



Everyday Settings & Family Activities

Outdoor Community Gardens

School gardens bring people together, helping to strengthen community relationships. The garden program has been successful, and as it has grown, it has become a home to our shared commitment to learning from each other. The garden also serves as a space for rich student-directed outdoor STEAM learning, provides increased access to healthy foods and helps improve student and school morale. And the garden is a natural place to teach our students about character and promote a culturally responsive growth mindset. What better place for a student to learn that it is OK to make mistakes than a garden where fixing mistakes easily becomes an observation lesson?

In 2005, the Gould Group, Australia's oldest environmental education organization, helped disadvantaged schools, as identified by the education department in the state of Victoria, to establish a multicultural food gardening program as a focal point to bring communities together – to garden, cook, learn from each other and create a connected community (Gould Group, 2008).

However, it became apparent that not all schools, particularly disadvantaged schools, had the resources to construct gardens or offer gardening activities to their students. The multicultural school gardens program was created to provide teaching and learning (core curriculum) materials, funding, raw materials, professional development, volunteer recruitment and coaching for a school year, to enable disadvantaged schools to establish a culturally focused gardening program. The intention was that the gardens would then be sustained by embedding the program in the school's curriculum and through the connections made with the local community. As an integral part of the multicultural school gardens program, I was engaged to research the program alongside its implementation. The primary purpose of the research was to gauge the impact of the program against its stated objectives, namely (a) celebrating cultural diversity and demonstrating the benefits of multiculturalism, (b) creating a multicultural garden and cooking projects within the school, (c) helping to develop strong local communities and school communities and (d) fostering healthy eating habits (Gould Group, 2008, p. 1).

How Gardens Connect With STEM

Gardening is also a learning tool that is appropriate for children or adults of any age. Early childhood providers and preschool programs can use gardens to provide multisensory learning experiences and to give children a strong foundation in basic STEM concepts. Elementary educators can then utilize gardens to expand on children's previous knowledge and to reinforce what children are learning in class. Gardening can also expose children to science and other STEM disciplines at an earlier age, which will increase the likelihood of them studying or working in a STEM-related field later in life.

Here are just a few of the ways you can use gardening to support STEM-based learning in the classroom:

- **Science:** Older children can study plants and insects, learn nutrition skills, observe the effects of weather and learn about more advanced science topics. Young children can feel the textures of different plant leaves, help water plants and learn a variety of basic science concepts.
- **Technology:** Weather and soil tools often used in gardens are a great way to discuss technology with older kids. You can also discuss the machines and technology used in larger gardens or farming. For younger kids, it is best to remember that technology is anything made by humans. Garden tools and other basic items are great conversation starters for how technology is used in gardens.

- **Engineering:** Building and planting a garden is a great engineering and design practice. This is why you need to involve kids as early as the planning process. Have them decide where the garden would best be located, but make sure they consider the amount of sunlight, proper drainage, and other important factors that affect how gardens grow.
- **Mathematics:** Gardening is a great way to promote a variety of math concepts for preschool and elementary students. Counting, size, shape, proportion, fractions, multiplication, etc., are all math topics that children can learn while gardening. Young children can count how many tomatoes are on a vine, for example, and older kids can problem-solve to figure out how for much they would have to sell 20 tomatoes to make a profit.

ONLINE RESOURCES

- [Starting A Community Garden](#)
- [Community Gardens and STEM Challenge](#)

