agriculture around them and have the opportunity to engage with local agriculture producers, businesses, or institutions of higher learning. Direct engagement will show students the value of agriculture in their community and help them discover potential career paths in the industry. Clearly, this article is not arguing that learning about agriculture on a local or state level is wrong—even the

⁷⁷ See NAITCO Annual Report 2021, *supra* note 23, at 5.

⁷⁸ See *Public School Enrollment*, NAT'L. CTR. FOR EDUC. STAT., <https://nces.ed.gov/programs/coe/indicator/cga/public-school-enrollment> (last visited Nov. 24, 2023).

⁷⁹ This calculation is an estimate because the number representing students were reached by an AITC program includes pre-K students, while the number of total enrollment does not. Additionally, the total enrollment number is only counting public school enrollment, while the AITC number is representing all students including public, private, charter, etc.

NALOs highlight the necessity of students learning about the local agricultural community. However, this article does acknowledge the disadvantages that arise with a state-led system of AITC programs.

As forementioned, the system of state led AITC programs vary in their design and operation. Some are maintained by the state departments of agriculture, some are run as non-profits, and others are run through universities or institutions of higher learning.⁸⁰ Additionally, there is a large group of AITC programs that operate through their state's Farm Bureau.⁸¹ In NAITCO's 2022 Program Report, which is a compilation of the forty-two submitted annual state and territory reports, eighteen of the forty-two state AITC programs were housed in the state's Farm Bureau organization.⁸² This poses a concern because Farm Bureau, through the American Farm Bureau Foundation for Agriculture (The Foundation), has its own set of standards for a curriculum that prepares the agriculturally literate student.⁸³

The Foundation defines its mission as operating "at the nexus of agriculture and education to deliver solid curriculum and high impact programs that present accurate agricultural information."⁸⁴ The Foundation's curriculum and programs are based on its own definition of "agriculturally literate" and structured to meet its own standards, called the "Pillars of Agricultural Literacy."⁸⁵ The Foundation defines the agriculturally literate person as one who understands "not just where food comes from, but who grows it, agriculture's effect on the economy, environment, technology, lifestyle and its relationship to livestock."⁸⁶ The Foundation's model for agriculture literacy is more complex than the NALO. The Foundation sees the Pillars as being a "framework for lifelong learning" and stresses the desire that it be used as a planning

⁸⁰ See *Classification of Agricultural Literacy Programs* (illustration), in 2022 Program Report, NAT'L AGRIC. IN THE CLASSROOM ORG., <https://www.jotform.com/report/23167517964206017> (last visited Nov. 26, 2023).

⁸¹ See *id.*

⁸² See *id.*

⁸³ See generally *American Farm Bureau Foundation for Agriculture*, <https://www.agfoundation.org/what-is-ag-literacy> (last visited Nov. 24, 2023) [hereafter AFBF Ag Literacy Page] (explaining the "Agricultural Literacy" program of the American Farm Bureau Foundation for Agriculture).

⁸⁴ American Farm Bureau Foundation for Agriculture, LinkedIn, <https://www.linkedin.com/company/agfoundation/> (last visited Nov. 12, 2023).

⁸⁵ See generally *Pillars of Agricultural Literacy*, AM. FARM BUREAU FED'N, <https://www.agfoundation.org/pillars> (last visited Nov. 12, 2023).

⁸⁶ AFBF Ag Literacy Page, *supra* note 83.

tool for educators and a measure of a classroom's success in implementing an agriculture literacy program.⁸⁷ The Pillars begin with a "Foundational Knowledge" section that highlights the following themes: the definition of agriculture and key vocabulary; the taxonomy of the industry; the history of agriculture; identification of agricultural products; and production awareness.⁸⁸ The Pillars are then broken down into six categories with learning expectations divided by four age groups. The six categories include: the Relationship between Agriculture and the Environment; the Relationship between Agriculture and Food, Fiber, and Energy; the Relationship between Agriculture and Animals; the Relationship between Agriculture and Lifestyle; the Connection between Agriculture and Technology; and the Relationship between Agriculture and the Economy.⁸⁹

Similar to the NALO, the Pillars do give a few standards for what should be taught at each grade level in each category, but they also give a one-word key objective for each of the levels.⁹⁰ The first grade level is defined as Early Childhood - 3rd grade, and the key objective for this grade level is "awareness."⁹¹ The Pillars believe that learners in this grade level should be aware of their connection to farmers, of general farming practices, and of basic farm-to-plate processes.⁹² The next grade level is 4th - 8th, and their key objective is discovery.⁹³ The standard for this grade level is that learners discover how farmers accomplish key tasks.⁹⁴ The third grade level is 9th - 12th, and their key objective is knowledge-building.⁹⁵ Learners at this level build upon key discoveries with specific examples of agricultural practices.⁹⁶ The last grade level is Early Adults, and their key objective is analysis.⁹⁷ Early Adults are expected to analyze the impact of farmers' actions and use that knowledge to inform their

⁸⁷ See *Pillars of Agricultural Literacy*, *supra* note 85.

⁸⁸ See *Pillars of Agricultural Literacy A Planning Tool for Ag Literacy Programs*, AM. FARM BUREAU FOUND. FOR AGRIC., <https://www.agfoundation.org/files/PillarsPacket062016.pdf> (last visited Nov. 11, 2023) [hereinafter *Pillars Packet*].

⁸⁹ See *id.*

⁹⁰ See *id.*

⁹¹ See *id.*

⁹² See *id.*

⁹³ See *Pillars of Agricultural Literacy A planning Tool for Ag Literacy Programs*, *supra* note 88.

⁹⁴ See *id.*

⁹⁵ See *id.*

⁹⁶ See *id.*

⁹⁷ See *id.*

personal decisions.⁹⁸ In addition to the key objectives, the Pillars list two to eight standards for each category that learners at every grade level group are expected to know.⁹⁹ This article's intent is not to criticize the Foundation's support of agriculture literacy or the work they have done to bring agriculture back into classrooms, but this article does recognize the danger of AITC programs that are based on different educational standards. While the Foundation's Pillars do share similarities with the NAITCO-accepted standards found in the NALO, the potential disparity created by inconsistent curriculum criteria threatens the progress of agriculture literacy across America.

In addition to the concerns arising from the use of the Foundation's Pillars, some state AITC programs are not as well funded or promoted through the state. A quick look at the various state-led programs' websites, show that some states provide a significantly higher number of resources than others. For example, the Arkansas AITC program, which is operated by Arkansas Farm Bureau, appears to offer far less resources and curriculum materials than other state-led programs.¹⁰⁰ Arkansas's main AITC program webpage located on the Arkansas Farm Bureau website has a short paragraph describing the mission of AITC, two short videos highlighting Farm Bureau projects, and three tabs that link to other program pages.¹⁰¹ The three tabs are for Teacher Resources, Educational Programs, and Garden Grants.¹⁰² Teacher Resources features a link to request "Classroom Materials"¹⁰³ which include thirteen Arkansas agriculture specific "reader" booklets, two general agriculture booklets, five resources labeled "other" which include a bookmark, poster, placemat, bingo game, and Garden Chef game, and two resources labeled under "Ag Literacy Program."¹⁰⁴

⁹⁸ See *Pillars of Agricultural Literacy A planning Tool for Ag Literacy Programs*, *supra* note 88.

⁹⁹ See generally *id.* (detailing expectations by grade level for early childhood up to 12th grade).

¹⁰⁰ *Compare Ag in the Classroom*, ARK. FARM BUREAU, <https://www.arfb.com/pages/education/ag-in-the-classroom/> (last visited Nov. 24, 2023), with California AITC website, *supra* note 19.

¹⁰¹ See *Ag in the Classroom*, *supra* note 100.

¹⁰² See *id.*

¹⁰³ See *Teacher Resources*, ARK. FARM BUREAU, <https://www.arfb.com/pages/education/teacher-resources/> (last visited Nov. 24, 2023) [hereafter AR teacher resources].

¹⁰⁴ See *Classroom Materials*, ARK. FARM BUREAU, <https://www.arfb.com/pages/education/classroom-materials/> (last visited Nov. 11, 2023).

The Teacher Resources page additionally includes a spot to fill out an order form for the Ag Literacy Project, two AITC teacher award and scholarship programs, and one upcoming teacher workshop.¹⁰⁵ The Classroom Materials page makes no mention of the National Agriculture Literacy Curriculum Matrix.¹⁰⁶ Under the Educational Programs tab, you are taken to a page that describes a singular program run through the Arkansas Farm Bureau education staff where a “Mobile Ag Experience” trailer travels to different schools and events to talk about agriculture using “interactive displays and demonstrations.”¹⁰⁷ The Garden Grants tab takes the viewer to a page highlighting the Outdoor Classroom Garden Mini-Grant Program.¹⁰⁸ This program is available to schools, FFA chapters, and 4-H Clubs and awards up to \$500 to new gardens located on school adjacent property to produce agriculture crops.¹⁰⁹

Conversely, the California AITC program, which operates as a 501(c)(3) non-profit, has a multitude of resources available on their website.¹¹⁰ Its main page has six tabs that lead to various other pages including a Teaching Resources tab, a Programs and Events tab, and a Student Center tab.¹¹¹ The Teaching Resources page has twelve tabs of its own with one labeled Lesson Plans and describing over thirty units available covering a wide-range of topics for grades K-12.¹¹² The Lesson Plans page has a link to thirty-six different California specific plans, a link to the National Agriculture Literacy Curriculum Matrix, and a link to a page with specific distance learning resources.¹¹³ Additionally, under the Teaching Resources page are links to fact sheets, agriculture books for all age groups, one-page sheets called “Ag-Bites” that explain how to perform

¹⁰⁵ See *Teacher Resources*, *supra* note 103.

¹⁰⁶ See *Classroom Materials*, *supra* note 104.

¹⁰⁷ See *Educational Programs*, ARK. FARM BUREAU, <https://www.arfb.com/pages/education/educational-programs/> (last visited Nov. 11, 2023).

¹⁰⁸ See *Garden Grants*, ARK. FARM BUREAU, <https://www.arfb.com/pages/education/garden-grants/> (last visited Nov. 24, 2023).

¹⁰⁹ See *Outdoor Classroom Garden Mini-Grant Program*, ARK. FARM BUREAU, https://www.arfb.com/uploads/resources/documents/2019_garden_grant.pdf (last visited Nov. 24, 2023).

¹¹⁰ See California AITC website, *supra* note 19.

¹¹¹ See *id.*

¹¹² See *Teaching Resources*, CAL. FOUND. FOR AGRIC. IN THE CLASSROOM, <https://learnaboutag.org/resources/> (last visited Nov. 24, 2023).

¹¹³ See *Lesson Plans*, CAL. FOUND. FOR AGRIC. IN THE CLASSROOM, <https://learnaboutag.org/resources/lesson/> (last visited Nov. 24, 2023).

hands-on learning activities with students in various grade levels, school garden guides, and more.¹¹⁴ California's website also has a page that lists eleven programs and events hosted by their AITC program, including California Farm Day, California AITC Conference, *Imagine this...* Story Writing Contest, National Agriculture Week, and several webinars.¹¹⁵ The California website additionally has a "Student Center" with online resources like interactive games and various reading materials.¹¹⁶

When comparing these two state AITC program websites, it is easy to see how vastly different the landscape of resources is. California has thirty-six in-depth state-specific lesson plans and links to the National Curriculum Matrix, while Arkansas merely has a few booklets that teachers can order.¹¹⁷ California offers a number of statewide programs for classrooms to participate in¹¹⁸, while Arkansas only offers two—Garden Grants¹¹⁹ and Mobile Ag Experience.¹²⁰ Arkansas only holds one workshop to train AITC teachers, while California holds several webinars and an annual conference.¹²¹ This is not mentioned to ridicule the Arkansas program, but to illustrate the lack of uniformity across the state-led system of AITC programs and highlight the necessity for common standards to be implemented. Though NALO is a great resource for evaluating the success of an AITC program or curriculum, it is not currently used to ensure that common standards are taught in each classroom operating under the AITC umbrella. For Agriculture in the Classroom to be a truly effective program, it must find a way to

¹¹⁴ See *Teaching Resources*, supra note 112.

¹¹⁵ See *Programs & Events*, CAL. FOUND. FOR AGRIC. IN THE CLASSROOM, <https://learnaboutag.org/programs/> (last visited Nov. 24, 2023).

¹¹⁶ See *Student Center*, CAL. FOUND. FOR AGRIC. IN THE CLASSROOM, <https://learnaboutag.org/student/> (last visited Nov. 24, 2023).

¹¹⁷ See generally *Lesson Plans*, CAL. FOUND. FOR AGRIC. IN THE CLASSROOM, <https://learnaboutag.org/resources/lesson/> (last visited Nov. 24, 2023) (detailing California lesson plans and the National Agricultural Literacy Curriculum Matrix); see also *Ag in the Classroom*, supra note 100 (detailing various teaching sources for Arkansas Ag in the Classroom).

¹¹⁸ See generally *Programs & Events*, supra note 115 (detailing various programs available to educators and students in California).

¹¹⁹ See *Garden Grants*, ARK. FARM BUREAU, <https://www.arfb.com/pages/education/garden-grants/> (last visited Nov. 8, 2023).

¹²⁰ See *Educational Programs*, ARK. FARM BUREAU, <https://www.arfb.com/pages/education/educational-programs/> (last visited Nov. 8, 2023).

¹²¹ See *Teacher Resources*, ARK. FARM BUREAU, (last visited Nov. 12, 2023), <https://www.arfb.com/pages/education/teacher-resources/>; see also *Programs & Events*, supra note 115.

guarantee all students are taught a curriculum in alignment with NALO, and all teachers are given resources and opportunities to help meet this standard.

III. Making Agriculture's Place In The Classroom More Prominent

Though Agriculture in the Classroom is a well-established program that laid a good foundation for agriculture literacy, there are several key issues that inhibit its success in reaching more students. The question that now remains is whether AITC is the best vehicle to move agriculture literacy forward. For agriculture literacy to become a permanent feature in classrooms across America, schools will need incentivization to adopt agriculture literacy programs and ensure that students are taught a curriculum that meets a common standard, like the NALO. This article proposes that the best way to incentivize participation and ensure the teaching of curriculum aligned with common standards is to require the implementation of an Agriculture Literacy Program for schools participating in various government-funded programs. If the school wishes to receive funding from the federal government, then it will have to prove the implementation of an Agriculture Literacy Program with a curriculum that meets the standards outlined in NALO. The best program to tie this Agriculture Literacy initiative to is the National School Lunch Program.

A. National School Lunch Program

Established in 1946 under the National School Lunch Act, the National School Lunch Program (NSLP) is a federally assisted meal program operating in public and nonprofit private schools and residential childcare institutions.¹²² Approximately 30 million students participate in this voluntary program that provides nutritional, low-cost or no-cost lunches.¹²³ On the federal level, NSLP is run through the Food and Nutrition Service (FNS) of the USDA, and on the state level, it is administered by state agencies.¹²⁴ For each reimbursable meal they serve, participating school districts

¹²² See *National School Lunch Program*, U.S. DEP'T OF AGRIC. FOOD AND NUTRITION SERV., <https://www.fns.usda.gov/nslp> (last visited Nov. 24, 2023).

¹²³ See *The National School Lunch Program Fact Sheet*, U.S. DEP'T OF AGRIC. FOOD AND NUTRITION SERV., <https://fns-prod.azureedge.us/sites/default/files/resource-files/NSLPFactSheet.pdf> (last visited Nov. 8, 2023).

¹²⁴ See *id.*

and independently ran schools receive cash subsidies and USDA foods.¹²⁵ The meals served by participating institutions must meet federal meal pattern requirements and be offered at a free or reduced price to eligible children.¹²⁶ Reimbursements can also be given for snacks served to children participating in an approved afterschool program that includes an educational or enrichment activity.¹²⁷ To be eligible for NSLP, a child may be deemed “categorically eligible” based on their participation in other certain federal assistance programs, or their status as a foster, migrant, homeless, or runaway child.¹²⁸ A child may also be “income eligible” if their household’s income falls within a designated range.¹²⁹

Schools are not required by law to participate in NSLP, but some states require schools to have a free/reduced meal program, some states require the use of NSLP for their mandated free/reduced meal program, and two states—California and Maine—passed legislation authorizing funding for free meal programs for all students.¹³⁰ Generally, FNS distributes cash reimbursements to state agencies who then distribute to participating schools.¹³¹ The reimbursement rate for NSLP is specified in its authorizing legislation.¹³² In the 2021-2022 school year, participating schools received \$3.66-\$3.90 for free meals given to participating students, and \$3.26-\$3.59 for reduced-price (lunch for \$0.40 or less) meals.¹³³ Additionally, schools receive reimbursement for their participation in NSLP through the form of USDA-purchased foods.¹³⁴ USDA foods are purchased by the USDA for distribution to federal nutrition assistance programs.¹³⁵

For the meals to qualify for reimbursements as part of NSLP, the schools must meet a few requirements. First, they must serve meals that meet the federal nutrition requirement.¹³⁶ The nutrition

¹²⁵ *See id.*

¹²⁶ *See id.*

¹²⁷ *See id.*

¹²⁸ *See The National School Lunch Program Fact Sheet, supra* note 123, at 1.

¹²⁹ *See* KARA BILLINGS, CONG. RSCH. SERV., R42634, SCHOOL MEALS AND OTHER CHILD NUTRITION PROGRAMS: BACKGROUND AND FUNDING, (last updated May 23, 2022).

¹³⁰ *See id.* at 11.

¹³¹ *See id.* at 6.

¹³² *See id.* at 5.

¹³³ *See id.* at 7.

¹³⁴ *See* Billings, *supra* note 129, at 7.

¹³⁵ *See id.*

¹³⁶ *See id.* at 19.

standard for school meals was most recently updated in 2012 after the passage of the Healthy, Hunger-Free Kids Act of 2010.¹³⁷ Per the legislation, the USDA is required to update the nutrition standards for school meals based on recommendations from the Food and Nutrition Board at the National Academies of Sciences, Engineering, and Medicine.¹³⁸ Based on both the 2010 Dietary Guidelines for Americans and recommendations from the National Academies of Sciences, Engineering, and Medicine, the standards increased the servings of fruits, vegetables, whole grains, and meats/meat alternatives in school meals.¹³⁹ The updated standards also required only low-fat unflavored and fat-free flavored and unflavored varieties of milk, set calorie and sodium limits, and prohibited trans fats in school meals.¹⁴⁰ In addition to nutritional requirements, local educational agencies or school districts participating in NSLP must maintain a wellness policy that sets nutrition and health-related goals and guidelines for schools within the jurisdiction.¹⁴¹ Among other content, the wellness policies are required to establish goals related to nutrition and physical activity and a nutrition standard for school meals that meets or exceeds the federal standard.

The NSLP operates on a federal, state, and local level. Division of authority for the program is as follows. The USDA has overall responsibility for the program, issues guidance and regulations to states, reimburses state agencies for qualifying meals served, and evaluates the state agencies' administration of the program.¹⁴² State agencies will issue guidance to school districts, reimburse school districts for qualifying meals served, and conduct administrative reviews of a school district's administration of the program.¹⁴³ School districts will certify eligible students for free or reduced-price meals, serve nutritionally balanced school meals that meet USDA requirements, and count and claim qualifying meals for reimbursements.¹⁴⁴

¹³⁷ See *id.* at 51.

¹³⁸ See *id.* at 24.

¹³⁹ See Billings, *supra* note 129, at 24.

¹⁴⁰ See *id.*

¹⁴¹ See *id.* at 27.

¹⁴² See *id.* at 14.

¹⁴³ See *id.*

¹⁴⁴ See Billings, *supra* note 129, at 14.

B. Proposing an Agriculture Literacy Program Requirement for NSLP

Because of the already established requirements NSLP participating schools must show, the addition of an Agriculture Literacy Program fits in well. The established chain of administration for NSLP allows school districts to easily report their implemented Agriculture Literacy Program to state agencies for review. School districts are already required to count and report their numbers of participating students and show evidence of their wellness policy and adherence to the required nutrition standards.¹⁴⁵ With the creation of an Agriculture Literacy Program requirement, NSLP participating schools will be required to report program implementation and maintenance, and allows state agencies to review programs for compliance with the common standard curriculum.

However, tying NSLP participation to the implementation of an Agriculture Literacy Program is only accomplishing half of the steps needed to make agriculture's presence in the classroom more prominent. The other half is establishing criteria for what makes a curriculum program effective, then creating a set of standards based on that. Luckily, through NAITCO there is already an accepted and research-backed set of standards found in the NALO. Because of AITC's system of state-led programs and their diverse operational realities, this article proposes NSLP's Agriculture Literacy Program requirement will not solely be the adoption of an AITC program. The use of various agriculture literacy resources is allowed, but they must be in compliance with the standards established in the NALO. School districts will have the authority to select the methods of implementation and curriculum they believe is best for the schools in their charge. This flexibility honors the traditional belief of AITC—that states and localities know best what works for them but ensures that the instruction students are receiving is in line with the national standard. Along with the use of the NALO, participating NSLP schools should be required to incorporate fieldtrips and visiting presentations from local agriculture producers, businesses, and researchers into their curriculum.

¹⁴⁵ See *Local School Wellness Policies*, U.S. DEP'T OF AGRIC. FOOD AND NUTRITION SERV., <https://www.fns.usda.gov/tn/local-school-wellness-policy> (last visited Nov. 24, 2023).

IV. Conclusion

As the world population continues to grow and environmental conditions continue to deteriorate, it will be imperative that the next generation of decision-makers and food consumers are properly prepared to tackle these growing issues. Agriculture literacy will be the tool that helps students move forward. Because of the low numbers of participating schools and a lack of uniformity in their curriculum standards, Agriculture in the Classroom alone is not an effective enough program to properly train the next generation. By tying an Agriculture Literacy Program requirement to the National School Lunch Program, potential deficiencies created by different states using different curriculum standards and models is reduced. Further, it sets up an incentive for engagement in agriculture literacy. Our society will be better served when everyone who eats also knows a thing or two about where that food came from!