Scholarship in Extension Program Development: The Role of the State Specialist[1]

Martha C. Monroe and George Hochmuth[2]

Introduction

Many Land Grant Universities and their faculties, in recent years, have re-evaluated their definitions of scholarship. These efforts have been largely in response to changing attitudes toward universities and popular belief that most have lost focus on the Land Grant Mission (i. e., have become less "engaged"). During the 1990s, the Kellogg Commission on the Future of State and Land-Grant Universities wrote a series of papers about the Land Grant University System. In one of the papers the Commission called on publicly supported institutions to direct a portion of their attention to solving problems of immediate importance to stakeholders (Kellogg Commission, 1999). These papers naturally led to discussions about scholarship, especially as the engaged university sought a balance of developmental and applied research and educational approaches for application endeavors.

Typically scholarship was synonymous with research and publishing in peer-reviewed journals. However, these university discussions have resulted in the broadening of the definition of scholarship and its application in teaching and extension. Ernest Boyer (1990) started the discussion about a need for a new definition of scholarship. He proposed four areas of professorial scholarship: discovery, integration, application, and teaching, the result of which would value formal and informal teaching more highly in faculty evaluations. Inherent in this emphasis on teaching

is that the enterprise includes more than merely presenting to students. Rather, teaching involves learner discovery and engagement, which can be measured with a variety of meaningful metrics.

The discussions about university engagement and the evaluation of scholarship have particular relevance for Extension Specialists. Most would agree that Extension faculty and their programs are at the heart of university engagement. The question becomes how to define and evaluate scholarship in the extension programs of the State Specialist. Oregon State University faculty, for example, decided that "scholarship creates something new that is validated and communicated," with the idea that discovery, application, integration, and creative artistry were fundamental forms of scholarship (McGrath, 2006; Weiser, 1997). This fact sheet describes the major components of a scholarly program of a successful Extension at the University of Florida.

Extension specialists have great latitude in how they define their job responsibilities and the intended audience. Scholarship is one element of the expectations for Extension specialists, which include teaching, innovation, external funding, program development, and documented program outcomes. Many specialists have developed educational products and materials for county agents to use as they train youth, lawn-care providers, farmers and ranchers, senior citizens, boaters, hunters, and others to work or recreate more safely; develop life skills; eat more

nutritiously; or take better care of financial or natural resources. Others have developed systems for training and evaluation that are used in leadership development and wildfire risk assessment. Still others coordinate programs that work directly with developers, ecotourism operators, and state leaders. At the core of a state specialist's job is *program development and implementation.* A program is an overarching educational strategy designed to achieve one or more objectives, such as an increase in knowledge or skills; or more significantly a change in behavior or practice that results in economic, social, or environmental impact. It usually includes a number of different events or activities, such as publications, materials, exhibits, campaigns, work-shops, trainings, assessment, and evaluation. Regardless of the amount of assigned time a specialist has to allocate to extension and regardless of the discipline, specialty, or commodity, specialists develop educational programs. Extension assignments represent a need in Florida. Having an extension assignment means that it is the specialist's responsibility to provide information in his or her area of expertise.

A specialist's area of expertise is most effectively conveyed through the effective development and implementation of a program. People with small assignments may wish to create small, specialized programs or link their efforts with others. Regardless of the assignment, however, each specialist must have at least one program. Scholarship in extension is a product of excellence in program development, implemen-tation, and evaluation, coupled with the communication of lessons learned to peers and the advancement of knowledge related to extension programming.

Scholarship in extension closely parallels scholarship in research. Indicators of scholarship can vary from the degree of creativity and innovation to the quality and number of peer-reviewed publications and awards. Indicators of peer recognition, such as state and national requests for partici-pation in projects and conferences, can also be a part of scholarship in extension. While communicating the success of an extension program is ideal, a possibility also is to take a scholarly approach to reporting on extension programs that were not as successful as intended. Using the results of an evaluation to reflect on challenges or unintended consequences and offering new strategies for future exten-sion program implementation also constitute scholarship.

The majority of our extension programs are designed to accomplish a desired outcome that meets a need or solves a problem for a target audience. Therefore, scholarship in an Extension program is a function of the effort that goes into

the components of program development listed in Figure 1 (see below).

Assessing the problem
- Defining the situation and educational need(s)
- Reviewing the literature
- Identifying available resources, team players, and partners
- Deciding on measurable educational goals and metrics for measuring success

Analyzing the audience
- Identifying the target audience (county agents, clientele groups, general public, etc)
- Determining how this audience learns
- Identifying potentially successful teaching methods and materials
- Identifying audience misconceptions, perceptions, and opinions

Reaching the audience
- Developing partnerships
- Developing the role of intermediate audiences
- Assessing intermediate audiences' needs and opportunities

Delivering the program
- Developing educational objectives
- Developing effective teaching strategies that are likely to reach the target audience
- Carrying out innovative approaches to teaching both peers (especially agents) and clientele
- Team teaching with county agents, state specialists, and partners
- Developing educational products such as EDIS documents, curricula, or reproducible programs
- Carrying out educational activities, such as demonstrations, workshops, radio shows, field days, etc.

Evaluating the program
- Implementing the measurement tools
- Seeking validation of program by peers
- Enhancing the field of extension education by communicating lessons learned, successful programs in context, and documented outcomes and impacts.
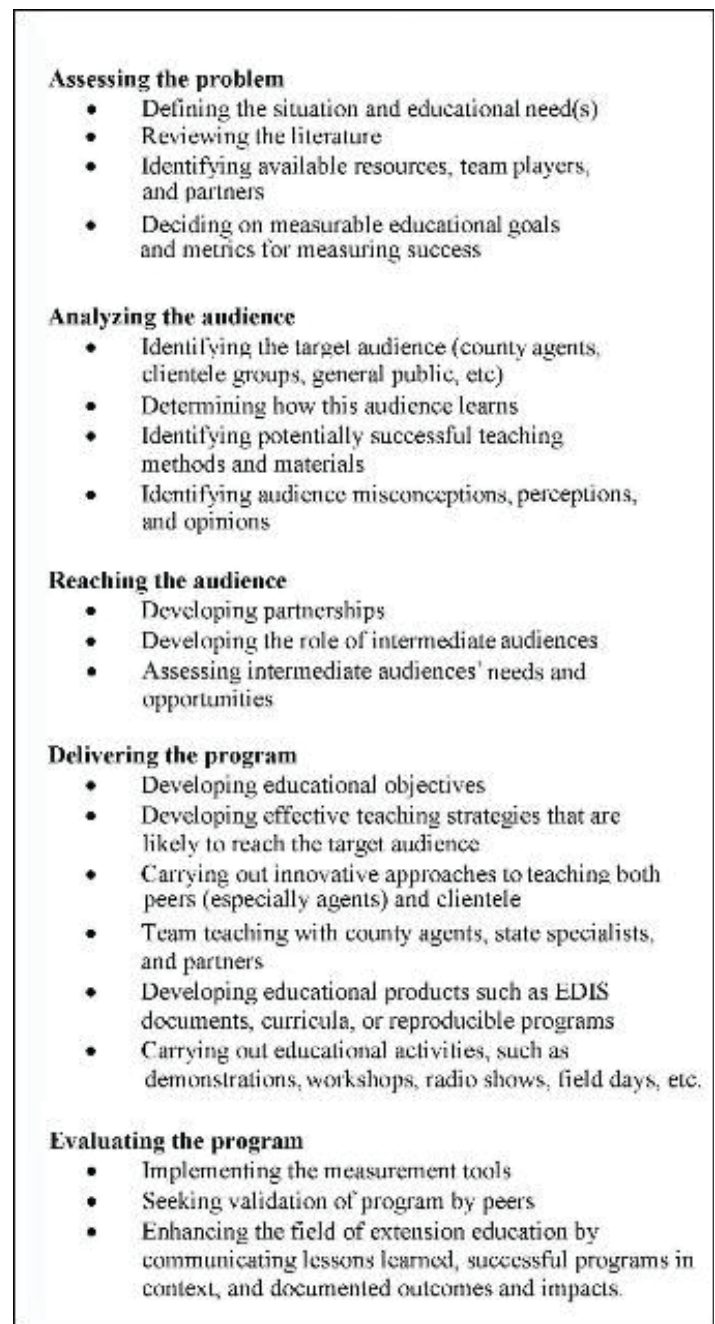
Figure 1. Components of an Extension Program

The following basic description of the components of an extension program highlights how scholarship can be achieved in extension by Extension specialists. Each step includes several questions to help focus on scholarship in the context of program development.

Step 1: Assessing the Problem

In this step experts and stakeholders at the local and state levels describe the problem or current situation or lack of information and generate possible strategies whereby

education can be used to solve this problem and move to a more desirable situation. A review of the literature is carried out to ascertain what experiences others have had relative to the educational problem. There may be a number of strategies and a number of audiences that could be targeted for change. Consider what resources extension has and what our niche is. Consider what other agencies and organizations we could partner with to design, deliver, and evaluate the program. Identify which Goal(s) and Focus Area(s) are involved and develop a team of specialists and agents to continue the development of this unique program. Consider federal strategic plans that may be relevant (e.g., Renewable Resources Extension Act Strategic Plan for Goal 2). Check with your focus area, goal, unit/center, and program leaders to assure that all of the appropriate individuals are on the team and that efforts are not being duplicated. Decide upon a measurable goal for the program that reflects the needed change and what outcomes are expected.

A scholarly approach to program development will carefully document the assessment process to justify the development of this program and measure its success. This documentation will be useful in grant and report writing, and could be the basis for communicating the scholarship to a wider audience in the profession. Several questions that might help address scholarship in assessing a problem are:

- How do you know this problem or situation really is a problem?
- What activity have you conducted to determine the extent of the problem?

Step 2: Analyzing the Audience

Given all the possible directions the program might take, identify an audience (let's call them the A audience) to target. For some specialists, their audience is always the county agents and their activities prepare agents to design interventions or provide current advice. If, however, you are involved in the development of publications for citizens, farmers, or youth leaders, these people are your A audiences--the people who can change a behavior that will help resolve the problem explored in Step 1. There will likely be several good options for an A audience; pick an audience that is a priority, one that you have the ability to reach, or one that can magnify your efforts. Reaching teachers, not children, for example, is helpful in changing a community norm over time. Reaching developers, not homeowners, is helpful in redesigning communities.

In Step 2, the team understands how this audience views the problem, what misconceptions they might have, what concerns and values they hold, what barriers they perceive, and what they need to understand in order to adopt the new behavior. In addition, it is valuable to explore how this audience obtains information, whom they trust, and what media systems and teaching approaches will effectively reach them. As you begin to formulate program ideas and communication strategies, make sure there is a good match between your product and the A audience. Few citizen organizers, ranchers, and forest landowners read scientific journal publications, for example.

Because county agents typically have more contact with these A audiences than specialists, effective extension programs ideally are a team effort between specialists and agents. When new programs are launched, however, even agents may not have the experience or time to collect data on audience perceptions. Grant funding can support this aspect of program development. Develop realistic objectives and goals for your program that your audience will be able to meet and you can measure. Scholarship in Step 2 includes using the literature to build assumptions about this audience, using existing knowledge to develop an innovative teaching approach, and using your audience assessment to contribute to the relevant literature. Teaming with a social scientist may be useful in assessing public knowledge, perceptions, and opinions. Questions of scholarship in the step of audience analysis are:

- What does your audience know and believe about this problem and your proposed solution, and how do you know this?
- Should you subdivide your audience into several target groups, and if so, what distinguishes them and creates the need for separate audiences?
- What are novel strategies to reach this audience, and why do you think they will be successful?
- How will you know if your program is successful?

Step 3: Reaching the Audience

You will probably need to work with an intermediary audience (B) in order to reach your ultimate audience (A) effectively. These intermediaries could be county foresters, community leaders, officers of associations, or landscape architects, for example, but should definitely include county extension agents. Extension agents play a key role in expanding (multiplying) the efforts of specialists and the Land Grant University. They are the backbone of the

extension system, but programs must be designed to access and utilize them effectively.

To reach farmers, landowners, students, or homeowners (your A audience), your program may need to provide packages of information and training to your B audience. In this step you need to understand more about how the Bs work and what they need, what they are most comfortable providing, and how they want the package delivered. What will make them more effective at reaching the As? How will you be able to measure their success? Because county agents are partners in specialist's work, these questions are easier to answer for agents than for other B audiences (such as those in state agencies and organizations). A scholarly specialist will establish a partnership with organizations or agencies that serve these B audiences (particularly county agents), add them to the project team, and work with them to assess their needs. In some cases, of course, it may be most appropriate for the specialist to avoid any B audience and work directly with the A audiences. This may be true for programs that target elected leaders or professional audiences.

At this point you should have a reviewable plan for your program. It may be written in a proposal format to obtain funding from industry or an agency. It should be reviewed by the relevant Goal and Focus Teams, program leader, and unit leaders for additional insights and suggestions. You can use this plan to write funding proposals. The scholarship angle could be:

- What does your B audience know about this problem and what will motivate them to carry your message to the A audience?
- Are there different B audiences that require different educational tools or training materials? Can you compare the effectiveness of different approaches?

Step 4: Delivering the Program

Do we know enough to provide the information needed to change the behavior to solve the problem? We might need more research. If we have the basic knowledge, we can design a program and develop some extension products. In addition to EDIS fact sheets, you may develop websites, reproducible educational programs, trade journal articles, videos, slide presentations, workshops, meetings, children's stories, training sessions, quizzes, demonstrations, interpretive signs, 4-H project books, brochures, podcasts, door hangers, billboards, and radio shows. Each of these products should be pilot tested before final production to assure

your message is understandable by the A audience and that your B audience will use and distribute the product.

How do you choose the products for your program? The scholar will look to the literature and the audience assessment, plus his or her team and resources to make a choice. The scholar will use the pilot-testing process to compare alternate products, refining and testing both the content and the process to best meet the audience's needs. Extension scholars use the peer evaluation process to review their extension products. Also consider new teaching and communication strategies that may improve the effectiveness of traditional products.

When your draft products are appropriate, move into production and dissemination. Use the Extension In-Service Training Program to deliver information to agents; use other state conferences and websites as needed. Scholarship in extension programming requires that in addition to the program products, the specialist write journal articles on some aspect of the program development/execution process (e.g., audience assessment, pilot test results, educational products developed, program success, lessons learned) that will be reviewed by peers prior to publication. While program implementation is the job of every specialist, it can be lead to scholarly publications with questions such as these:

- What is the key research that can be shared with the A and B audiences? Why do you think this will help solve the problem?
- What are the results of your pilot test? What did you change to improve the product or the delivery system?
- Which questions were most informative when you conducted your pilot test? What is the best strategy for testing these types of products for this type of audience?

Step 5: Evaluating the Program

Although program evaluation includes the audience analysis and the pilot test of the products, we also need some indication that the implemented program worked (i.e., we are interested in the short and long-term outcomes (such as change in knowledge, attitude, and skill level)). Over time, you should aim to document program impacts as well: social, economic, or environmental change. Metrics for measuring this success should be built into your program so you can track how many coupons in your newsletter were returned to the garden shop, how many teachers used your curriculum, how many farmers or ranchers adopted a new practice, or how your program resulted in client retention. Consider strategies to measure effectiveness of

the B audience in distributing information and the change in awareness and knowledge in the A audience.

Ultimately, if you can measure changes in behavior of the A audience and changes in the problem itself, you have a **very** good program! If measuring behavior change is not likely, use your team to help identify indicators of program success—the precursors of change. The adoption of forestry BMPs, for example, is an indicator of future improvement in environmental quality, thanks to the research that helped design the BMPs. Often success is not measured in over-night change, but rather in small advances toward a target. Measuring the success of your program each year will allow you to see the advances being made over time.

Scholarship is involved when we employ innovative approaches to measure the success of our educational efforts. Awards (local, state, and federal) are another avenue that allows peers to validate our extension programs. In addition to assisting with tenure and promotion decisions, successes that are publicly shared help to make future projects more successful, from obtaining funds and building a team, to training volunteers and soliciting helpful partners. The long-term nature of program evaluation suggests that your commitment to this program will last several years. If outside funding is needed to support the product development and distribution, make sure that it will cover evaluation as well. Scholarship is more typically connected to program evaluation in questions such as:

- How was success defined, how was success measured, what enabled you to achieve success, and what were the key factors in your success?

- If the program was not as successful as intended, what accounts for the lack of success and what should be done differently in the future?

- How effective were the B audiences and what made them effective? If you had more than one, how did they compare, and how did their differences complement each other?

- What behavior changes have A audiences adopted and what long-term impacts might this new change make?

- What awards might be given to this program?

- What additional research or extension activities are needed to build on your success?

- What can other specialists at the regional or national levels learn from you about conducting extension programs or working with this audience?

Summary

Extension specialist's work is evaluated every year against job expectations. Scholarship is the outcome of superior performance in the development and implementation of educational programs with the careful attention to collecting meaningful data, making appropriate decisions, evaluating impacts, and communicating both the process and the success to others. While many of those "others" will be peers, some are reviewers of T&P packets and accomplishment reports. The ability to communicate our work must include developing a language to talk about program outcomes and impacts that sounds scholarly–that we have good reasons for making program decisions, that we have collected data and made solid choices, and that we have evidence of success.

Scholarship in extension requires content-specific knowledge as well as skills in teaching methods, social science, and evaluation. It is quite common for teams of Extension specialists and agents to work together in program development. Goal and Focus Teams should facilitate the process of identifying individuals for these program development teams, and specialists should work closely with Goal and Focus Team's priorities.

There are many avenues to scholarship in extension. Your path should be designed with a strategic appreciation for other demands on your time, including teaching and research responsibilities, location, and professional skills. The process of program development is characterized by a careful process of testing ideas, reflecting on results, and changing select aspects of a program, activity, or material. A scholarly approach to extension programming is applied research that bridges a university to the citizenry.

Acknowledgments

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