Examining Green/Environmental Conservation Practices in School Nutrition Programs and Schools Using Case Study Methodology

OBJECTIVES
Describe and examine green/environmental conservation (GEC) issues and initiatives in school nutrition (SN) settings by:

- Identifying roles, practices, perceptions, and barriers to implementing GEC practices in SN programs
- Determining the roles of school personnel and SN professionals in the implementation and sustainability of GEC practices in schools

METHOD
Phase I

- Child nutrition state agency directors provided contact information for SN professionals who were at various stages of implementing and sustaining GEC practices in SN programs and schools.
- A virtual panel of 19 SN professionals participated in a modified Delphi process and provided data supporting the research objectives.
- Data collected from the Delphi was used to develop the case study protocol and data collection instruments.

Phase II

- The case study protocol was designed using a holistic, multiple-case study design with a literal replication format, including procedures, interview/focus group questions for SN staff and school personnel, and observation and documentation checklist as data collection instruments.
- Four SN directors in four USDA regions were invited to participate in the case study site visits based on their participation in the Delphi process, and their SN program’s demographics (geographic location, meal eligibility characteristics, and school district size parameters).
- The first case study site visit served as the pilot. No changes were made to the protocol and procedures. However, there were minimal changes made to the case study data collection instruments.
- Site visits consisted of: structured interviews with the SN director and an SN manager involved in GEC practices; focus group with district and school personnel involved in GEC practices; and field and document observations.

Data Analysis

- Data collected from the site visits were used to confirm the GEC practices described by SN participants in the Delphi process.
- Data from each school were separately analyzed and cross-case tabulated to confirm similarities and/or differences that identified and described GEC practices, SN and school district personnel’s perceptions, GEC roles and responsibilities, factors for sustainability, and barriers to success.

RESULTS

- Participants identified 40 GEC practices within six practice categories (Recycling, Energy Conservation, Air and Water Conservation, Resource Conservation, Building Renovations and Construction, and Other GEC Practices) occurring in SN programs and schools across the country.
- GEC practices were more sustainable in school districts and SN programs that had support from district administrators, principals, SN directors and custodial staff.
- SN and school professionals who had defined roles and engaged in GEC practices were more likely to buy-in, support, and encourage others to engage in GEC practices.
- SN programs and schools that had a GEC Team and/or GEC policies and procedures were engaged in more than one GEC practice.
- Sustainable GEC programs included evaluation protocols to assess the effectiveness of GEC practices and make changes as necessary.
- Education and training SN and school personnel and students were identified as essential to sustaining GEC practices and overcoming barriers.
- SN and school professionals perceived that partnerships between the schools, community, and vendors were necessary for adopting and supporting GEC practices in the community.
- The primary factors effecting sustainability of GEC practices were school officials’ and other school staff’s support, perceived cost, and time to implement and sustain practices.

APPLICATION OF RESULTS

Findings from this study were used to:

- Develop education and training resources for SN professionals
- Develop a national survey to assess GEC practices and sustainability in SN programs across the country

ADVICE FROM SN DIRECTORS AND SCHOOL PERSONNEL FOR IMPLEMENTING AND SUSTAINING GEC PRACTICES

- Evaluate the SN and school staff perceptions about GEC practices before implementation
- Explore regional and state operational policies and regulations regarding GEC practices before implementing new GEC practices
- Explore the benefits (including time and cost saving measures) of implementing and sustaining GEC practices and share them with SN and school stakeholders
- Get administrators’ and school board members’ support prior to implementation of a new GEC practices
- Start with GEC practices that are low cost and easily adaptable such as turning off lights and computers that are not in use
- Identify resources (i.e., grants, refunds, rebates, community resources) to support GEC practices
- Include GEC concepts and practices in general training and professional development sessions with SN and school staff to gain support for adopting GEC practices
- Be persistent and understand that adopting and/or changing perceptions and behaviors for implementing and sustaining GEC practices takes time