A Qualitative Study of the Influence of Farm Leaders' Ideas on a Sustainable Agriculture Education Program

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Abstract

This paper considers issues related to farmers' control of program planning for non formal agricultural adult education. Discussion is based on an empirical study of a $10 million Canadian sustainable agriculture education program that was initiated, created, and controlled by a coalition of farm organizations, supplanting a traditional role of government. The program, titled Ontario Environmental Farm Plan program, was funded by Canada Agriculture Green Plan federal funds from 1992 to 1997 and included a significant contribution of technical support from Ontario Ministry of Agriculture, Food and Rural Affairs. Theories of participatory extension education, with linkages to the land-grant concept of 'engagement,' provide a theoretical framework for consideration of issues in the case. The concept of engagement guides the formation of partnerships among extension, communities, industry, and government. In the area of sustainable agriculture, however, stakeholders may conflict, presenting challenges to the engagement process. Moreover, agricultural education researchers have produced little data to show effects of stakeholder involvement in program planning, putting the extension system at risk of desiring engagement without a knowledge base about potential impacts. The study was conducted over a 3-year period using cultural anthropology and participatory action research. Political and social aspirations of farmer-planners influenced five program elements: (a) staffing, (b) content, (c) instruction, (d) evaluation, and (e) composition of planning group. The staffing dimension featured non professional grassroots educators employed by a non government organization. Content emphasized multiple subject areas, including farmstead, wood lot, and petroleum storage, appropriate for a wide range of types of farms. Instruction featured participatory and experiential education which emphasized farmers' involvement in environmental assessment and farm planning. Instruction was designed to be compatible with a program policy of confidentiality. In addition to conventional auditing and monitoring, evaluation processes included innovative Peer Review Committees, and collection of 'Barriers to Action' data intended to influence government policies and university research. The program planning group involved leadership of mainstream agriculture, government agricultural ministries (including extension), and hunting-oriented conservation groups. Less involved were leaders of organic and ecological farming associations, traditional supporters of sustainable agriculture education. Recommendations highlight the extent to which forms of non formal agricultural adult education favored by learners may be fruitfully understood as proposals for reconfiguring power relationship among farmers, organizations, and government.

Introduction

Participation interests extension educators because the right forms are anticipated to improve the learning experience individually and collectively. Participatory approaches to program planning are ground in theories of democratic education advanced by John Dewey (1938) and Paulo Freire (1970). The definition of participation used in this paper exceeds that of 'attendance,' and instead indicates important involvement and shared control (see Deshler, 1995 for a review of definitions). 'Engagement' is the term used within the extension system that links the concept of participation to land-grant college activities. Engagement is the organizing concept for a landmark report on the U.S. land grant system sponsored by the W.F. Kellogg Foundation (National Association of State Universities and Land-Grant Colleges {NASULGC}, 1999). The Kellogg Commission report urges universities and extension to manifest engagement by pursuing their activities with greater "respect for partners" and "joint academic-community definitions of problems, solutions, and definitions of success" (NASULGC, 1999, p.3). In practice, the concept of engagement guides the formation of partnerships among extension, communities, industry, and government. In the area of sustainable agriculture, however, stakeholders may conflict, presenting challenges to the engagement process. Moreover, agricultural education researchers have produced little data to show effects of stakeholder involvement in program planning, putting the extension system at risk of desiring engagement without a knowledge base about potential impacts. Discussion is based on an empirical study of a large-scale sustainable agriculture program, the Ontario Environmental Farm Plan program (hereafter, Farm Plan), for which farmers, rather than government, provided leadership.

Theoretical Framework

Agriculture continues to experience a crisis that includes, among rapid financial and structural changes, an awareness of farming's enormous influence on ecosystem health (Environmental Canada {EC}, 1991; National Research Council {NRC}, 1989). The effects on environment are complex; nonetheless, negative impacts of common agricultural practices are well documented, especially contamination of surface and ground water (NRC, 1989). In North America, programs that seek to change farmers' agricultural practices in the direction of environmental stewardship have produced lackluster results when compared to the severity of the problem (Lockeretz, 1990; NRC, 1989). Development specialists Robert Chambers (1997) and Niels Röling and Annamarie Wagemakers (1998) argue that to be effective, scientific-technical institutions must value and elicit authentic participation of farmers and rural people in programs for sustainable agricultural development. Environmental programs that are cooperatively defined by farmers and scientists mobilize local knowledge and are anticipated to change farmers' practices more effectively than technology transfer programs of the past (Röling and Wagemakers, 1998). Extension systems in North America are part of the web of institutions and organizations that seek to affect farmers' behaviors in areas related to the environment as well as to production and financial planning. Interaction and local control figure prominently in the system, making the extension system a North American experiment in democratic education (Blackburn, 1994). Decisions made during extension program development affect learning profoundly, and it is to this phase of adult and extension education that the paper is directed.

Program planning is where agendas are set and resources allocated (Cervero and Wilson, 1994; Heron, 1989). Commonly, program planners' interests compete with learners' needs, resulting in educational designs that muffle learners' influence (Cervero and Wilson, 1994; Freire, 1970; Welton, 1995). Cervero and Wilson urge adult educators to attend to power dimensions in planning, including participation, as ethical practice. Röling and Wagemakers (1998) emphasize participatory learning and adaptive management as a means for refreshing farmer education, particularly "in times of environmental uncertainty" (p. 5).

Sustainable agriculture associations in the U.S. and Canada have supported local associations for farmer learning, but its advocates suggest that the impact on policy and land-grant college activity has been limited (Hassanein and Kloppenburg, 1995; see also examples in Bird, Bultena and Gardner, 1995). Landcare in Australia and New Zealand are celebrated examples of ambitious farmer-directed grassroots organizations dedicated to environmental improvement in agriculture across commodities and associations (Lockie, 1995). In Landcare, farmers determine the nature and scope of programs, utilizing facilitators and coordinators to "foment synergy" rather than transmit content matter (Campbell, 1998). However, most sustainable agriculture programs that have successfully implemented government-stakeholder partnerships in industrialized countries are limited in scale or serve targeted sub-groups in agriculture. For example, programs in the United States, Netherlands, Switzerland and Germany are connected to certification programs for organic and sustainable farming practices or grass-based dairy and beef production (Bird, Bultena and Gardner, 1995; Hassanein and Kloppenburg, 1995; Röling and Wagemakers, 1998). Sociologist Gil Gillespie (1995) argues forcefully that community-level effects of programs with distinct goals for sustainable agricultural development would impact quite differently. In short, there is little empirical data to draw upon that would assist people to predict impacts of competing ideas of different stakeholders on real sustainable agriculture education programs (Chambers, 1997; Uphoff, 1988).

Purposes

This paper is based on a larger study that sought to understand how farm organizations brokered interests of their farmer-members with respect to design of a sustainable agriculture program. This "how" objective of the research required detailed descriptions of behavior and intentions of people at the site over time. A qualitative, single case study approach was therefore applied to obtain the data. The researcher intended to illuminate the practice of engagement of institutions and stakeholders in an applied setting for agricultural and extension education. This paper focuses narrowly on effects of farm leaders' ideas on program design. Other papers focus on coalition-building that preceded the Farm Plan program (Grudens-Schuck, in press), training of grassroots and extension educators in participatory instruction (Grudens-Schuck, 2000), and on facilitators' use of local knowledge in workshops (Grudens-Schuck and Hill, 1997).

Methods

The research focused on a single, large-scale sustainable agriculture program called Ontario Environmental Farm Plan program (Farm Plan) funded through Canada's Agriculture Green Plan program from 1992 to 1997 at $10 million (InfoResults, 1993; Ontario Farm

Environmental Coalition {OFEC}, 1991/1995) (see Table 1). Apropos of learner control, the program was proposed, designed and managed by a coalition of farm organizations, called Ontario Farm Environmental Coalition (hereafter, the Coalition) (OFEC, 1991/1995). Learner involvement in Farm Plan was uncommonly vigorous for environmental farm planning programs at the time (Ervin and Smith, 1996; Grudens-Schuck, in press). The Coalition subsequently involved government ministries in curriculum development, technical support, and teaching. Nonetheless, farm leaders retained control of funding and administration of Farm Plan. The Farm Plan program expected farmers to analyze environmental risks on their farms, write an action plan, and implement environmental projects with assistance of a $1,500 CDN grant. At the close of the study in April 1998, over 12,000 farmers had participated in the Farm Plan program, making this program one of the largest environmental farm planning programs in North America (Ervin and Smith, 1996; Higgins, 1998).

Procedures

The author directed the intensive case study of the Ontario Environmental Farm Plan program from 1995 to 1998, with one-year resident fieldwork in Guelph, Ontario, in 1996-97. The study used cultural anthropology combined with participatory action research to produce an ethnography. Ethnography is a cultural account which pays close attention to language, behavior, settings, and the connections among them (Geertz, 1973). Ethnography was developed within the discipline of anthropology, and is considered an advanced, distinct approach to research in the qualitative tradition (Erickson, 1990; Lincoln and Denzin, 1994). Ethnography emphasizes immersion at the site and long association (e.g., months or years) with people important to the research using informal and formal information gathering techniques lumped under the general term, 'participant observation.' Ethnography also requires that at least part of the results be presented in narrative form, including verbatim quotations, so that readers may experience the data more directly than is possible through presentation of statistical results (Erickson, 1990; Geertz, 1973; Lincoln and Denzin, 1994). Ethnographic research methods featured 36, two-hour interviews; direct observation of 13 Farm Plan workshop sessions with total attendance of 195 farmers; and 53 distinct events involving 256 hours of participant observation of farms, organizational meetings, farm shows, and field days. Methods also included document review of current and pilot editions of the Farm Plan workbook and other internal documents. A five member planning group composed of insiders and the author negotiated selection decisions, gathered data at critical reflection sessions, and collaboratively planned and presented reports consistent with the participatory action research approach to the study (Greenwood and Levin, 1998). Insiders included a workshop facilitator, two farm organization staff, and a ministry extension educator, all responsible for ongoing Farm Plan activity. Analysis consisted of nested sets of coding schemes subject to member checks (people at the site assisting determination of veracity of claims) and peer debriefing (a technique analogous with internal validity check which reviews logic and consistency of coding schemes). The result is a set of themes that explain the ways in which local people analyzed their situation. This type of data is important for educators who desire to understand how and why local people act in the setting. Such knowledge can be used to design successful extension education programs for particular learners or may explain why past efforts were rejected (Erickson, 1990; Cervero and Wilson, 1994).

Table 1

Essential Facts about Ontario Environmental Farm Plan Program 1992-1998

1. How many farmers attended workshops?	12,000
2. How long were workshops?	2 day-long workshops one week apart (16 hours). Sometimes shorter.
3. What materials were used in workshops?	Farm Plan workbook, instructional videos, soil maps, best management practices booklets, fact sheets.
4. Who created workshop materials?	Ministry extension through 23 technical committees with farmer/scientist membership.
5. What was the topic range?	Extensive field crops to grapes; livestock to greenhouse. Also woods, wells, fuel and septic.
6. What were instructional methods?	Participatory education, lecture and hands-on environmental self-assessment.
7. Who was administrative lead for funding?	Ontario Federation of Agriculture (non-governmental organization).
8. Who officially delivered EFP?	Ontario Soil and Crop Improvement Association (non-governmental organization). .
9. Who taught EFP workshops?	Team composed of one Soil & Crop staff and ministry extension educator.
10. Who attended workshops?	Farmers only; any commodity or scale.
11. Where were workshops held?	County-by-county basis; every county in Ontario.
12. What was amount of financial incentive?	$1,500 CDN (less than $1,100 US).
13. How did farmers obtain financial incentive?	Completed farm assessment and action plan. Received go-ahead from Peer Review Committee.
14. Who staffed Peer Review Committees?	Committee of local farmers plus Soil and Crop Program representative.
15. Did extension or government see farmers' assessments or plans?	No.
16. What is the Ontario Farm Environmental Coalition?	Four farm organizations as lead. Approximately 35 other farm organizations (mainly commodity) as participants.

Results

Farm leaders designed Farm Plan to reflect their collective analysis of farmers' experiences with environmental regulation, the sustainable agriculture movement, and extension education. Specifically, farm leaders based their approach to adult education on local theories about the ways past programs discouraged farmers from acting environmentally. This section discusses farm leaders' beliefs about effective adult education related to program design for Farm Plan. In particular, five features influenced heavily by farm leaders constituted a program that differed in important ways from many extension and government programs.

Staffing featured grassroots educators

A prominent feature of the Farm Plan program was employment of a cadre of grassroots facilitators drawn from the ranks of local farm families; most had not considered themselves educators previously. Grassroots educators were employed by Ontario Soil and Crop Improvement Association (hereafter, Soil and Crop), a farm organization with a history of successful third party delivery of government programs (Dyszuk, 1991). Farm leaders claimed that grassroots education and recruitment would be able to involve farmers in "threatening" issues, like environmental improvement, better than extension. This claim figured prominently in committee discussions and in Farm Plan publicity. Farm leaders also designed the program to be confidential. Confidentiality prevented government agency staff from reviewing farmers' assessments of environmental hazards and risks on their farms documented via the Farm Plan process. Confidentiality was an uncommon feature of environmental farm planning programs at the time (Ervin and Smith, 1996). Confidentiality was aggressively sought by farm leaders in response to farmers' fears of vulnerability to government prosecution (OFEC, 1991/1995). This policy distinguished Farm Plan from U.S. farm planning programs in which extension and government agency staff provided leadership for individual on-farm environmental assessments, for example in the New York City Watershed program (Malvicini, 1992; McLeod, 1995). In Farm Plan, grassroots facilitators were the only personnel who could link a farmer's name with his or her farm plan.

The farming background of grassroots Soil and Crop facilitators also figured prominently in workshops. In an interview, one facilitator explained why he told farmers in the workshop that his own farm was rated an "an environmental disaster" using the Farm Plan assessment. He described how he used his authentic personal experience to gain "buy in" (e.g., commitment) from farmers, and relay their fears about reporting environmental problems on their farms. He said,

> I am quite ready and willing to admit it {poor environmental rating}. I don't believe that for a second there is anything incriminating about this program. I want to get that message across loud and clear. . . . I don't feel at risk. I want them to get that feeling.

Some bitterness existed among extension educators regarding farm leaders' decision to plan and publicize the program as "farmer-driven and farmer-led." An extension educator

remarked, when asked in an interview if he encouraged farmers to attend Farm Plan workshops,

> At the beginning, we got told fairly bluntly, "Don't do that. We don't want the perception that it's an OMAFRA {Ministry} program. . . . Since it's the environment, they {Farm Plan} don't want to be perceived as a government program. They want to be perceived as a *farmer*-run program.

Grassroots and extension approaches were distinct even to staff members who were enthusiastic about partnership dimensions of the program. A grassroot educator put it,

> I think it's beautiful in the way it's set up being a partnership. . . It's got the best of both worlds working together.

This educator expressed greater approval than the extensionist, but note the firmness of the shared assumption that extension and farm organization approaches to education differ.

Instruction featured participatory techniques

Soil and Crop facilitators used participatory educational techniques in Farm Plan workshops. During participatory exercises, farmers developed their own reasons for taking charge of environmental problems, engaged each other in development of solutions, and challenged each others' assessments of hazards. Extension staff did not, on the whole, disparage participatory education, and some had been trained in participative techniques. Extension staff members were, however, more likely to talk about participatory methods as "ice breakers" or as techniques for making instruction more fun, toward outcomes of increased compliance or retention of content matter. Soil and Crop staff, on the other hand, articulated a more comprehensive account of participatory education that included instrumental outcomes (e.g., content knowledge), but valued equally the process by which farmers overcame dependency and resistance with respect to environmental stewardship (attitudinal change, action orientation). Overall, grassroot educators' accounts of participatory education were more consistent with tenets of democratic education for adults than extension staff members' (per Deshler, 1995 and Chambers, 1997). One Soil and Crop facilitator exclaimed,

> It's not *my* workshop. It's *these people's* workshop. It's my job to facilitate it. And that's why I do shut up. They do the talking.

Later, the author asked the same facilitator about resistance of some educators to using silence and tolerating discomfort of participants during participatory exercises, such as when facilitator or peers confront each other on ideas. The following conversation resulted.

> **Researcher:** But you didn't . . . cut it short to save their uncomfortableness. You risked letting them be uncomfortable.
>
> **Facilitator:** So why don't they want to make them {farmers} uncomfortable?

> (Laughs). It makes *them* {other educators} uncomfortable. It makes *them* uncomfortable to make the *other ones* {farmers} uncomfortable . . . . That's probably part of what's wrong with our society. Everybody thinks they should be comfortable all the time. Hell, when you *do* something is when you become uncomfortable.

Content emphasized experiential learning and farmers' knowledge.

The Farm Plan workbook is composed of 23 chapters of environmental assessment checklists and an Action Plan based on University of Wisconsin's Farm*A* Syst environmental farm assessment (Mulla, Everett and DiGiacomo, 1998). Farm Plan's emphasis on active learning and control by farmers distinguishes the workbook, however, from other environmental farm planning programs led by government and extension (Ervin and Smith, 1996). As noted earlier, Farm Plan expected farmers rather than scientific experts to complete the 23-chapter assessment and Action Plan (OFEC, 1994). The research documented that when facilitators introduced the large, glossy workbook, farmers sighed, frowned, or joked. "It's a ton of stuff," was a typical remark. The data suggest that the decision to require farmers, not experts, to complete the workbook was rooted in farm leaders' belief that all farmers in Ontario were capable of learning and combining scientific knowledge with local, practical knowledge. Farm leaders also believed that farmers would learn best by becoming involved in and responsible for environmental activity. Through experiential education, farm leaders also intended to counter what they saw as complacency among some farmers, and increased nervousness among others, resulting in dependency on government with respect to environmental decision making. Farm leaders suggested that farmers had become mired in a set of defeatist assumptions about the feasibility of environmental activities that contributed to passivity. In an interview, one said,

> If it looks like the only solution is to build a big manure storage, then the farmer is going to sit there and say, "Well, I can't afford it. So I am not going to do anything."

The study also revealed that design of the workbook expressed organizational interests of farm leaders by preventing individual farmers from calculating a summary statistic related to their farm's overall sustainability through Farm Plan. The workbook is designed so that the farmer cannot, for example, score an 80% (e.g., "good" or "green") rating with respect to environmental stewardship. At the time, avoidance of conflict among commodity organizations was imperative to farm leaders in regard to environmental issues captured by the question, *Who's greener?* (i.e., Who is more environmental?) Fine-tuning the assessment to produce a summary statistic was anticipated to worsen inter-organizational conflicts rather than build solidarity. A farm leader explains the meaning of solidarity in this context,

> Through this organization you can bring together commodity groups for a common cause who would ordinarily be at each other's throats because they are competing with each other in the marketplace. If we come out of this thing {Farm Plan}

> having just accomplished that we will have accomplished something. . . We are going to need that solidarity . . . . particularly with the government.

Moreover, the intellectual effort required to produce a program that would deliver a reliable summary statistic (i.e., computer model) was anticipated to require tremendous resources. Farm leaders instead allocated financial resources to aforementioned grassroots hiring; to writing a workbook that addressed all commodities in an ambitious 23-chapter workbook; and to offering the program province-wide to all farmers. This approach directly contrasts with most government programs which target particular crops or livestock; focus on lands with slopes that surpass a particular threshold; or channel resources to farms in hydrologically-sensitive watersheds (Ervin and Smith, 1996).

Evaluation utilized peer review and aggregate data

Among conventional forms of evaluation (Helmut Loewen, 1995; InfoResults, 1993), the Farm Plan program created two additional assessment processes which directly served farm leaders' interests: Peer Review and aggregate data. Farmers who participated in workshops were encouraged to submit completed Action Plans for anonymous review of "appropriateness" to committees called 'Peer Review'. Submission was voluntary, but necessary to receive incentive grant. Soil and Crop hired over 200 local farmers to staff Peer Review Committees. The farmer-reviewing-farmer policy was philosophically consistent with both the confidentiality policy and with the grassroots staffing decision. The peer review system also pressed the issue of ownership of the program by the farming community on a county-by-county basis, spinning off professional development programs on environmental assessment for farmers on Peer Review Committees so that committees made responsible and consistent decisions across counties.

In another form of assessment, farm leaders required Soil and Crop facilitators to collect anonymous data from Action Plans, called "aggregate data." Included in these data were farmers' responses to a section called "Barriers to Action," a checklist which allowed farmers to document reasons why they declined to fix a particular environmental problem (OFEC, 1994). This feature mobilized farmers' local knowledge of the financial, social, and technical feasibility of environmental improvements. The Barriers to Action list also encouraged honesty in the self-assessment process by providing an opportunity to declare personal and professional reasons for not taking immediate action on existing environmental hazards and risks on the farm. Farm leaders used the data to support positions on determination of extension priorities and on allocations of research funds. The Barriers to Action section also leant credibility to grassroots facilitators' claims that farmers could take control of their individual Farm Plan, even to the extent of declaring specific environmental improvements not a personal priority.

Mainstream farm organizations and extension dominated planning

It is notable that farm leaders planned privately, using organizational resources available to them, then advanced their ideas through a professional policy booklet that startled ministry officials when it was released (Fagen, Kennedy and Van den Broek, 1992; OFEC, 1991/1995).

Extension staff subsequently entered into a period of cooperation with farm leaders to develop the workbook and technical guides. Government staff, farm leaders, and members of selected conservation groups collaboratively wrote each of the 23 chapters of the Farm Plan workbook.

Extension and the Coalition formed a partnership for many aspects of programming, with membership negotiated between them. However, analysis showed that environmental and organic farming organizations (groups with a mission beyond hunting and game conservation) remained uninvolved in the coalition--uncommon for a sustainable agriculture program. According to a member of one of the uninvolved organizations, mainstream farm leaders "pulled their wagons in a circle" when they composed their learner-directed program planning team. Importantly, prior to Farm Plan, the ministry had composed a discussion group from across the spectrum of production approaches (conventional, mainstream, organic) and environmentalist activity (activist, conservationist, preservationist), but leaders involved in Farm Plan rejected this group as a basis for cooperative planning.

Conclusion

This paper presents findings about farmers' influence on adult education program design. Overall, Farm Plan is a demonstration of farm leaders successfully advancing sustainable agriculture while working with extension in ways that reconfigured power relationships through an adult education program. Participation of prospective learners in early stages of program planning is advocated for adult education programs that address complex scientific issues with unmistakable social and economic components, such as the environmental crisis. Nevertheless, meaningful participation of stakeholders is described in the literature as rare and difficult to accomplish. One of the study's basic but noteworthy findings is that farmers successfully influenced program design, affirming theoretical claims that substantive involvement of key stakeholders is feasible. The findings also support claims in several extension handbooks that 'collaboratives' and farmer-initiated ideas may come to fruition even when stakeholders' program assumptions differ from professional adult educators' (Taylor-Powell et al., 1998; Wells, 1988). Disagreement is not inevitably a death knell for engagement.

Specifically, the study documented five dimensions of adult agricultural education that were strongly affected by prospective learners: (a) staffing, (b) content, (c) instruction, (d) evaluation, and (e) composition of planning group. Across categories, one may apply two sorts of analyses, one social and cultural, the other from within the critical tradition of adult education. First, circumstances of the case lead to the thorny issue of how to conceptualize the turn about from expert-led to learner-led in the context of Ontario extension education. Chambers (1997) and other writers suggest that under circumstances of rapid change and increasing distance of professionals from constituents, supporting clients in the driver's seat allows changes to be based on timely social and cultural information that stakeholders uniquely possess. One may view grassroots, farmer-to-farmer staffing in this light, including the peer review process. Both practices rely upon farmers' practical knowledge of local environmental conditions, social and fiscal dimensions of environmental issues in related to agriculture, and local uses (and abuses) of technologies.

Direct line social and cultural theory does not, however, account for political bids apparent in farm leaders' strategies for Farm Plan education. Here one benefits from analysis

possible within the critical tradition in adult education (Cervero and Wilson, 1994; Welton, 1995). The confidentiality policy, for example, manifests the farming community's concerns about regulatory, command-and-control dimensions of environmental education, salient despite extension's historic emphasis on democratic education. The confidentiality policy undergirds the decision to employ non-extension staff (grassroots Soil and Crop farmer-educators) and the decision to work through local Peer Review Committees. Aggregate data and the Barriers to Action, on the other hand, demonstrate farm leaders' desire to influence policy by documenting protest by farmers related to cost and feasibility of environmental improvements on farms. Additionally, by asking farmers to do more than they believed possible with respect to environmental assessment, farm leaders manifested their goal of decreasing farmers' dependency on government and scientific-technical institutions. The amount of work that the program expected farmers to complete for Farm Plan was well outside the organizational culture of extension. More often, extension educators are coached to make tasks easy for farmers, with the unstated behaviorist assumption that compliance with unpalatable rules (i.e., acting on behalf of the environment) requires a tangible reward, principally, time-saving instructional approaches (Blackburn, 1994; NRC, 1989).

Finally, one must consider the finding that farmer-driven aspects of the Farm Plan program resulted in exclusion of organic and activist environmentalist groups. There is an instrumental, practical explanation, suggesting as per Applebea (1993) that greater diversity would have prevented the unlikely occurrence of the Farm Plan program taking flight. In other words, homogeneity eased the challenges of pulling together disparate commodity groups. From the perspective of critical theory, there is another view--one would expect learners to exhibit dependencies and stereotypical assumptions about themselves and others even when they become planners. Stakeholders may be reflective and open to new ideas on one front (i.e., environmentalism) but not on another (including former adversaries). To assume otherwise is to romanticize the farmer-to-farmer process as devoid of interpersonal conflicts that besiege the rest of us (Heron, 1989). Exclusionary characteristics are, in short, unsurprising in development of the autonomy of most groups (Heron, 1989; see also Grudens-Schuck, in print).

Recommendations

Several recommendations for extension program planning practice can be derived from this study. Three recommendations stand out as crucial to the engagement process: (a) the importance of social and political dimensions of teaching and learning; (b) the likelihood that learners experience education differently from educators; and (c) the value of the professional educators' informed view of exclusionary tendencies people bring to educational planning.

First, rather than using a classical, step-wise program planning process for development of objectives, extension educators may support stakeholder engagement more fully if they anticipate a political dimension in addition to a focus on subject matter. Moreover, including political elements in program design may be beneficial for rather than uniformly unproductive. This recommendation does not suggest throwing either attention to content or ethics to the wind. The recommendation instead emphasizes Cervero and Wilson's (1994) democratic approach to program planning whereby adult educators talk openly about social and political aspirations of interested parties (including those of adult educators) rather than focus

exclusively on content matter objectives.

Second, this study affirms prior qualitative research that underscores the surprising degree to which learners bring different meaning to ordinary dimensions of educational practice, such as: Who teaches programs (extension or farmers?). How much work is involved (little or "a ton"?). Who assesses quality (scientists or peers?). For topics like sustainable agriculture, the identity may be more important to learners than for other program areas. Moreover, suppositions of educators, such as the 'make things easy for farmers' ethos shared by many extension staff, should be questioned and not applied uniformly to all program decisions.

Third, in processes of engagement, stakeholders may act according to their own preconceived ideas about which other people and organizations are appropriate to involve. Extension educators, as part of ethical professional practice, must be alert to exclusionary tendencies of groups. The author does not advocate forcing equitable participation in any one project. However, one may still strive for appropriate involvement of identifiable stakeholders over time firmly and strategically (Welton, 1995).

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A Qualitative Study of the Influence of Farm Leaders' Ideas on a Sustainable Agriculture Education Program

A Critique

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The author did an excellent job of developing the need and theoretical framework for this study. A three year qualitative, single case study approach to consider issues related to farmer's control of program planning for non formal agricultural adult education was utilized. The study used cultural anthropology combined with participatory action research to produce an ethnography.

Ethnographic research methods featured 36, two-hour interviews; direct observation of 13 Farm Plan workshop sessions with total attendance of 195 farmers; and 53 distinct events involving 256 hours of participant observation of farms, organizational meetings, farm shows and field days. A five member planning group composed of insiders and the author negotiated selection decisions, gathered data, and collaboratively planned and presented reports consistent with the participatory action research approach of the study. Analysis consisted of nested sets of coding schemes subject to member checks and peer debriefing. The result was a set of themes that explain the ways in which local people analyzed their situation.

The author identified three recommendations that stand out as critical to the engagement process: (1) the importance of social and political dimensions of teaching and learning; (2) the likelihood that learners experience education differently from educators; and (3) the value of the professional educators' informed view of exclusionary tendencies people bring to educational planning. These recommendations could have tremendous impact on the way adult educators plan and implement programs. From a practical standpoint, this reader has some questions. How will this information be utilized in Iowa? What additional studies are planned as a follow-up to this research?

The author is to be commended for utilizing a qualitative approach involving action research in this study. While this research does not create the volume of data tables we normally see in quantitative research, the information gained has tremendous potential to make a difference and answer many "so what" questions. If properly utilized, this study will be extremely beneficial to extension program planners as they develop future programs. We need more studies like this in Agricultural Education.