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ESTABLISHING STATEWIDE UNIFORMITY WITHIN THE SOUTH CAROLINA MASTER GARDENER PROGRAM

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ABSTRACT

In South Carolina, the structure of the Master Gardener program exists only in the form of localized live site educational classes. In addition, the program is offered in a limited number of counties across the state. This fragmentation results in a distorted image of the overall South Carolina Master Gardener (SCMG) program. Consistency is needed to assist the Clemson Extension Service in its proactive efforts of cultivating new ways of efficiently and effectively delivering educational programs. A modified Delphi process was used to help local site coordinators establish statewide uniform criteria for the SCMG program. The findings of the study indicated: (1) the most appropriate course requirements to be used statewide in the SCMG program and (2) the most appropriate topics to be covered statewide in the SCMG program. Based on the conclusions of this study, several lists of guidelines and recommendations were developed that may be used as an outline for integrating consistency into the SCMG program. The findings of this study still allow for limited amounts of flexibility to exist between localized sites.

Introduction

Currently, there is a lack of statewide consistency within the South Carolina Master Gardener (SCMG) program. As a result, the Clemson University Cooperative Extension Service (CUCES) has been prevented from fully utilizing the program delivery method of distance education, which involves "conducting uniform training on a statewide basis" (Dooley, Van Laanen, and Fletcher, 1999, ¶ 4).

In addition, the program's overall reputation, along with that of the CUCES, is threatened as a result of the current discrepancies and biases existing between the SCMG program sites. This study focuses on establishing statewide uniformity within the SCMG program.

Justification of the Problem

Many studies, such as one performed by Cecil and Feltes (2002), suggest that organizations should seek new ways of delivering programs in a more efficient manner. Through the implementation of a distance education option of the SCMG program, the CUCES would be provided an avenue of substantially reducing the large amounts of time and money invested, identified as commonly incurred with Master Gardener programs in general (Meyer & Hanchek, 1997). In a similar study, Kelsey and Mincemoyer (2001) indicated that a major benefit of distance education over traditional in-service trainings was significant savings in travel time and cost by the participants.

Presently in South Carolina, an array of SCMG programs exists across the state. The existence of multiple versions of the SCMG program leaves participants with mixed experiences and widely varied opinions. At the state level, this leads to a distorted image of the overall program as well the CUCES. According to a study performed by Rohs (1986), program participation is influenced by overall organizational reputation and by program reputation.

Methodology

The modified Delphi technique was the method used in this study. Linstone and Turoff (1975) identified this type of research as being appropriate for studies that seek to reach a consensus and have a high potential for generating major disagreements between members of a population. For this study, 14 Master Gardener site coordinators agreed to serve as the expert panel and assisted in the establishment of statewide uniformity within the SCMG program.

Round I

Each expert was administered a 101-item Round I survey instrument that was divided into six main sections: (I) the establishment of uniformity, (II) course requirements, (III) logistics and miscellaneous, (IV) topics, (V) comments or suggestions, and (VI) demographic information of the participants. Likert-type scale items were evaluated for means and standard deviations. (Copies of survey forms used for this study are available upon request from the authors.) Consensus was considered to be agreed upon when the standard deviation was equal to or less than one. Multiple choice items were summarized for percentages of selections.

Round II

Based on written feedback responses from the first round, five new items were incorporated into the Round II instrument. In addition, the Round II instrument included each item from the initial survey that had not reached a consensus, along with a summary of respective comments from the panel of experts. Once the panel of experts had completed the Round II surveys, the procedures used to summarize the Round I data were repeated with the newly collected data.

Findings and Discussion

In Round I, 58 of the 67 Likert-type items (scaled one to four) reached consensus. In Round II, all other items reached consensus. At this point, the survey items were put into list format and sorted by descending order of the expert's mean ratings:

Section I (The Establishment of Uniformity)

Based on the expert panel's mean ratings, these items should be pursued:

- All SCMG participants should receive the same quality educational experience.
- Individual site coordinators should have the option of including sessions based on topics of local interest in their SCMG program.
- All SCMG program participants should participate in the same core program.
- A standard core program should be developed for the SCMG program.
- The idea of an 'advanced SCMG course' should be explored as a future program possibility.
- Course completion requirements should be the same for all participants of the SCMG program.
- Funding assistance should be available to interested SCMG program participants with limited resources.
- Establishment of uniformity would improve the overall educational quality of the SCMG program.
- Volunteer requirements should be the same for all participants of the SCMG program.
- A uniform SCMG program would be beneficial for course participants.
- A uniform SCMG program would be beneficial for the Clemson Extension Service.
- A uniform SCMG program would be beneficial for Master Gardener (MG) site coordinators.
- All SCMG program participants should receive the same for-sale publications as part of their registration.
- An optional distance education MG program would be useful in those counties that lack the agents or expertise to teach the information.
- Establishment of uniformity would assist in improving the overall reputation of the SCMG program.

Section II (Course Requirements)

Based on the expert panel's mean ratings, each participant should:

- complete the required volunteer hours before receiving their official SCMG certificate.
- complete a final exam with a passing score in order to graduate from the SCMG program.
- adhere to an attendance policy in order to graduate from the SCMG program.
- use the same evaluation form when assessing the SCMG program.
- achieve a cumulative mean score of at least 70% in order to graduate from the SCMG program.
- pay a higher registration fee to take a non-volunteer/ education-only horticulture program based on MG core curriculum (in the event there was one available). This task is purely hypothetical, and is inquiring only about fees.
- take weekly exams in the SCMG program.
- be required to spend a designated part of their volunteer time in the County Extension Office.
- be required to have all volunteer hour projects pre-approved by a SCMG Coordinator.

Section III (Logistics and Miscellaneous)

The questions below are from section III of the survey. All responses listed below received at least a 25% selection rate and should be given consideration when establishing uniformity in the SCMG program.

When is the most appropriate time of day to offer the SCMG program?

- 61.5%: morning (before noon)
- 30.8%: evening (after 6 pm)

When is the most appropriate time of year to offer the SCMG program?

- 46.2%: fall
- 30.8%: late winter

What is the most appropriate number of times per year to offer the SCMG program?

- 84.6%: once per year

How long should a single session of the SCMG program last?

- 85.7%: 3 hours

Should a 'core program' be implemented, how many sessions should be included in this component of the SCMG program?

- 50.0%: 11-12
- 28.6%: 10 or less

How many sessions devoted to topics of local interest should be allowed as part of the SCMG program at the discretion of the local site coordinator?

- 71.4%: 3 or more
- 28.6%: 2

How many sessions devoted to topics of local interest should be required as part of the SCMG program?

- 78.6%: none

How many volunteer hours should participants be required to donate as part of the SCMG program?

- 92.9%: 40

What is the most appropriate registration fee for the SCMG program relative to fair market value?

- 78.6%: \$100-149

Section IV (Topics)

Responses to section IV of the survey allowed for the development of this list of topics considered to be important for inclusion in the SCMG core program:

- Soils and Plant Nutrition
- Basics of Entomology
- Basic Plant Pathology
- Turfgrass Establishment and Management
- Plant Physiology: Plant Growth and Development
- Selecting, Planting, and Managing Woody Ornamental Plants
- Chemical Pest Control
- Vegetable Gardening
- Woody Plant Material for Landscape Use
- Herbaceous Flowering Ornamental Plants
- Pruning Methods
- Basic Botany
- Basic Weed Science
- Diagnostic Key to Urban Plant Problems
- Composting: A Guide to Managing Organic Yard Trimmings
- Fruit Gardening
- Environmental Conservation

While there were numerous discrepancies between responses to many of the survey items, the expert panel agreed in consensus that the establishment of uniformity would be beneficial to program participants, the CUCES, and the site coordinators. It was also agreed to by consensus that uniformity within the SCMG program would improve the overall quality and reputation of the program. These particular findings represent the underlying theme of this entire study, and signify the importance of the issue from the overall perspective of the expert panel.

Many other states' Extension services have already implemented some degree of uniformity into their Master Gardener courses. Several states have also incorporated distance education technology into their Master Gardener courses. The CUCES will potentially be able to apply both uniformity and distance education technology into the SCMG program as a result of this research, which will allow for optimized outreach potential and improved organizational efficiency.

Conclusion

In summary, the findings of this study have set the framework for establishing uniform criteria within the SCMG program while still allowing a limited amount of flexibility between sites to exist. Based on the research, results, and commentary generated by this study, in addition to the guidelines previously outlined, the following recommendations are presented:

Based on the findings of this study, the SCMG Advisory Committee should consider using the items of consensus in the revision the SCMG Administrative Manual. This manual should serve as a guide for all coordinators, and should be enforced on a state level by the State Coordinator.

Based on the findings of this study, the SCMG Advisory Committee should consider developing an updated core curriculum, including the amount of hours that should be devoted to each topic in the core. This core curriculum should be used on a statewide basis, and should be enforced on a state level by the State Coordinator.

Based on the findings of this study, the SCMG Advisory Committee should consider developing an approved listing of elective topics to be offered optionally by individual sites as additions to the core curriculum.

The concept of distance education should be further explored as a delivery option for the SCMG program. The SCMG Advisory Committee and/or a task force should be utilized in coordinating this effort.

Updated resource material should be developed for all topics included in the core curriculum and the approved electives for the purpose of assisting site coordinators with the delivery of local Master Gardener programs. These resource materials should be of high quality, and should be developed by qualified specialists or field experts.

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