



# **Evaluating an Initiative to Increase Youth Participation in School and Community Gardening Activities**

### Kristi S. Lekies

4-H Youth Development Ohio State University Extension <u>lekies.1@osu.edu</u>

#### **Marcia Eames-Sheavly**

Department of Horticulture Cornell University Ithaca, NY ME14@cornell.edu



# **JOURNAL OF YOUTH DEVELOPMENT**

bridging research and practice



Volume 3, Number 2, Fall 2008

#### Article 080302RS001

# **Evaluating an Initiative to Increase Youth Participation in School and Community Gardening Activities**

Kristi S. Lekies Ohio State University Extension

> Marcia Eames-Sheavly Cornell University

**Abstract:** Across the country, youth gardening opportunities are rapidly increasing, as is the need for documentation on successful strategies for working with young people. This paper describes the evaluation of the Greener Voices project, a three-year initiative created to increase youth participation in gardening activities through consultation, resources, and information provided to adult leaders at six sites across New York and Pennsylvania. The evaluation is highlighted to encourage others to think about ways to incorporate evaluation into gardening programs. Useful strategies include starting early with evaluation planning, using an underlying program theory or logic model, collecting data through multiple methods, coordinating evaluation and program planning, building theory into evaluation, and publicizing findings. Documenting lessons learned can contribute to the knowledge base in the youth gardening field.

# Introduction

Across the country, youth gardening opportunities are rapidly increasing. While studies have documented the positive impacts of gardening (e.g., Klemmer, Waliczek, & Zajicek, 2005; Lohr & Pearson-Mims, 2005; Pothukuchi, 2004), more information is needed about effective ways of working with youth in these settings to optimize the potential for learning and development. This paper describes the evaluation of Greener Voices, a three-year initiative created to increase youth participation in gardening activities. The initiative consisted of ongoing consultation, print and website resources, and meetings with adult leaders at six sites across New York and Pennsylvania. The sites included school- and community-based gardens in urban, rural, and

suburban areas at varying stages of implementation and involved approximately 500 children from preschool through older adolescent and 10 adult leaders. We highlight our evaluation as a way to share useful strategies with others planning to incorporate evaluation into gardening and related projects.

## **Starting Early**

The evaluation began when the project proposal first was written and objectives were formulated. The project was viewed as a collaborative between a horticulture educator/project manager and a human development/evaluation specialist. At the project's inception, weekly discussions immediately began, and data gathering started within one month. These activities continued throughout the project, with outreach strategies and data collection in years one and two and dissemination efforts in year three.

# **Using a Program Theory**

The evaluation was guided by an underlying program theory, or logic model. The model implied that the implemented activities would change adults' thinking about youth participation, which would changes practices in working with youth, and ultimately, increased levels of actual participation. Initially, the evaluation was to examine selected youth developmental outcomes, but this would prove difficult given the age range and the changing group of youth over time at most sites. Therefore, the evaluation questions focused on the usefulness of the outreach efforts, changes in practices, and the extent of youth participation. Examples of questions are provided in the Appendix.

The project was influenced by the theory and practice of engaging young people in community development, and especially by the work of Roger Hart. Hart developed a visual model of participation with an eight-level continuum ranging from "tokenism," to fully "child-initiated and directed" (Hart, 1992; 1997). Based on over ten years' experience in the children's garden arena, the project director believed many adult leaders struggled with how to engage children and youth in planning and decision-making. It was expected that the resources, especially the visual model, would help to increase participation.

### **Using Multiple Methods**

Given the diversity of sites and participants, several evaluation methods were used. Documentation completed by adult leaders included a baseline survey about garden activities and monthly log sheets about their use of project resources and participation challenges. Annual site visits provided the opportunity to observe children and youth in decision-making and planning roles, and to learn more about their involvement. At one site, for example, the phone rang in the office, and with no prompting from an adult, a youth answered the phone, responded professionally, and then hung up. It was noted as an example of a young person who had a considerable degree of engagement, ownership, and comfort level with the program and an overall "climate" in which youth were allowed to assume some responsibilities normally handled by adults. In another case, the visit culminated in a meeting with an entire grade level of 4<sup>th</sup> graders. At least three-quarters of the 120 children waved their arms for the opportunity to respond to questions. Students described in detail the garden planning process. When asked, "Who usually designs gardens for children?" the entire grade level shouted "kids!" rather than "grown-ups," or "teachers," which were expected. This suggested genuine involvement. Youth at two sites completed written surveys about their experiences. The sites were assessed both by the adult leaders and Greener Voices staff as engaging youth at fairly high levels of participation. This was reflected in the survey responses that indicated participation in planning, serving on committees, and other key activities. At the first site, which took place at an elementary school and involved 10 and 11-year-old youth, approximately 60% of the youth talked with adult leaders about their ideas and helped plan activities, 40% helped make decisions about activities, and 30% were members of small planning at work groups. At the second site, which took place at a neighborhood center and involved adolescents, over 75% had discussions with adult leaders about project activities, and over 50% helped make important decisions, solved problems, and took the lead in carrying out activities. One quarter of the youth made decisions about money and managed and directed activities.

Structured interviews with the 10 site leaders at the end of year two provided information to indicate the project was successful. Outreach efforts were helpful, attitudes and practices had changed at most of the sites, and both youth and adults engaged in new roles (Eames-Sheavly, et al., 2007; Lekies, et al., 2007). The other methods used supported these findings.

### **Coordinating Evaluation and Project Planning**

A continuous process was in place in which project activities shaped evaluation activities, and evaluation findings shaped future project activities. For example, as the visual model of participation became an increasingly important strategy in the second year, additional evaluation efforts were made to examine its use and effectiveness. As evaluation findings indicated that some adults did not see preschool-aged children as capable of contributing, information on engaging young children was added to the project website. The project website was completed as an outreach effort for adult leaders of youth gardening programs and included information on the Greener Voices project, evaluation findings, garden-based learning resources, and suggestions for practice.

### **Building Theory into Evaluation**

We used the evaluation as an opportunity to test a hypothesis of how young people develop interests in gardening. Using youth survey data from one site, a quantitative analysis indicated that gender, length of time with a garden, active participation, and gardening skills are related to gardening interest (Lekies & Eames-Sheavly, 2007). Thus, we saw evaluation as a chance to learn about our own program, as well as contribute to the overall knowledge base on youth gardening.

### **Publicizing the Findings**

Finally, we disseminated our learnings to larger audiences across the country through journal articles and the project website. We felt it was important to share what we learned so that others can learn from our experiences, pursue evaluations of their own, and ultimately, improve the experience of gardening for youth.

### **Concluding Comment**

We encourage all youth gardening projects to document their efforts. Lessons learned from sites across the country, with youth of different ages, with adult leaders of diverse backgrounds, and with various objectives are much needed for this exciting and rapidly-growing field.

# References

Eames-Sheavly, M., Lekies, K.S., MacDonald, L., & Wong, K.J. (2007). Greener Voices: An Exploration of Adult Perceptions of Participation of Children and Youth in Gardening Planning, Design and Implementation. *HortTechnology.* 

Hart, R.A. (1992). *Children's participation: From tokenism to citizenship.* Florence: International Child Development Centre, UNICEF.

Hart, R.A. (1997). *Children's participation: The theory and practice of involving young citizens in community development and environmental care.* New York and London: UNICEF/Earthscan.

Klemmer, C.D., Waliczek, T.M., & Zajicek, J.M. (2005). Growing minds: The effect of a school gardening program on the science achievement of elementary students. *HortTechnology. 15*, 448-452.

Lekies, K.S., & Eames-Sheavly, M. (2007). Fostering children's interests in gardening. *Applied Environmental Education and Communication.* 

Lekies, K.S., Eames-Sheavly, M., MacDonald, L., & Wong, K.J. (2007). Greener Voices: Strategies to increase the participation of children and youth in gardening activities. *Children, Youth, and Environments, 17,* 517-526. Retrieved February 15, 2007 from www.colorado.edu/journals/cye.

Lohr, V.I., & Pearson-Mims, C.H. (2005). Children's active and passive interactions with plants influence their attitudes and actions toward trees and gardening as adults. *HortTechnology*, *15*, 472-476.

Pothukuchi, K. (2004). Hortaliza: A youth "nutrition garden" in southwest Detroit. *Children, Youth, and Environments, 14,* 124-155.

© Copyright of Journal of Youth Development ~ Bridging Research and Practice. Content may not be copied or emailed to multiple sites or posted to a listserv without copyright holder's express written permission. Contact Editor at: <u>patricia.dawson@oregonstate.edu</u> for details. However, users may print, download or email articles for individual use.

ISSN 2325-4009 (Print); ISSN 2325-4017 (Online)

# **Appendix**

**Adult interview guide.** We developed a guide for the site visit interviews that would provide in-depth perspectives from the adult leaders. Questions covered project activities, child and youth involvement, a self-assessment of participation based on Hart's Ladder of Participation, changes in educator and volunteer perspectives on participation, changes in activities, impacts on the children and youth, and barriers and challenges to participation. Sample questions included:

Please describe your project and the ways children/youth have been involved.

Using the Ladder of Participation, where do you think the project rests? Is this where you intended the project to be? What is your goal?

How have you and any other adults have been involved (initiating the project, obtaining funding, supervision, and planning)?

Would you say your thinking about participation has changed from the start of the Greener Voices project (about 1<sup>1</sup>/<sub>2</sub> to 2 years ago)? If yes, in what ways? What has contributed to this?

As a result, have you done anything differently? Were there ways in which you tried to change or increase participation? If yes, please explain.

How did the children and youth respond to your efforts to change or increase their participation? Have they done anything differently as a result? Please note any successes and difficulties.

What about your co-workers and volunteers? How do these adults view the level, ability, and success of children's participation in the project?

How have they reacted to any changes you have wanted to make regarding children's participation? Have they done anything differently? Please note any successes and difficulties.

**Youth survey.** We also developed a survey for youth that was completed at the end of the summer. Two versions were developed—one for younger and one for older youth. Questions focused on project activities, skills they learned, and future interests in gardening. Sample questions from the younger youth survey included:

Did you do any of these things for your project?

I planted seeds I watered the plants and flowers I picked vegetables when they were ripe I helped with composting I talked with the adult leaders about my ideas I helped plan things to do I helped decide the things we should do I helped find answers to problems I helped raise money for the garden I helped decide what do with money for the garden I was a member of a small planning work group I showed other kids how to do things, like planting

Please check all the things you learned from your work with the garden:

How to plant a garden How to look after a garden How to tell the difference between the plants and weeds How to get rid of insects and pests How to use different tools in the garden

Think about before you started working in the garden and today. Do you like gardens and plants more now? Do you like being outside with nature more now? Do you want to do more gardening projects?

More information about the interview guide and surveys are available from the authors.