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Flexible Training Program Builds Capacity for Diverse Challenges

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Abstract: *Flexible training programs help participants build skills to solve problems in a variety of contexts. Programs that enable trainers to adapt materials create an additional type of useful flexibility. This case study explores how a program was designed to help natural resource managers address challenges and conflicts across the southeastern United States. Changing Roles: Wildland-Urban Interface Professional Development Program gives trainers maximum flexibility in creating a locally relevant program and also engages participants in addressing important challenges. The evaluation suggests this design was successful and is helping participants overcome the helplessness that comes with not knowing how to solve problems.*

Extension educators often develop adult training programs that convey information and build skills so that participants master specific tasks. The more carefully that task is detailed, the better the training program can prepare learners, and an evaluation will clearly show changes in skill level. Within the Cooperative Extension

Service, for example, training programs enable participants to perform a specific service, such as answering questions on gardening (Master Gardener Training) or leading nature walks (Master Naturalist Training). In Minnesota, golf course personnel are trained to reduce their use of phosphorus fertilizers (Horgan, Bierman, & Rosen, 2003), and veteran volunteers are trained to train new volunteers in Oregon (VanDerZanden, 2001). When the objectives and goals are specified, a training program can be developed to build mastery and competence.

There are cases, however, when specific task objectives are not possible, yet a training program still needs to develop skills—perhaps to identify and solve problems or perhaps to address a local issue that the program designer is not familiar with. More commonly termed "professional development" than "training," these programs often engage adults in sharing their experiences and gaining insights (McCullough, 1987). And here is the challenge: nebulous objectives can lead to meaningless exercises, frustrated participants, and worthless evaluations, yet when the objective is best defined by the audience or when the challenges are extremely diverse, specificity in the training program is difficult to build into the materials.

When presented with this challenge for a 13-state region, we chose to create materials that solved this problem in two different ways:

1. Enable trainers to meet local needs by adapting the materials and selecting the pieces that were most useful. In essence, we empowered trainers to be as specific as possible with the staff training program by creating a variety of tools.
2. Provide imagery and opportunities to help participants gain skills to recognize and resolve new challenges. Interactive exercises and success stories were included in the materials to help participants see connections, redefine their concerns, and create new possibilities that could meet local needs.

We hope this case study enables others to apply these strategies to similarly uncertain or challenging situations.

The Context

Across the United States, development pressures are challenging natural resource managers and educators working in rural areas (Webster, 1988). Harvesting timber next to retirement communities, using prescribed fire in regions crisscrossed with highways, and hunting wildlife are a few examples of traditional activities that are

more difficult where suburbs have infiltrated rural lands. In the South, population increase and larger home size have combined to fragment forests into subdivisions and new towns, dramatically changing southern forests (Duryea & Vince, 2005; Wear & Greis, 2002). Differences between residents are leading to conflicts (Arcury & Christianson, 1993; Hull, Roberston, & Buhyoff, 2004; Shands, 1988) and creating challenges for resource managers who may not understand their various perspectives (Abdalla & Kelsey, 1996; Bliss, Nepal, Brooks, & Larsen, 1997; Lee, 1991).

Significant wildfires in 1998 and 1999 prompted the U.S. Forest Service to conduct a broad assessment of the problems, needs, and opportunities (Macie & Hermansen, 2002) in the wildland-urban interface (WUI)—the area of changing land-use practices and ecosystem services. As a part of the needs assessment process, 12 focus groups were held in six southern states in 2000. The summary of that effort suggested that participants (n=173) were frustrated by the need to provide ecosystem services and forest products to a growing population from a fragmented and shrinking forest (Monroe, Bowers, & Hermansen, 2003).

People in every focus group explained that their work was complicated by a lack of vision and leadership in regional planning and the inability of the residents to grasp the complexity of the issues associated with rural land development. When asked to think about what could improve the situation, participants articulated three broad areas: managing fragmented forest lands, incorporating natural resource protection into development guidelines, and improving communication with the public (Monroe et al., 2003).

The lack of tools and resources were articulated by some participants as a dire sense of helplessness.

The means to influence private land stewardship is out of balance. It comes down to three things: education, incentives, and regulation. We are void of regulation. We don't have enough incentives. And we aren't doing a good job of education" (Monroe et al., 2003, p. 20).

Realizing that these issues and problems were likely to affect every state in the region, the Southern Group of State Foresters worked with the U.S. Forest Service to fund the development of a training program that could be used in state agencies and Extension programs across the region to help staff obtain the skills to work more effectively in the WUI. Recognizing that interface issues vary across the region and that agency priorities and staffing structures also vary, the agency leaders asked for

curriculum materials that could be implemented differently in each state. The goal was to develop a template or cookbook of options, not a recipe, for improving resource professionals' skills across the region. Flexibility was essential.

A Framework

The needs assessment pointed to a key dimension that the training program should address. The sense of helplessness is a likely response to believing that there is nothing resource managers can do to stem the tide of development. This sense of despair and frustration can be reversed if, a) participants recognize how others overcome this problem and b) they believe they share these skills (Abramson, Seligman, & Teasdale, 1978).

The Reasonable Person Model (Kaplan & Kaplan, 2009) suggests that an environment or learning platform that empowers people to solve problems should also enable participants to build a common understanding of both the problem and the ways they can make a difference. To build these elements into our training program, we designed the program to include these three important components:

1. Exercises such as role plays and guided discussions that allow participants to exchange ideas and learn from each other,
2. Case studies and success stories of how other communities have addressed similar problems, and
3. Skill-building exercises such as scenarios and planning strategies to enable people to share their experiences and apply new skills to novel situations.

Adding literature about effective adult education, successful communication, and meaningful training to the above components, the program established the following set of goals.

- Trainers will have accurate and current background information supported by documentation.
- Materials will provide many examples from which trainers can choose the most useful to make the resource useful across the region.
- Accurate and current background information will be available to participants, too, in distinct topic areas so trainers can select the most relevant materials and bypass the rest.

- The materials will include a variety of presentation techniques: slide presentations, readings, interactive exercises, discussion questions, worksheets, case studies, field trip and guest speaker ideas, and background readings.
- The trainers will be encouraged to develop a supportive atmosphere that encourages discussion and interaction by providing ideas for icebreakers and guidelines for group discussions. Challenges are be easier to address when the atmosphere respects participants' experiences (Knowles, 1987).
- Case studies, examples, and success stories will help participants distill these challenges into discreet and solvable problems (Kaplan & Kaplan, 2009; Monroe & Kaplan, 1988).
- Exercises that enable participants to build skills will include introductory and summary statements that will help trainers point out the purpose and usefulness of the activity.

The Program

Faculty and students at the four universities and staff with the U.S. Forest Service authored program materials for Changing Roles: Wildland-Urban Interface Professional Development Program. Four themes were articulated from the needs assessment and approved by a regional team of advisors:

1. Introduction to the wildland-urban interface,
2. Managing fragmented forests,
3. Understanding and influencing land-use policies and plans, and
4. Communication skills to work with interface residents and community leaders.

Each of these four training modules includes a trainer's guide that provides background information and a wealth of reference citations; slide presentations (total of 17) that can be modified with local images and examples; fact sheets (total of 28) that supply background information for trainers and participants, or even for residents; case studies (total of 23) that provide snapshots of how communities are solving challenges in the interface across the region; and interactive exercises (total

of 39) that enable participants to explore, share, and apply what they learn during the workshop. Discussion questions are provided for the exercises and case studies to help trainers engage participants in recognizing and discussing key concepts and building skills.

To help trainers understand that the materials are not designed to be a curriculum, but require their input to develop an appropriate agenda, the materials do not provide an outline of the order to present concepts or exercises. Instead, the materials include guidelines for creating agendas and several samples that vary from 2 hours to 2 weeks. Similarly, trainers need to be able to adapt and change presentations, exercises, and worksheets to localize these resources. As a result, these are provided in MS Word® files rather than camera-ready pdfs. And finally, clear directions and icons are used to help trainers navigate through the complexity of this large program and identify complementary resources that could be used to cover basic concepts.

One significant challenge to flexible programs is evaluation. A standardized pre-post test is not possible when trainers determine the information to cover. The program includes a master list of quiz questions to help trainers make their own test of knowledge, plus some basic evaluation questions common to most training programs.

An accompanying program website provides access to the program materials <http://www.interfacesouth.org/products/training/changing_roles.html> by clicking "Changing Roles Notebook." The Trainer's Corner encourages users to share ideas, learn from others' experiences, and maximize the value obtained from using the materials—another element that reinforces the flexible nature of the materials and begins to build a network of trainers across the region. Some pages require a simple registration. In 2009, a series of webinars were produced to orient trainers and other users to the modules. These, too, are available on the website.

Materials Evaluation and Distribution

Prior to publication, 20 experts reviewed each module for accuracy and applicability across the region. Pilot testing workshops with the materials in Texas and South Carolina (n=33) helped improve the directions, organization, and the flow of the program. Most helpful was an opportunity for program developers to observe trainers leading sessions with the materials. Both workshops increased the value and usefulness of the material.

In February 2006, a training-of-trainers (TOT) workshop introduced Changing Roles to 55 participants from state forest agencies and Extension programs. They were encouraged to begin the process of designing their own training workshops for their colleagues. The workshop evaluation results suggested that the program would be useful and uniquely fills a gap. Workshop participants commented on the usefulness of the exercises, fact sheets, and case studies. Most recognized that it would take time to become comfortable with the material, but acknowledged that some sections could be used immediately. Respondents (n=36) described the program as relevant and dissimilar to existing materials. They rated the materials 4.6 on a 5-point scale where 5 was "very relevant to the work of my agency or organization." They rated the materials 2.6 on a 5-point scale where 5 was "very similar to resources I already have." Participants also said they are likely to use the materials with others, share them with other trainers, and help train their staff. They rated these latter three questions 4.2, 4.3, and 4.2 respectively on a 5-point scale where 5 was "very likely."

TOT participants confirmed that state agencies have different needs and capacities for using this material. Staff from some state agencies expressed interest in a follow-up regional workshop facilitated by local trainers. Others planned to team up with Extension faculty to organize training programs in their states.

Program Evaluation

Changing Roles has been evaluated with a number of strategies. In terms of outputs, within 2 years of the first TOT, 460 copies of the materials were distributed to southern state forestry agencies, state Extension specialists, and other organizations and individuals upon request.

A more important measure is the extent to which the materials are being used and adapted for local situations. Follow-up surveys were attempted with all TOT participants. Written responses from 24 participants 5 months after the training suggested that all but one person planned to use the materials at a later date; 17% of the respondents had already incorporated the materials in a workshop or presentation, such as workshops for state forestry staff and a natural resource leadership institute conducted by Extension specialists. An email survey and phone interviews 1 year after the TOT collected responses from all 13 southern states and revealed that the materials are being used as anticipated but also in ways never imagined, in keeping with the original intent for maximum flexibility. Several of those novel efforts are described here.

- In Arkansas, forestry students created a workshop for interface residents after their introduction to WUI issues and communication skills during their summer camp.
- In Florida, resources from Changing Roles formed the basis for a session on the wildland-urban interface for the Natural Resources Leadership Program.
- In North Carolina, locally specific fact sheets were written to accompany the regional materials.
- The Texas Forest Service trained 80 of their own staff, who then created programs for interface residents near Houston, reaching over 2,000 homeowners and community leaders with information on wildfire, butterfly gardens, and harvesting in fragmented forests. Work with the Texas Park and Wildlife Department enabled them to showcase their efforts at a regional training workshop in April 2009 and also reach current and future resource professionals at Stephen F. Austin State University (Stephens Williams, Kulhavy, Stafford, Jones, & Oswald, 2010).

Resource manager feedback is difficult to obtain when program train trainers, but trainer feedback provides an indicator of this outcome. Several trainers reported that their participants' comments suggested managers are no longer hopeless about the future of their landscape. They have new insights about possible solutions (such as conservation zoning) and have gained skills to believe these practices can occur in their community. One Texas participant wrote, "Change holds opportunities for improvement," a distinctly hopeful attitude. A Florida trainer reported that the materials enabled participants "to move beyond blaming developers and newcomers for causing interface issues and to focus on how land-use policy could protect natural resources." It was the introduction to a different profession that helped some respondents realize solutions might exist. Another trainer wrote "The land use and policy module is extremely useful in our state. More of our staff should be exposed to this material."

Overcoming helplessness is an important first step to changing the way people tackle challenges. Imagery, skills, and opportunities to make a difference are key elements of creating reasonable strategies for solving problems (Kaplan & Kaplan, 2009). The evaluation results provide clear evidence that the materials in the Changing Roles program have been adapted to local situations and are providing this imagery and building these skills. Opportunities and support from host agencies and

organizations are critical complements to the materials to help resource professionals believe they have the freedom to use new strategies to solve problems (Darling-Hammond & McLaughlin, 1995).

The success of the program can also be measured by its recent expansion. In 2008, the Southern Group of State Foresters helped the U.S. Forest Service Centers for Urban and Interface Forestry create a new position for a Changing Roles Coordinator, who is supporting program implementation across the region. To increase awareness of the program, she improved several outreach materials including a list-serve, a quarterly e-bulletin, and the website. She conducts workshops and coordinates webinar sessions for professional organizations, state agencies, university students, and leadership fellows. A new module addressing emerging issues and additional webinars is being developed.

Summary

As interface challenges continue to vex those who manage the forested landscapes, a host of challenges are stretching their skills. While these talented and dedicated professionals know how to work with traditional landowners and manage timber, they may be less comfortable working with the novel problems that arise in the interface. Changing Roles provides the tools, information, imagery, and resources to help natural resource professionals redefine their jobs and develop new skills. When training workshops are led by state agencies that sanction a new approach to programs and strategies, these professionals are able to change their outlook, their activities, and the WUI landscape.

This case study can assist program developers who work in other areas of Extension as well. As the world tumbles into a new era of changing climate, burgeoning consumption patterns, economic challenges, and public health concerns, Extension educators may be called upon to create training programs for a variety of professionals who need to recognize problems, build skills, and create change. We cannot foresee every problem—and certainly not all the answers. Yet we can create a training environment that allows participants to share information, gain new perspectives, learn about successful examples, and discuss what might help their situations. One effective strategy for Extension is the development of flexible, adaptable training materials that help both trainers and their participants create locally relevant skill-building programs.

Regional planners, water treatment plant operators, architects, farmers, and teachers, for example, may be more interested in attending a professional

development program that builds their capacity for identifying problems and generating potential solutions than one that offers specific answers to problems they don't recognize. Our experience suggests that programs that offer trainers the ability to select content, adapt exercises, and organize an agenda to fit their needs will be useful. In addition, exercises and case studies that engage participants in sharing ideas, applying skills, and understanding how others have approached challenges will help overcome the sense of helplessness that can frustrate professionals. Needs assessments can help people articulate their challenges, incorporating advisors and authors outside the discipline may reveal new strategies for success, and pilot testing materials with local trainers can help program developers create materials that are useful, novel, flexible, and adaptable.

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