Extension Education Methods

Edina Goes Green Part I: A Model for Low-input Lawn Care Community Education

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SUMMARY. A yearlong community education project was conducted in Edina, Minn., to teach residents about low-input lawn care techniques. Informational articles, a World Wide Web (Web) page, public seminar, and demonstration sites were the four major strategies employed by the project. Each of these teaching methods had a specific objective for influencing the lawn care knowledge and practices of Edina residents. Feedback from surveys at the completion of the project showed that printed articles had the highest familiarity. Based on these results, recommendations are given for other communities to implement low-input lawn care education programs.

Many municipalities have ordinances concerning lawn care; height of grass, setbacks, and even the type of plants permitted (Balbach and Balbach, 1998). Increasingly, these ordinances have been challenged, as homeowners become concerned about the environmental effects of a traditional lawn (Diekelman and Bruner, 1978; Gillespie, 1990; Hanchek, 1994). Although the numerous benefits of turf have been published (Beard and Green, 1994; Leslie and Knoop, 1989) there remains a perception of inputs, especially pesticides and fertilizers, as having a negative environmental impact.

In an effort to teach environmentally responsible and low-input lawn care, community leaders and concerned citizens of Edina, Minn. (a Minneapolis suburb), initiated a community educational program, called Edina Goes Green (EGG).

The University of Minnesota Extension Service provided information about low-input lawn care and coordinated the EGG program, which operated from March 1996 through June 1997. The primary source of information was the University of Minnesota Extension Service publication, *LILaC: Low-Input Lawn Care* (Mugaas, 1995). EGG used four educational methods, each with its own goal of affecting the knowledge, attitude, and/or practices of Edina residents toward the task of lawn care. This article outlines the EGG program and critiques the teaching methods used. Concluding information offers recommendations to other communities interested in low-input lawn care.

Background and resources

Before the start of EGG, Edina City Council had voted to change the way the city managed the turf in its public parks. In February 1995 a new turf management plan was adopted that would eliminate or severely reduce the use of lawn chemicals on public areas (Edina Park and Recreation Department, 1995). Residents who had supported this change then began to think of ways to educate the community as a whole about low-input lawn care. It was thought that a greater understanding of this approach would make for wider acceptance of the city's plan and could also lead to reduced use of lawn chemicals on private property.

In EGG, resources available for the program were closely linked with community support. EGG was unique in that it was initiated by Edina residents. Members of the Edina League of Women Voters, the Edina Community Health Services Advisory Committee (ECHSAC), and other concerned citizens were instrumental in forming a partnership between the City of Edina and University of Minnesota Extension Service, and in applying for funding for the program. The EGG committee applied for and received a Sustainable Urban Landscape Education Program grant from the University of Minnesota. Thus, the major material and financial resources for the project came about as a direct result of community involvement and support.

Key factors in a successful community educational program include identifying financial and material resources available, gathering support within the community, identifying clear and measurable objectives, and planning a schedule and strategies to meet those objectives using the available resources.

The grant provided funding to hire a project coordinator for one year. This position involved organizing, planning, and implementing the educational campaign. The goal was to make use of the available resources to develop an educational program that would reach a wide audience at a variety of levels within the community. Extension programs in other areas have shown this to be a successful approach to community education (Aveni and Hartung, 1997).

The four educational techniques and objectives are evaluated below. At the start and end of the program, surveys were distributed to 800 random households in Edina asking questions about lawn care knowledge and practices. The final survey also asked questions about the respondent's familiarity with the EGG program.

Published articles

Seven articles were published concerning the project

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Minnesota Experiment Station scientific journal series paper 981210035. The cost of publishing this paper was defrayed in part by the payment of page charges. Under postal regulations, this paper therefore must be hereby marked *advertisement* solely to indicate this fact.

Table 1. Publications about Edina Goes Green (EGG) educational program, March 1996 to June 1997.

Publication	Date	Title
AboutTown	Summer 1996	A year-round guide to home lawn care, part 1
AboutTown	Fall 1996	A year-round guide to home lawn care, part 2
AboutTown	Fall 1996	Edina goes green
SunCurrent	21 Aug. 1996	'U' program helps Edina 'go green'
SunCurrent	14 May 1997	Answers to common questions on lawn fertilizers
SunCurrent	21 May 1997	Knock out weeds not environment
SunCurrent	28 May 1997	Tips for your lawn to make it in the shade

(Table 1). *AboutTown*, a quarterly magazine published by Edina's Park and Recreation Department, is distributed free to Edina residents. The free weekly *SunCurrent* newspaper also ran articles on EGG. Members of the EGG committee were instrumental in contacting the newspaper and supplying the articles.

The objective of publishing informational articles was to educate Edina residents as a whole. The articles were distributed to all residents and were purely informational, requiring no effort on the part of the recipient other than choosing whether or not to read them.

Survey results indicated that these articles were the most widely used educational tools of EGG's program. As Table 2 shows, of those respondents who knew about the EGG program, more were familiar with the *AboutTown* and *SunCurrent* articles than any other aspect of the program. Homeowner surveys conducted in other communities have asked respondents to rate their preferred methods for receiving information and determined that printed materials, either from mailings or newspapers, are consistently preferred over other teaching methods (Lajeunesse et al., 1997; Minnesota Center for Survey Research, 1995).

Web site

A Web site was posted in February 1997 with the objective of providing up-to-date information about the program. The site contained introductory information, copies of the published articles, demonstration site addresses, and results from the first survey. The Web address was advertised at the end of the SunCurrent newspaper articles.

Like the published articles, the Web site was primarily an informational teaching tool. It did, however, require more effort on the part of those using it than did the *AboutTown* or *SunCurrent* articles. The Web information required a computer, Internet access and the desire to seek information independently. The EGG's site was not posted until halfway through the program and was not actively advertised until much later, thus making it relatively ineffective in reaching residents. Only ≈2% of residents were familiar with the Web page by the end of the program (Table 2).

This result should not rule out the use of Web pages in community education projects. With more advertising and planning, a Web page can be a relatively easy way to make available large amounts of information (Peet, 1998). It also has the capacity for expansion through e-mail to become a mode of communication between participants and project organizers. For projects with limited financial resources, posting information on the Web can be quite cost effective. EGG's site was posted on the Internet at no cost as a link from the Department of Horticultural Science's Web site at the University of Minnesota.

Public seminar

A free public seminar, hosted and funded by Edina Park and Recreation Department, in March 1996 was titled "Lawn Care for the 90's: A Pinch Not a Pound" and featured two speakers. The seminar opened with information from a waste prevention specialist from the Minnesota Office of Environmental Assistance. The primary speaker was a turf specialist and consultant hired by the City of Edina to assist in implementing their new turf management plan.

The objectives of the seminar were to provide professional information on lawn care and to give those attending an opportunity to ask questions pertaining to their own lawns. About 100 people attended and audience response to the program was overwhelmingly positive. This event required much more effort on the part of the participants than did the published articles or the web site. It is likely that only those residents already interested in lawn care would be motivated to attend. In that respect, only a small number, ≈1% of residents were familiar with this event (Table 2).

Demonstration sites

The last major educational tool used was a demonstration site project. This was a yearlong program that paired 12 Master Gardeners (MGs) with 19 homeowners, who agreed to use their lawns as demonstration sites. MGs are volunteers trained by extension to teach horticulture in the community (Meyer, 1997).

The objectives of these demonstration sites were to 1) provide an individualized learning experience for the homeowners, and 2) provide public examples of low-input lawn care, and 3) evaluate home lawns as demonstration sites. For the homeowners, this was the most intensive teaching method EGG used. It required a yearlong commitment and the desire to learn about and hopefully implement changes in their lawn care practices.

The project was promoted and participants' addresses published in the *AboutTown* and *SunCurrent* publications and on EGG's web site. However, only 1.1% of Edina residents were familiar with this educational tool by the end of the program. For complete information on the demonstration sites, see Carpenter and Meyer, 1999a.

Other educational tools

Other educational methods, also had some influence on the program. EGG hosted an informational booth at an Edina City Hall Open House held at in February 1997. A member of the EGG committee tended the booth, and EGG fliers were distributed. As indicated in Table 2, this was not a highly influential event. It was, however, an opportunity for members of the EGG committee to take a more active role in promoting the program. The committee member handing out fliers came away from the event with the sense that he had made a valuable contribution to the program. Such a sense of satisfaction, that each participant has a significant role to play in the program, may be essential for ongoing success.

Table 2. Responses to the survey after the Edina Goes Green (EGG) educational campaign rating familiarity with the program and each educational component.

Survey question	Frequency (%)
Familiarity with EGG program	
Very familiar	6.0
Somewhat familiar	24.2
Vaguely familiar	29.0
Not at all familiar	39.9
Which of these sources are you or anyone in your household familiar with, whether or not you have used the source personally? (Please circle all that apply)	
Articles in Edina's *AboutTown* magazine	31.3
Articles in Edina's *SunCurrent* newspaper	34.5
EGG's Web page	1.9
Public seminar	1.1
Demonstration sites	1.1
Word of mouth	8.4
City Hall open house	1.5
Other sources (write-in response)	3.9
Not familiar with the program	47.6

Word-of-mouth had some influence and most likely was a result of the high degree of community-member participation in the project (Table 2). Members of the League of Women Voters, ECHSAC, Edina's Park and Recreation Department, and the demonstration site participants were all involved in promoting the program and motivating others through interactions with friends and neighbors. This is one indication of the important role that community support for a project can play in its success.

The final survey of the project found that 30.2% of respondents were somewhat or very familiar with EGG. The effect these articles had on Edina residents' lawn care practices and knowledge is addressed elsewhere (Carpenter and Meyer, 1999b).

Recommendations for other communities

To implement a program of reduced inputs and environmentally responsible lawn care we offer the following recommendations:

IDENTIFY RESOURCES AVAILABLE WITHIN THE COMMUNITY. Local newspapers or other publications, community action groups, garden clubs, and city government organizations can provide support, publicity, and resources for educational programs.

IDENTIFY FINANCIAL RESOURCES. Grants and funding sources from community organizations can help with the cost of labor, mailings, printing, supplying and distributing brochures and fact sheets, and other expenses. The amount of funding available will directly affect the types of educational programs that can be offered.

INVOLVE LOCAL CITIZENS IN AN ACTIVE ROLE. Offer residents the opportunity to help organize and implement programs. Such involvement can increase the program's popularity and may encourage continuation of the program beyond the established time frame.

OUTLINE MEASURABLE GOALS AND OBJECTIVES. For each educational program, determine the desired outcome, whether a change in participant's knowledge or practices. Use periodic feedback from the participants to determine if the project is on track, and be willing to change programs that are not working. If a seminar is held, obtain participants' addresses so a follow up survey can be conducted to evaluate program effectiveness.

OFFER A WIDE VARIETY OF OPPORTUNITIES WITH VARYING LEVELS OF COMMITMENT. Those with lower requirements, such as newspaper articles, will be able to reach more people, but those with higher requirements can have more influence for changing the lawn care practices.

USE DEMONSTRATION SITES WITH WIDELY PUBLICIZED OPEN HOUSES. Identify the sites with informational signs, and have homeowners and MG on hand to answer questions from visitors.

CONTINUE THE PROGRAM FOR AT LEAST 2 YEARS. Broccolo (1989) emphasizes educating the public takes time and commitment. Repetition is important, especially where low involvement is concerned. A longer program will also facilitate measuring lasting change in the community.

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