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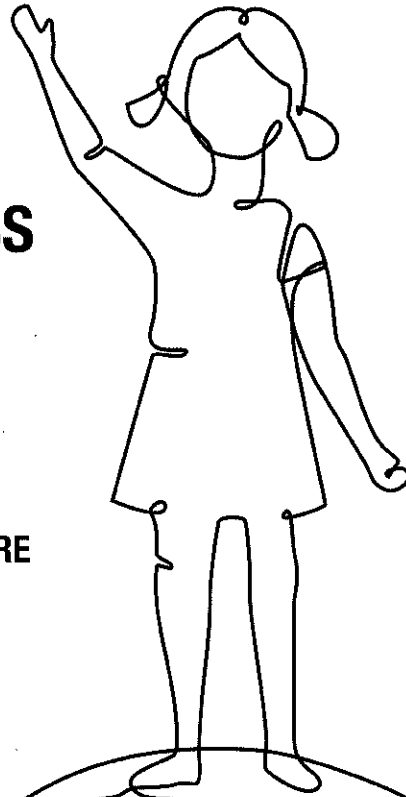
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# ITALIAN AND AMERICAN PERSPECTIVES ON OUTDOOR EDUCATION

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Gabriella d'Aprile



## Abstract

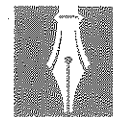
*The authors provide examples of outdoor education projects from Italy and the United States, along with some specific ideas teachers can use to start their own outdoor learning projects to bring problem-based and project-based learning into the curriculum.*

**Key words:** *active learning, outdoor education, problem-based learning, project-based learning*

**J**ohn Dewey (1916) noted that the least desirable type of classroom instruction occurs when each lesson is delivered as an independent experience, unrelated to other lessons, and divorced from the experiences or interests of the students. Conversely, Dewey suggested that the best type of teaching

is found in lessons that connect academic content to students' interests through active learning experiences. He observed that active learning "puts the student in the habitual attitude of finding points of contact and mutual bearings" so students can connect the content to their lives (p. 117).

Active learning is often associated with problem-based or project-based learning activi-



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ties in which students apply the knowledge and skills learned in traditional subject areas, such as math or science, to tackle real-life problems. Active learning is a teaching method that transcends cultures and national boundaries. It places the student in the role of an active constructor of meaning who brings prior knowledge and experience to the learning situation and connects it with new content and skills that can transfer learning to life situations outside of the classroom.

Thorndike (1924) described transfer as the highest form of learning because it shows that the student can use what he or she learned to take action on his or her environment. If students cannot take the knowledge and skills from the classroom out into the world, then perhaps they did not really learn anything. The way that curriculum is organized and the activities students engage in during their learning have a strong influence on students' opportunities to transfer knowledge and skills from the school to other areas of their environment. Problem-based and project-based activities are concrete ways educators can operationalize active learning by reorganizing curricular activities to provide more opportunities for students to transfer their learning.

Outdoor education is one vehicle to realize problem-based and project-based learning within the school curriculum. In this article, we present examples of outdoor education from Italy and the United States, along with some specific ideas teachers can use to start their own outdoor learning projects to bring about active learning and transfer.

## Peace Gardens of Sicily

Italian educators have a long history of engaging their students in outdoor education. *Studio d'ambiente* (environmental study) is the dominant mode of outdoor learning and most commonly includes gardening and agricultural studies. Michele Crimi from Sicily (1875–1963) was a prominent pedagogue and education activist associated with promoting outdoor learning in Italy (Tomarchio & d'Aprile, 2014).

Crimi is best known for the *scuola aperto* (open schools) in which students studied in outdoor classrooms. Gardening and land cultivation were main features of the outdoor school. Sicily was, and still is, an agricultural economy. About 15% of Sicilians work in the agricultural industry, and nearly 75% of the land is used for agricultural pursuits. Crimi's legacy of outdoor education lives on today in Sicily through the *Orti di Pace Sicilia* (Peace Gardens of Sicily) project.

The Peace Gardens of Sicily project originated in 2009 as a collaboration between the Department of Education Sciences, the Department of Architecture and Urban Planning at the University of Catania, and several local schools in the Catania area. The Peace Gardens of Sicily is a formal consortium of schools around Sicily. The project represents a concrete example of how the land becomes a place where the school curriculum comes to life and creates a connection between nature and nurture for students (d'Aprile & Tomarchio, 2017).

The most common types of projects undertaken in Peace Gardens of Sicily are those related to creating and tending a school garden, where the food grown is then prepared and eaten by the students or sent home to families in need. Multiple classes and grade levels often collaborate to plan the garden, prepare the plot of land, develop a plan and system for choosing and planting fruits and vegetables, determine a schedule for tending and nurturing the garden, and establish processes for the harvest and distribution of the crops.

The educational aims of the gardening project are academic, social-emotional, and physical. The garden projects connect to curricula related to environmental protection and education for sustainable development, healthy living, civics, relationship building, and stress relief (d'Aprile & Tomarchio, 2017). The highly accessible nature of nurturing a garden also provides opportunities for social connections among students, especially for individuals with disabilities and those at risk of marginalization like the many African immigrant students currently entering Sicilian schools.

Garden projects may focus on cooperative social enterprises, such as helping to feed students or their families. Or projects may focus on social-emotional bonding experiences that capitalize on the positive feelings of eco-sustainable behavior and use of environmentally friendly technologies. These can help to create a stronger link among students as well as between students and their environment.

The Peace Gardens of Sicily are not confined to the school property. Several gardens have been started at children's hospitals and counseling centers. The rehabilitative facets of gardening include stress relief, physical movement, and overall improvement in the mental outlook of children and adults through their experiences with nature and the fulfillment of literally seeing the fruits of their labor.

The Peace Gardens of Sicily have had an important impact at children's healthcare facilities. For example, the department of neuropsychiatry at the University Hospital *Polyclinic Vittorio Emanuele* of Catania collaborated to create a garden on the hospital grounds that was aimed to improve the quality of life for sick children. The staff wanted to create opportunities for the children to have direct contact with nature in order to create conditions that foster the development of sensory capacities and help to overcome the senses of isolation and uselessness that are often associated with extended hospital stays.

A small space on hospital grounds was reserved for planting aromatic herbs, flowers, and vegetables to create an environment where children can be engaged in fun, creative, and stimulating educational outdoor activities that become rehabilitative. The staff has informally labeled the space as a "hospital-free zone," which has also been useful for supporting parents in difficult situations, especially for long hospital stay cases where ordinary family-life conditions are far removed.

It is no coincidence that special education teachers at the schools belonging to the Peace Gardens of Sicily network were among the first

teachers to tap into this mechanism for active learning. The project promotes alternative strategies for learning and community building of great benefit for students with special needs. Special education teachers report that experiences in the garden have moved their students from passive recipients of education to active constructors of meaning who gain confidence and increase self-esteem.

The increased inclusion of special education students in projects related to active learning has added to the overall impact of the program. Keep in mind that inclusive education practices are not as well established in Italy as they are in the United States. So opportunities to further include students with disabilities in the general education program are necessary, and the Peace Gardens of Sicily have played an important role.

The act of collectively learning and working to sustain and cultivate the land results not only in academic outcomes related to horticulture, agriculture, and biology, but also has perhaps a more important impact of helping to develop the collective experience of community building. It is this connection among history, active learning, culture, and community that promotes an overall academic, social-emotional, and physical education experience. The Peace Gardens of Sicily take Dewey's (1916) call to move subject matter from an isolated set of facts to recognition that effective teaching needs to use and capitalize on situations that involve learning by doing.

### **Farm to Table Project in New Jersey**

The Farm to Table Project in the Wildwood Middle School in Wildwood, New Jersey, is part of a larger Culinary Arts career academy at the Wildwood High School started in 2015–2016. The Culinary Arts career academy, created in response to a lack of career education opportunities in and around Wildwood, seeks to prepare students for post-secondary education in the culinary arts. The academy was started with a grant by The Daniel Tanner Foundation and has

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since grown into the most popular program in the high school, with more than one-third of the student population involved. The program now offers students a direct pipeline to college credit, in which students attend and receive credit from the local community college as part of their high school course load.

The high school Culinary Arts program has been such a success that a group of educators and students decided to start a Farm to Table project in 2017. The group of middle school teachers and students developed the Farm to Table program after recognizing a need in their community (food insecurity) and an existing vehicle to address it (the high school Culinary Arts program). They started with a socially conscious community problem and identified ways that the curriculum could be reorganized and reconstructed to incorporate important content and provide opportunities for its transfer to address a social aim.

The middle school students designed a large-scale gardening project for a plot of space in the parking lot of the school that was not being used. The project began as an extension of the school's 21st Century Community Learning Centers federal grant. In collaboration with the high school's Industrial Technologies class, the students designed and built large planting boxes out of wood in which they grow vegetables in the spring, summer, and fall. The vegetables are used as part of the high school Culinary Arts program, creating a Grades 6 to 12 career pathway based on Dewey's concept of active learning and socially conscious problem solving. Students donate excess yield from the garden to local restaurants that either employ Wildwood High School students or host them for structured learning experiences. The district also received another grant to construct a greenhouse that will allow the Farm to Table program to run all year, including the winter months.

Culinary arts and gardening programs in the United States are not new or revolutionary. American horticulturist and botanist Liberty Hyde Bailey is widely considered the father of garden-

ing education in the United States (Banks, 1994). He brought gardening and horticulture to the forefront of formal educational programming by founding the College of Agriculture at Cornell University. His work resulted in agricultural extension programs at the university level, and those programs directly influenced the creation of gardening and culinary-related programs at the secondary school level.

## Standout Programs

What makes the Wildwood program and the Peace Gardens of Sicily stand out is that they have socially conscious aims at their core. Wildwood City has the highest percentage of children ages 5 to 17 living in poverty in the state of New Jersey (U.S. Census Bureau, 2017). The food grown in the Farm to Table program makes its way from the middle school exploratory program to the high school career academy, where the high school students use it to cook meals for their classmates. The Wildwood students use Dewey's (1916) concept of the problem-solving method: Students and educators identify a common problem, investigate the problem, develop solutions, and reflect on the positive and negative impacts of the solutions in order to devise more effective future solutions.

The Farm to Table project and the Culinary Arts academy at Wildwood represent what Dewey (1916) proposed as effective education: "that reconstruction or reorganization of experience which adds to the meaning or experience, and which increases ability to direct the course of subsequent experience" (pp. 89-90). Dewey (1929) remarked that teachers and students must collaboratively play an active role in the development and transformation of knowledge. The curriculum is something that must be customized at the local level by those who develop and experience it.

The Peace Gardens of Sicily are an extension of Crimi's original goal of bringing education and social services to the rural poor in Sicily at a time when the region was in the grips of an economic crisis. Many families resorted to mortgaging their

children to local farmers or working as indentured servants in order to pay the bills. Education and health services were nearly nonexistent for the poor, and Crimi's idea of bringing education to the children, in the fields, was revolutionary and addressed a socially conscious issue.

### Making It Happen

Educators can engage in active learning opportunities through outdoor education projects on a small or large scale. A project can start as a 1-day activity or a week-long project. It can evolve into a full unit of study that involves all grade levels or even multiple schools. Regardless of the scope of the project, educators should capitalize on the success. Whether the program is the construction of a consortium of schools like the Peace Gardens of Sicily or a new school program like the Farm to Table project at Wildwood Middle School, it is important to bring attention to the project. Attention helps to rally support. In the age of decreasing school budgets, decisions to fund and support projects are sometimes made based on the perceived impact of the project. Therefore, it is important that educators find ways to get their projects noticed.

For example, in Wildwood, what started in 2015 as a grant from The Daniel Tanner Foundation to support the creation of one course in the high school has burgeoned into an entire vocational education program in Grades 6 to 12, with a pipeline to the local community college. Success breeds success, and the Wildwood program has attracted the attention of the local businesses and some philanthropic donors from outside the community. The school leveraged the power of the local media and larger media outlets in the region to get the word out through print, radio, and television. The reports about the success of the program brought additional donations of materials and money that have helped to create a sustainable funding stream in addition to support from the local school district's budget.

The current version of the Peace Gardens of Sicily started as a one-school garden project. Now it is an organized consortium of schools

across the entire island. The consortium has a website to disseminate information and recruit more schools, and it hosts an annual conference based on its collaboration with the University of Catania. Universities are a great resource for helping to organize consortia. Most universities require their faculty to conduct some type of service to the profession. Many professors develop university-school collaborations as part of their service. Reaching out to the local universities can be one way a teacher transforms a class project into a larger collaboration, which in turn can provide access to additional funding.

Gardening programs are excellent vehicles for incorporating state-mandated curriculum content standards into hands-on projects that make learning active. The satisfaction students receive in taking part in bringing about life and creating something they can use or that can help others is motivating and can lead to more engagement in the classroom. Gardening projects require the use of critical thinking skills, project planning and organization, collaboration, teamwork, and other skills and dispositions that are not found in state-mandated curriculum content standards, but that are certainly important skills and dispositions for life. Educators can capitalize on students' natural interest in outdoor education and gardening to activate learning and to potentially do some social good. ■

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