

Benefits of School-Based Community Gardens

A compilation of research findings

Academic Achievement

- A study of third and fourth graders involved in a school garden and nutrition program found that “the school garden **supports student inquiry, connection to the natural world**, and engages students in the process of **formulating meaningful questions**” (Habib & Doherty, 2007).
- Students involved with school gardens generally **take pleasure in learning** and **show positive attitudes towards education** (Canaris, 1995; Dirks & Orvis, 2005).
- Students who have school garden programs incorporated into their science curriculum score significantly **higher on science achievement tests** than students who are taught by strictly traditional classroom methods (Klemmer, Waliczek, & Zajicek, 2005).

Physical Health

- Children who are familiar with growing their own food tend to **eat more fruits and vegetables** (Bell & Dymont, 2008), and are more inclined to continue healthy eating habits through adulthood (Morris & Zidenberg-Cherr, 2002).
- Gardening during childhood **exposes children to healthy food, moderate exercise, and positive social interactions** and can often lead to a lifetime of gardening (Gross & Lane, 2007).

Social and Emotional Health

- The school garden serves as a “safe place” for students. Studies show that large numbers of students report “**that they feel ‘calm,’ ‘safe,’ ‘happy,’ and ‘relaxed’** in the school garden” (Habib & Doherty, 2007).
- Children who work in gardens are **more likely to accept people different from themselves** (Dymont & Bell, 2006).
- A study of third, fourth and fifth graders showed that students participating in a garden program had **increased self-understanding, interpersonal skills, and cooperative skills** when compared to non-gardening students (Robinson & Zajicek, 2005).

School and Community Benefits

- According to Skelly & Bradley (2000), teachers who worked in schools with garden programs had **higher workplace morale and increased “general satisfaction with being a teacher at that school.”**
- The study by Habib and Doherty (2000) showed that “**68 percent of the students shared what they were learning with family and friends** unassociated with the school garden program.” This has the potential for spreading the benefits to a much larger community.
- The American Community Gardening Association attributes community gardens to an **increase in home prices for residences** near the garden, a **reduction in violent and non-violent crime** in the neighborhood, and an overall **increase in the feeling of safety** (2009).
- In a Denver study, **95 percent of community gardeners give away some of the produce they grow** to friends, family and people in need; **60 percent specifically donate to food assistance programs** (Litt, J.S., et al., 2012).
- **In a survey of community gardeners in Denver, 80 percent gardened as children**, suggesting that gardening at a young age has a long-reaching impact (Litt, J.S., et al., 2012).
- **More than 50 percent of community gardeners meet national guidelines for fruit and vegetable intake, compared to 25 percent of non-gardeners** (Litt, J.S., et al., 2011).



I've learned a lot from the garden, but the community garden is also a place where I can just go and breathe in some fresh air. I feel calm and peaceful when I'm in the garden.

—Fifth grade student

Sources

- American Community Gardening Association, 2009. Promoting Community Gardening Through Research: A Survey. *Community Greening Review*, 41.
- Bell, A. C., & Dymont, J. E. 2008. Grounds for health: The intersection of green school grounds and health-promoting schools. *Environmental Education Research*, 14(1): 77-90.
- Canaris, I. 1995. Growing foods for growing minds: Integrating gardening and nutrition education into the total curriculum. *Children's Environments* 12(2): 134-142.
- Dirks, A. E., & Orvis, K. 2005. An evaluation of the junior master gardener program in third grade classrooms. *HortTechnology* 15(3): 443-447.
- Dymont, J. E., & Bell, A. C. 2006. Our garden is colour blind, inclusive and warm: Reflections on green school grounds and social inclusion. *International Journal of Inclusive Education* 12(2): 169-183.
- Gross, H., & Lane, N. 2007. Landscapes of the lifespan: Exploring accounts of own gardens and gardening. *Journal of Environmental Psychology* 27(3): 225-241.
- Habib, D., & Doherty, K. 2007. Beyond the garden: Impacts of a school garden program on 3rd and 4th graders. *Seeds of Solidarity*: 2-14.
- Klemmer, C. D., Waliczek, T. M., & Kajicek, J. M. 2005. Growing minds: The effect of a school gardening program on the science achievement of elementary students. *HortTechnology* 15(3): 448-452.
- Litt, J.S., Soobader, M., Turbin, M.S., Hale, J., Buchenau, M., Marshall, J.A. The influences of social involvement, neighborhood aesthetics and community garden participation on fruit and vegetable consumption. *The American Journal of Public Health*. 101 (2011) 1466-1473.
- Litt, J.S., et al., Community gardens in the city: A characterization of Denver's garden infrastructure, awareness, use, and practices (Manuscript In preparation, 2012).
- Morris, J., & Zidenberg-Cherr, S. 2002. Garden-enhanced nutrition curriculum improves fourth-grade school children's knowledge of nutrition and preference for vegetables. *Journal of the American Dietetic Association*, 102(1), 91-93.
- Robinson, C. W., & Zajicek, J. M. 2005. Growing minds: The effect of a one-year school garden program on six constructs of life skills of elementary school children. *HortTechnology* 15(3): 453-457.
- Skelly, S. M., & Bradley, J. C. 2000. The importance of school gardens as perceived by Florida elementary school teachers. *HortTechnology*, 15(3): 439-443. <http://horttech.ashspublications.org>