Characterizing "Good" Teaching in Non-formal Settings

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Abstract

Characteristics of good teaching in formal settings have been thoroughly debated, yet research documenting effective teaching in non-formal settings is lacking. The purpose of this phenomenological study was to describe what constitutes "good" teaching in non-formal settings. Six Extension specialists representing two land grant institutions were interviewed using a semi-structured approach. Results indicate that key differences exist between effective teaching in formal versus non-formal settings. From the interview data, five domains of "good" teaching in non-formal settings emerged: "Good" teaching is (1) grounded in relationships, (2) flexible and adaptive, (3) identifiable in audience non-verbals, (4) similar to theater, and (5) mastering the fundamentals. An understanding of these domains can enrich the overall teaching and learning experience in non-formal settings. Also, Extension literature suggests mastering successful non-formal teaching is critical in fostering agent career retention. Given the connection between successful non-formal teaching and agent retention, Extension agents in particular should receive professional development trainings addressing these five domains.

Introduction

New agent retention is a well-known challenge within the U.S. Cooperative Extension Service. Among the key reasons cited for agent career retention are personal satisfaction derived from educating clientele and a sense of enjoyment in the teaching and learning process (Ensle, 2005). Given the link between agent retention and teaching and learning, there is a need to better understand what constitutes "good teaching" in non-formal settings as research in this area is lacking. As in formal education, non-formal education is planned or structured; however, it occurs outside of a formal classroom setting. While it could be assumed the roles of an effective instructor in formal and non-formal settings are equivalent, given the lack of literature in the area of effective teaching in non-formal settings, this assumption cannot be verified.

Although literature characterizing good teaching in non-formal settings is currently lacking, the characteristics of what constitutes effective teaching in formal settings have been debated in the teaching and learning literature (Nilson, 2003). Rosenshine and Furst (1971) suggested five effective teaching principles which have been widely cited in the literature: clarity, variability, enthusiasm, student feedback, and a structured learning environment. They advocated effective teaching in the classroom involves clarity in explanations, illustrations and examples, the organization of subject matter, and the use of questioning strategies. Instructional materials and methods, assessment techniques, and the levels of tasks students are asked to perform must have good variability as well (Rosenshine and Furst, 1971). They and others (Bain, 2004; Bean, 1996; Cheek et al., 2000; Nilson, 2003) suggested instructor enthusiasm is also crucial. Enthusiasm can involve instructor movement, gesturing, posture, voice inflections, as well as various questioning styles and audience interaction techniques (Beebe and Beebe, 2006). As advocated by Bandura (1977), providing learners with feedback is another important characteristic of effective teaching practices. Nilson (2003) suggested three types of student feedback—written (a comment on a paper), verbal (a kind comment in class), and emotional (a smile or nod). Finally, a structured learning environment is one principle of effective classroom teaching that can be equally influenced by both the teacher and learner (Rosenshine and Furst, 1971). This can include employing teaching practices such as the use of learning objectives to measure student progress and grasp of topical material as well as creating a learning environment where student expectations are well known (Myers, 2004; Nilson, 2003).

Along with the aforementioned five principles of effective teaching, the use of participatory teaching approaches is suggested to increase the likelihood of teaching effectiveness (Bean, 1996; Nilson, 2003).

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Participatory approaches to instruction could include active learning techniques such as small group work, role plays, student debates, and educational skits (Cooper and Robinson, 2000; Fuhrman and Ladewig, 2008). Fuhrman et al. (2005) discovered that participatory approaches to learning, specifically the use of cooperative learning activities, helped improve student attitudes toward subject matter. Additional participatory approaches suggested to enhance teaching effectiveness include taking students on a field trip, participating in a lab exercise, or using a democratic approach to learning where students themselves develop the learning objectives they would like to achieve (Nilson, 2003).

Given the lack of literature characterizing good teaching in non-formal settings, it is unclear whether such characteristics would match those in a formal, classroom setting. Information characterizing good teaching in settings outside of the classroom could be especially valuable in Extension professional development trainings. Both Guskey (2000) and the Cooperative Extension Service Professional Development Task Force (1998) defined professional development as involving an array of individual and organizational efforts to help build Extension agents' capacities and skills. The Extension Committee on Organization and Policy (2002) emphasized given the increasing demand for proficient agents, Extension must incorporate professional development as a fundamental component in continually building Extension agent capacities. One means of building agent capacities would be to provide trainings on effective teaching techniques within non-formal settings. Therefore, the purpose of this study was to describe what constitutes "good" teaching in non-formal settings.

Methods

A phenomenological theoretical perspective was used in designing and conducting this study. According to Bogdan and Biklen (1998), "Phenomenologists believe that multiple ways of interpreting experiences are available to each of us through interacting with others, and that it is the meaning of our experiences that constitutes reality" (p. 23-24). Phenomenology was chosen for this study because it requires engagement in phenomena, such as "good teaching," and reflection on how sense is made of those phenomena through direct experiences (Crotty, 2003). Via adhering to phenomenology throughout the study, dependability was addressed by ensuring consistency between the research question, theoretical question, and research design (Golafshani, 2003).

Prior to collecting data for this study, the researchers constructed subjectivity statements documenting the potential for bias in the data collection process. In addition, bracketing was used to account for the researcher's previous experiences in formal and nonformal education and feelings con-

cerning appropriate teaching methods. As suggested by Ashworth (1999), bracketing is done to document the researcher's role in the data collection process. Journaling was also used to document the researchers' feelings immediately following the participant interviews. These three techniques were applied to address credibility.

Study participants were purposively chosen to meet the following criteria: Extension specialists with at least a 30% Extension appointment and previous receipt of at least one teaching award. As such, six Extension specialists representing two land grant universities were interviewed (one assistant professor, two associate professors, one full professor, and two Associate Deans/Directors of Extension). Two land grant universities were chosen (a) given the specific nature of the participant selection criteria, and (b) to achieve saturation and transferability of the results (Koro-Ljungberg, M., personal communication).The interview guide for this study followed a semi-structured interview approach. Thus, guided questions were prepared but the researcher was "open to following the leads of informants and probing into areas that arise during interview interactions" (Hatch, 2002, p. 94).

Each interview was conducted in the participant's office and lasted between 30 minutes and one hour. Hatch's (2002) recommendations for conducting successful qualitative interviews were followed during the interviewing process. This included establishing respect, paying attention, and encouraging participants. Qualitative responses to the interview questions were transcribed verbatim and themes were extracted from the data using inductive analysis (Coffey and Atkinson, 1996; Hatch, 2002). Inductive analysis involved (1) reading the data to identify broad frames of analysis, (2) creating domains based on relationships among the data—compared across participants, (3) identifying salient domains, (4) refining salient domains once the data has been reread, and (5) supporting each domain with "raw" data (Hatch, 2002, Spradley, 1980). Once the key domains were extracted from the interview data, they were shared with respondents to ensure credibility and confirmability, thus increasing trustworthiness of the data (Ely et al., 1991; Hatch, 2002). No changes were recommended by respondents following review of the interview findings.

Results and Discussion

Five key domains emerged from the interview data. According to Extension specialists, "good" non-formal teaching is (1) grounded in relationships, (2) flexible and adaptive, (3) identifiable in audience non-verbals, (4) similar to theater, and (5) mastering the fundamentals.

Domain #1: Grounded in Relationships

Individuals participating in Extension and other non-formal educational programs typically attend

voluntarily without accountability to a test or course grade. Often, non-formal educators have a single opportunity to establish rapport with these learners in hopes of encouraging their participation in future programs. The importance of establishing a positive, trusting relationship with learners was noted by the Extension specialists in this study. One participant mentioned, *"a connection, relationship-wise, is more important in the non-formal setting because learners don't get the repeated exposure that they get in the formal classroom."* All participants in this study stressed nonformal educators must minimize the distance between teacher and learner and capitalize on the commonalities shared between the two. The adult education literature supports this practice by advocating "a spirit of mutuality between teachers and students" (Knowles, 1980, p. 47; Merriam et al., 2007).

The importance of demonstrating a learner-centered connection was noted in this example shared by one of the study participants:

"I immediately think of a field day I participated in that was one of the best 30-minutes of non-formal teaching I had ever witnessed…The two speakers knew their audience well enough that they directed some questions at the audience to try and get them to participate. For example, they used somebody that had done what they were trying to convince people to do so they pulled that person into the discussion to verify that 'we're not just a bunch of university academics here, we've got John Doe here in the audience and he's done this.' They knew how to establish a connection and legitimize what they were saying by getting a person in the audience to participate."

As this example suggests, when non-formal educators take time to establish a relationship with learners by making them active participants, they help ensure the content being shared is relevant. Knowles et al. (1998) suggested adults learn best when information is presented in a real-life setting and what is to be learned by the adult is impacted by prior learning experiences. Using adult learners in a case study demonstration is one way to build an early relationship during non-formal educational programs.

Domain #2: Flexible and Adaptive

While Rosenshine and Furst (1971) recommend that a structured learning environment be created for effective formal instruction, extension specialists in this study noted the importance of an unstructured, flexible learning environment where educators capitalize on "teachable moments." One participant stated, *"In non-formal teaching, use whatever goes out of control to your advantage…a teachable moment kind of thing."* Another participant shared this example:

"A sign of good non-formal teaching is when you might have had a whole other lecture planned but because of where you are, because of the weather, *because of the other speakers who are coming, whatever host of other reasons, you had to completely change what you were going to do within five minutes of doing it and the learners never really know the difference."*

Several extension specialists noted how educators' reliance on technology as a crutch can work negatively in non-formal settings by creating an overly structured learning environment. One extension professional shared *"…with PowerPoint, we get into too much of a routine…and because of it, less adaptive and spontaneous teaching goes on now."* In this example, technology seems to prevent the non-formal educator from setting aside a planned agenda to make their teaching adaptive to learner needs.

The influence of educator adaptability in providing a positive learning experience for participants in the non-formal environment was highlighted in this extension specialists' example:

"I guess the biggest thing for me if looking at the difference in good teaching in either the formal or non-formal environment is your ability to adapt. And I think that in a formal setting you don't have to worry about that too much. You have expectations of what the learning environment is going to look like, but in a non-formal setting it's that ability to kind of roll with the punches…and maybe I have a microphone and maybe I don't, or maybe I'll have to yell real loud. Maybe I'll have a chance where I'm actually on level ground and everybody else is too or maybe we'll be standing on a hillside somewhere. It's just that ability to gauge how to use the environment you're in to best relay your message to the people who are supposedly learning."

Domain #3: Identifiable in Audience Non-verbals

Extension specialists also noted the importance of noticing and responding to audience non-verbals as a key characteristic of what constitutes "good" teaching in the non-formal setting. Participants emphasized the non-formal educator must notice such things as audience members' positions in their seats (body language) and facial expressions. "Smiling faces and nodding heads" were learner behaviors mentioned by several participants as being signs that "good" teaching was being exhibited. In an indoor, "sit-down" setting, the sight of learners leaning in together around a table was an observable characteristic that these Extension specialists encouraged non-formal educators to look for as evidence of "good" teaching. When observing an effective non-formal educator in action, one participant mentioned that audience members *"…were engaged, they were working, they were leaning in because they were working together—heads together!"*

According to all participants in this study, audience non-verbals are just as important in the outdoor, "stand-up" learning environment as they are in a sit-down setting. Specifically, the learners'

distance from the speaker was noted as observable evidence that "good" non-formal teaching was happening. One participant stated, *"…how close your audience is getting to you…if they are all up there pushing and shoving to hear what you have to say, your information must be of value to them."* In fact, several Extension specialists mentioned that even when an educator has information the audience perceives to be important, this is not justification for "sloppy" teaching methods. Participants again noted the voluntary nature of participation in the majority of programs offered in the nonformal setting and the importance of "top-notch teaching techniques."

Domain #4: Similar to Theater

Extension specialists in this study compared the "good" non-formal educator with a theatrical performer. As one participant explained, *"…like those who act, I have to put on my game face and I have to be in that way to convey my information…whether it's through humor, stories, or visuals."* Another participant associated the non-formal educator/performer with someone who can captivate an audience, sharing *"…if you're in a place where you can't control the environment like you can in a formal setting, you've got to be a performer of some sort and you've really got to do well at keeping your participants engaged."*

The zoo education literature uses the term "edu-tainment" to describe the practice of entertaining while educating in the non-formal environment (Fuhrman, 2007). Several of the study participants emphasized the importance of entertaining participants of non-formal educational programs as a way to focus their attention and add enjoyment to the learning process. For example, the use of humor as an effective pedagogical device has been examined from both an instructor and learner perspective (Torok et al., 2004). King (1999) suggested humor can increase learner attention spans, improve classroom morale, and make learning and teaching a more enjoyable experience. Funny comments and stories, jokes, cartoons, and sarcasm are often reported by college educators as helpful ways to grab student attention and generate interest in course content (Sadowski and Gulgoz, 1994; Weaver and Cotrell, 1987). King (1999) also suggested using jokes and stories as a way to improve morale and make participants look forward to learning. Given the voluntary nature of participation in many Extension programs, the use of "edu-tainment" may be one way for non-formal educators to increase the likelihood their audiences will enjoy the learning experience enough to participate in subsequent non-formal events.

Domain #5: Mastering the Fundamentals

Lastly, Extension specialists in this study associated "good" teaching in non-formal settings with effective formal (classroom) instruction when it came to basic communication and subject matter relevance. One participant used an analogy to illustrate his point, noting *"communication mechanics are the first step…it's like if I don't put in the right amount of eggs or too much flour. It doesn't matter what else we put in the recipe, we're not going to make a good cake."* Another participant shared the following communication fundamentals which apply in both the formal and non-formal setting:

"We have non-formal things that fail for reasons that you would consider laughable. They can't hear because there's no PA system, they can't see because the visuals are set up or the screen is set up where nobody can see. I mean things that you would say 'well crap, that's just fundamentals.' But it happens. It is still happening today so it's a problem."

The relevance of the subject matter shared by non-formal educators was also mentioned as being vital to effective instruction in the non-formal setting. One participant noted, *"…targeting your subject matter to the right educational level for that audience is so important. Using the appropriate visuals and whatever you can use that will help them to understand and not give them stuff that's over their heads."* The literature on pedagogy and andragogy recommends using similar best-practices (Nilson, 2003; Beebe and Beebe, 2006; Merriam et al., 2007).

Recommendations

Extension specialists in this study emphasized the importance of being flexible and accommodating as a key component characterizing "good" teaching in non-formal settings. Specifically, setting aside a lesson plan or agenda to celebrate "teachable moments" was emphasized by all participants. The following example from one Extension specialist conveys this message:

"I remember taking a bunch of preschoolers to a wetland pond. We got to the pond and I could see caddis flies down in the mud just barely moving. So I told all the kids to lie down on the boardwalk and hang their heads over the edge and look into the water and nobody can say anything for at least a minute. So they had to focus and they were only inches from the water and the water was only a few inches deep so they were just right there. It was in their face. So they were looking and then all of a sudden they were squealing and screaming, 'It's moving, I can see, it's moving!' So, you know, it was a teachable moment. And the teacher for that day came back every year and said 'I remember when you had those kids lay on the ground on their bellies and look into the water' and she thought it was the greatest thing ever."

Based on the responses from these Extension specialists, the following recommendations were made for educators teaching in non-formal settings:

1. Use audience non-verbals and body language to inform how you adapt to learner needs.

2. Equally consider the emotional and informational needs of learners.

3. Use the non-formal setting to its full potential.

As one participant put it, "it's not a formal setting, so don't try to make it one."

4. Consider the reality of the educational situation. Is your message simple and clear? Are your anticipated outcomes realistic?

Although the results of this qualitative study cannot be generalized, they are transferable to a broader audience of educators working in non-formal settings, including Extension agents. If professional development trainings on non-formal teaching methods were offered to Extension professionals, this study provides insight into some key components such trainings should focus on. Many states offer Extension agent mentoring experiences for newly hired agents with limited teaching experience. Perhaps these mentoring programs could partner a less experienced non-formal educator with a more seasoned educator as student teaching opportunities in agricultural education often do. Given the importance of being flexible and accommodating, professional development opportunities which allow non-formal educators to discover their "teaching comfort zone" during actual teaching experiences would be most beneficial.

Summary

The results of this study indicate that "good" teaching in non-formal settings is grounded in relationships, flexible and adaptive, identifiable in audience non-verbals, similar to theater, and involves mastering the fundamentals. Given the link between Extension agent retention and experiencing success in teaching, agents should receive professional development trainings which address these five key characteristics. The responses of these Extension specialists suggested there is a difference between teaching in the formal and non-formal environment. With an audience of voluntary participants, failing to consider the importance of "good" teaching in the non-formal setting may significantly impact the success of non-formal educational programs.

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