

Using Group Facilitation Skills to Provide Training for Extension Modernization

John Preissing, Ph.D.

Professor, Department of Community Development
University of Wisconsin Extension
University of Wisconsin Extension Northern District Office
702 Front Street, Spooner, WI 54801
Phone: 715.635.9190
fax 715.635.9172
john.preissing@ces.uwex.edu

Tom Cadwallader, M.S.,

Professor - Department of Agriculture and Agbusiness
University of Wisconsin Extension Lincoln County Office

Arlen Albrecht, M.S.,

Professor - Department of Community Development
University of Wisconsin Extension Taylor County Office

Abstract

Modernizing an extension service means more than incorporating in new technologies in the distribution of information and educational programs. Extension services are often faced with the challenge of serving a wider array of client and community needs as they struggle to balance local resources with global demands for both raw commodities and niche products while they are under increasing pressure to downsize. An effective modern extension service needs access to the latest research information and educational technologies but those resources are of little value if they don't meet the unique needs of the people and communities they serve. A modern extension service must also be skilled in human development and group process skills that uncover the unique needs for those they serve and build the capacity within them to sustainably meet their needs. This paper describes how a team of faculty members from the University of Wisconsin Cooperative Extension Service engaged the Guyana Ministry of Agriculture Extension Service in successfully incorporating those capacity building skills in their modernization effort through a combination of formal workshops and modeling group process skills in two agricultural communities.

Key Words: Facilitation skills, extension exchange programs, Group process skills,

Introduction

In 2007 the University of Wisconsin Extension - Cooperative Extension Service (UWEX-CES) teamed up with the Partners of the Americas (POA) to help the Guyana Ministry of Agriculture (MOA) modernize their Extension Service. Over the last 20-30 years the MOA Extension Service (MOA-ES) eroded from a staff of over a thousand well supported extensionists to less than 100 in 2007 working with meager resources. The MOA-ES was not responding effectively to the changing needs of the country's farmers and they knew they needed to do something different but weren't sure what.

When the project began the UWEX-CES faculty found that the MOA leadership and field extensionists perceived a modern extension service as one that integrated in more modern technology, however, while the use of high technology can help an extension service perform its work more efficiently, the challenges often facing farmers and rural communities require solutions beyond the reach of technology.

International extension training programs continue to be very similar to what a majority of extension programs traditionally were. They have often focused on strengthening extension methodologies related to content transmission (Brewer, 2000). But, while learning to be more effective in transmitting technical information is essential for extension work, effective process and facilitation skills are ever more necessary to improve and modernize extension services as they try to help farmers and rural communities deal with rapidly changing global economics and adapt technology that is appropriate to their climate, culture and community capacity. Cyr (2008), Lillis (2000), and others have urged greater focus on building community capacity as an extension function.

It is much more common to find that what is missing in many small, rural agricultural communities is the ability to organize so they can reach new and evolving markets and provide community members with better services, information and resources. Without this community asset the latest production technologies and research are of limited value. Group process, facilitation and leadership development skills are as important in a modern extension service as knowing how to determine soil fertility or the teaching the best management practices for planting and caring for crops and livestock.

With that in mind a 10 member team of UWEX-CES faculty skilled in facilitating community and organizational development projects in a variety of rural settings, in both the United States and internationally, divided up into four teams and made separate trips to Guyana over a one year period teaching and modeling various facilitation and group process skills. Skills the faculty have found to be very useful in helping groups and communities set goals, evaluate appropriate technologies and methodologies to achieve those goals, and chart their progress.

This was part of the five year Farmer to Farmer project that was implemented by POA and funded through the United States Agency for International Development (USAID).

Project Objectives

For the Guyana MOA-ES, their primary objective was learning how, with very limited resources, they could be more effective in helping serve the farmers in their country. They wanted to learn about newer educational technologies but were well aware of the fact that farmers and their communities needed to be more self-sufficient and that

the nature of community based extension work has evolved with a greater emphasis on helping communities achieve that self-sufficiency. They also knew that they had little firsthand experience with practical applications of the community capacity building and organizational development practices commonly used by extension services in many developed countries. Effective facilitation concepts and their application were of primary importance.

For the UWEX-CES faculty, the project was an opportunity to apply their knowledge and skills in a new setting with a team of colleagues who had never worked together before. It was also a chance to learn from each other and continue to build our own capacity as we adapted and learned as the project unfolded.

For the POA this project offered an opportunity to pilot an effort that may have some usefulness in other countries where they work. The pressures on extension services are similar throughout the world, even in developed countries.

Teaching Methodology

As mentioned in the introduction, teaching the various group facilitation and process skills was done by a series of teams visiting Guyana in two week time periods stretched out over a year. Each team built on the work of the previous one and each worked in conjunction with their counterparts in the Guyana MOA-ES. First we'll go through the overall flow of the team activities and then into more detail on a few facilitation skills and techniques they focused on and how they were applied in the field.

The first team's task (April 22 – May 5, 2007) was assessing the MOA-ES organizational and individual skill levels in group facilitation and community development processes. They also located two communities differing in geography and need that would lend themselves to modeling the skills to be taught. The second team (October 27 – November 9, 2007) began the process of building institutional buy-in within the MOA and among many cooperating agencies and NGO's so any new skills that were learned could be further supported. This team also began working with the two communities that were selected on identifying some needs if they were to improve the production and marketing of their products.

One community was in the Parika area about an hour west along the coast from Georgetown. This group of a dozen or so farmers was exploring the development of an export market for a non-traditional crop, butternut squash. The other group of farmers was in the community of West Watooka near the city of Linden, a mining community about an hour and a half inland from the coast. The approximately 20 farmers in West Watooka were struggling with limited resources to meet an increasing domestic demand for their produce.

Team 3 (January 6 – 19, 2008) blended a two day workshop setting for MOA-ES staff on topics including such things as coping with organizational change and facilitating a community discussion on assessing and addressing needs. They then took these concepts out into the two communities to show how they could be applied. Team 4 (April 21 – May 4, 2008) built on Team 3's work but used a split workshop approach that presented material on strengthening group leadership skills, assessing a community's economic strengths and identifying forces that either hinder or help a community make progress on identified goals. They took these concepts out to the two communities to practice their application then brought the MOA-ES staff back for the second phase of the

workshop that debriefed the extensionists involved in the ongoing work in those communities examining the lessons that were learned. The second workshop day also expanded on other phases of leadership and group dynamics

Team 1: Issue Exploration and Asset Inventory

Team 1 demonstrated an important skill in facilitating effective group processes, asset assessment. Over the two week period the team met with 48 agriculture and extension professionals, rural development agency heads and farmers and visited seven national organizations that delivered rural or agricultural development services in the country either in cooperation or in competition with the MOA Extension Service. They interviewed the US Ambassador, United States Agency for International Development (USAID) Mission Director, and the head of the Guyana Trade and Investment Services (GTIS) Project and met with 100 MOA extensionists at a professional development conference where they did a presentation on the Wisconsin model of extension delivery. They also visited four different governmental regions, meeting farmers, agricultural extension professionals and local government officials.

The team found extensionists who were very passionate in their desire to help communities but morale was very low and they questioned their current roles. Farmers and extensionists talked with fondness of the way it “used to be”, all were frustrated and all seemed to acknowledge the fact that the MOA-ES would not return to its former self. Extensionists were comfortable with their knowledge and skill on teaching farm practices but were unsure of their abilities in facilitating group processes. Sharing their observations with the MOA-ES leadership, all agreed that focusing on developing their capacity to do group process work and to work with two communities throughout the process in order to build trust, the cornerstone of all human development activities, was the best route to take.

Team 2: Developing Institutional Buy-In and Demonstrating Facilitated Inquiry

Institutional support is essential if the individuals of any community or organization are to incorporate new skills into their daily lives. That is why this team had the task of building institutional buy-in along with beginning the process of teaching group process facilitation skills. To earn that buy-in a key team member was the UWEX-CES Interim Dean and Director of UWEX-CES, Dr. Rick Klemme. Much of the first week the team’s project was spent having in-depth discussions with the leadership groups from nine different agencies and institutes that had some type of involvement with the MOA-ES. The team shared some of Wisconsin’s experiences over the previous decade in using self-directed teams in making its extension system more adaptable and responsive to the needs of its communities and shared the teaching methodologies to be used in Guyana.

Working with the communities of Parika and West Watooka the team modeled a facilitated group inquiry technique called a “gap analysis” that identifies the gaps between a current and an ideal situation, such as a food production and marketing system. A “gap analysis” is not only effective in analyzing a process from start to finish it also engages farmers and service providers in such a way that everyone in the chain of events is an “expert” somewhere along the line. Done in three parts, the “gap analysis” first walks through the entire process taking a product from preparing the soil to the end of the

market chain. Everyone involved in the process gets to describe what they do so all get a chance to learn from each other. The next step is a listing of the major gaps that impede the efficient movement through the process and then they come to some consensus on what gaps are the most important to be dealt with first and who needs to be involved in filling the gaps.

In the Parika area the group identified several issues: soil testing, organizational development of the farm group, ensuring safe and effective use of pesticides, maintaining and expanding drainage and irrigation systems and basic business management skills. The West Watooka farmers said that they needed to capture extra dollars for their products rather than giving so much to the middlemen. They also said it was important to find ways to reduce labor since much of their work was by hand. There were also a few things that were similar to the Parika farmers, including soil analysis, pesticide use and handling and business skill development.

Once the two groups went through the process the MOA extensionists were able to share what they could likely help with given their constraints and both communities began to explore things that they may need to do themselves, but they would need to get better organized. That led to the next two teams.

Team 3: Organizational Change and Assessing a Community's Needs

Team 3 blended classroom teaching of MOA Extension staff with a continuation of applying those skills in the communities of Parika and West Watooka. The trainings took place over a period of two days at the Guyana School of Agriculture (GSA) in Georgetown with approximately 35 MOA extensionists. The curriculum was titled "Capacity Building Skills for Sustainable Programs" and focused on developing skills in various tools common in community development work. Topics included managing change, effective communication, team building, community networking and engagement, community organizational assessment, group sustainability, leadership development, appreciative inquiry, action planning and evaluation.

The team also engaged the learners by providing them with opportunities to assess themselves and learn more about each other. Trainees completed a communication styles assessment and then discussed how the different styles can work together in creating teams that respect and properly utilize individuals' varied talents. Other tools introduced during the trainings included a community development tool box model, community organizational assessment tool (COAT), an appreciative inquiry scenario exercise and World Café (Brown and Issacs, 2005). A post-training evaluation asked what attendees learned and how they planned to use those skills as well as what changes attendees might make in their work with clients or communities. This tool modeled how the extensionists might begin to measure the effectiveness of their work using a Logic Model (2008). Throughout the training the team placed an emphasis on Transformational Education (Blewett and Kiem, 2008) concepts that have been embraced by the UWEX-CES.

After the workshop the training team went out into the countryside to continue working with the farmer groups in Parika and West Watooka. Parika provided the team with an example of how extension community development work is often an iterative process. Although the gap analysis performed by Team 2 identified some production challenges, Team 3 found the group expressing a need for basic leadership, group dynamics and conflict management skills. This demonstrated the value of appreciative

inquiry and the reframing of issues and goals based on the results of that inquiry. By the end of the two days working with the Parika farmers and the local MOA Extension staff, a small group of informal leaders had been identified who would continue to work along with the Extension staff and would be involved in further work with this particular project.

The project in the West Watooka area also needed to be adapted. Here again, while the original gap analysis correctly identified some production and marketing problems that needed to be dealt with; further inquiry found that those gaps could not be filled unless the group had better access to capital, primarily financial. Unlike Parika, the West Watooka farmers did have some good experiences in working with each other. The challenge that they faced was learning how to focus their efforts on critical needs through an action planning process. The team led the farmers and the local extensionists through a visualization process that laid out the components of a holistic farming system plan and a general community plan. After this process the group was then able to objectively analyze where they should focus their attention. The consensus was to focus on the farming plan and the team then led them through a brainstorming exercise that allowed them to discuss various options related to group governance, leadership selection and recordkeeping that would more effectively help them prioritize needs and present their ideas to decision makers overseeing potential sources of capital.

Team 4: Leadership Skills and Assessing a Community's Development Capacity

Rather than teaching in Georgetown and then going to the field they taught a portion of the workshop, went to the two communities to model the skills being taught and then returned to debrief on lessons learned and then build on those lessons. The training session at the GSA in Georgetown was well attended with approximately 25 people, both leadership and field extensionists. The team showed the use of a simple "ice breaker" often used to get participants to know each other personally. The group was broke up in pairs with the members in the pairs interviewing each other asking "Where were you born and raised?", "What was something that others might not know about you?", "What have you learned from the previous workshops that you've found useful?", and "What do hope to learn from this workshop?" Each person then reported back what they had learned from the person they interviewed.

The team then led a SLOGO (Slogan and Logo) exercise to demonstrate the various stage of team development – forming, storming, norming and performing. They were divided up into four teams and each was asked to develop a team name, slogan and logo based on the strengths of the team members. The success of the activity varied based on the different strengths of the individuals. To use these new team building skills and further develop their understanding of teams, the four groups were asked to come up with an agreement on a farmer's group issue and develop a process to address the issue. The issues the teams choose ranged from group process challenges to applying agricultural technology. The UWEX-CES team found it interesting to watch the different dynamics of each of the MOA-ES teams. With some, the concept of shared leadership was easily understood. In others, group members deferred to either the most outspoken member of the team or the most senior member.

In the field the team continued the efforts of earlier teams of helping to further define and address leadership challenges but they also incorporated the use of a very

helpful community economic visualization tool called “The Leaky Bucket”. Community members are lead through a discussion that identifies all of the various things going into the bucket, such as water, soil, people and money from the sale of things they make. They then listed all of the leaks leaving the bucket such as fertilizer, pesticides and clothing purchases. If more is coming in than leaving the community is economically improving. If it is going the other way the community is declining. The community members in both Parika and West Watooka quickly saw where they could make improvements in their economic situation and began exploring ways they might be able to accomplish them.

In the second phase of the workshop after returning from the villages and debriefing the local extensionists on what they saw and experienced the UWEX-CES team covered several other topics. Things such as personality styles, organizational and community development frameworks, including community development educator roles, building trust based relationships, leadership development, collaboration, community based planning, conflict management, strategic planning and shared leadership. As the team covered these concepts they also shared case examples from their own experiences.

Results and Discussion

In the Project Objective section we laid out a few objectives for everyone involved in the project. The Guyana MOA-ES wanted to make progress on adapting their institution so they were more responsive to meeting the needs of the people they served. They also wanted to provide their leadership and staff with a broader array of group process and facilitation skills allowing them to help the farmers and their communities become more self-reliant and effective in meeting their goals. The UWEX-CES wanted to not only help the MOA-ES and their communities, they wanted to further hone their own skills so they could become better extensionists themselves. And finally, the POA wanted to learn more about how they could meet similar needs faced by the Guyana MOA-ES in other countries they serve. So how did we do?

The Guyana MOA-ES and the Communities of West Watooka and Parika

At the end of each of the workshops evaluations were given to the MOA-ES staff that participated. The participants say they found the information and training extremely beneficial and their written comments were very moving. What follows are a sampling of direct written comments from 22 the Guyanese participants.

“I found the workshop to be very timely and informative and I learn(ed) that before you plan programs for farmers in the field it is important to find out and understand what their problem is, who the ones being affected and what they expect us as extension officers (can) do for them. With this in mind, programs appropriate for their needs can be planned and implemented. From participating in this workshop I will be able to plan and deliver the necessary information to the farmers that will enable them to perform better at their respective activities”

“So much gained from this workshop that will make more efficiency in my daily work, if I applied some in my work. First, how to be a leader. What is the leader’s duty? How to deal with the daily work? The workshop taught so plenty. I think my life might be changed, and I could challenge a high position. First

listen to other's advice, ideas and opinions. Secondly, book an adaptable plan for work with clients or communities. Third, be active in work with higher passion. Finally, just do it. Take action."

"I learned a lot but most of all I gained better knowledge on how to cope with group members and how to go about encouraging farmers to get organized in groups and how to work along with them so their interest can be achieved. Because of this program I feel more confident in going out in the field with farmers groups and show them the benefits and reasons why they should be more organized and supportive. I will make several changes in my working community with clients because I can now give answers which I did not have before and give more support them and show them positiveness."

And perhaps more important than the impact on individuals right after the trainings, are the changes that occurred in the communities as a result of what was taught. In follow-up assessments the POA found the Extension Services Modernization project helped make changes on a national scope, including the introduction of a more "participatory" form of extension where agents meaningfully engage farming communities to identify needed services. By involving staff from other agencies and the private sector, cutting across disciplines, the impact has expanded. Shortly after the end of the project the Parika community formed a formal agricultural organization and secured a commitment from the Ministry of Agriculture to provide two stipend staff to assist in their development. The West Watooka community organized themselves to create a farmers market in the area as a part of a long-term vision for the region, including the promotion of value added products, and their proposed idea was received with interest by their region's extension staff. By all indications, the objectives of the MOA-ES and the people of West Watooka and Parika seemed to have been met.

The Partners of the Americas

At this writing the Partners of the Americas have considered the project very successful and have already contacted UWEX-CES faculty about the possibility of doing similar extension service modernization projects in other countries where they have projects. In fact, we are collaborating with them on a series of related projects throughout Central America and the Caribbean.

The University of Wisconsin Extension – Cooperative Extension Service

To gain some insight from the UWEX-CES team members we conducted key informant interviews with the 10 team members involved in the Modernizing Guyanese Extension project through an internet email survey. Theme or pattern analysis was used to analyze the data, based on the steps recommended by Krueger (2000). The analysis began with the findings and organizing them into coherent themes and patterns as well as noting those points which uniquely stood out. Finally, we used Patton's (2002) guidance to seek internal homogeneity and external heterogeneity in developing the distinct themes. The results of each question are presented along with illustrative quotes.

1. *Can you briefly describe why you chose the specific facilitation tool/skill that you shared/taught while in Guyana?* The most common response was that the decision

was based on the extension worker's judgment of the situation and the context. Similar to this was a second response that on the ground diagnostic led to deciding which tool might be most appropriate in the situation. Another common response theme was that the staff changed their mind in the field, based on the results of the initial efforts, to be more responsive and effective. These first three represent, not so much teaching a tool, but an open, flexible approach to the work, an essential requirement for modern extension practices. Also cited frequently by many was that they chose the tools that they knew well.

“Although we had an idea of what the training participants might need, a more thorough diagnosis on the ground was used to refine or in many cases, add to the information we presented.” – A.L.

“It varied, some (such as force field analysis, strategic questioning, and asset mapping) were used on the spur of the moment as a way to bring focus to an ongoing discussion and dialogue. These methods were also used based on a lack of materials (such as flip charts) and overall group size. Other methods such as nominal group process, affinity diagram, and action planning were taught to groups because they hadn't previously been exposed to those processes and these are processes we typically use to bring equal participation.” – D.B.

2. What about teaching and using the facilitation tools seemed to be most positive. That is, what worked well or well received; why do you think that was? Many of the UW Extension staff believed that the most appealing aspects of the facilitation tools that were demonstrated were that they were practical, transparent, and immediately effective. Somewhat similar to responses from the first question, the Wisconsin extensionists also believed that some success was due the progressive use of one tool to another, depending on the context and their own judgment. Another common responsive was that the tools represented a new way to gather information or to interact with community members by extension staff which many found appealing. A distinct set of answers mentioned by some was that it helped to generate some unity around a topic.

“It was something that others could actually do – implementable. First of all, we offered logical framework in which to place the tools and then we taught about and modeled them. Finally, we discussed how we had used them in our work and shared both the successes and failures of them in practice.” – GW

“World Café – this was probably the most interesting one to observe. Quiet people and others that may be marginalized or left out were really able to step forward and contribute because this tool gave them the means to do it.” – JKB

“The tools that encouraged dialogue seemed most effective because it gave the participants more ownership of the process and, as a result, better information was received.” – RK

3. What did not seem to work well with respect to the facilitation tools that you taught or used? Why? All pinpointed reasons why there were problems with some of the training or use of facilitation tools though the reasons were varied. A cluster of observations were along the theme that more training, awareness, or appreciation for the

possibilities of extension facilitation work was needed. To the extent that the role of the extensionist was seen primarily as a technical expert and not a community developer, there was less interest. Others frankly questioned the appropriateness of the specific tool or the use of a model from another country and culture. Some also cited more operational reasons such the lack of time and lack of practicality of a particular process.

“However, I’m not sure this tool was really appropriate in terms of trying “to modernize” Guyana’s extension service. Some other types of diagnostic tools may have been more appropriate for that.” – AD

“Time was a factor. It would have been nice to have been able to work with the group a few more times. That is one of the problems with such short duration projects.” – TC

“Most of the extension staff were technicians. They were more interested in tech transfer and not transformational education.” – SB

“They were reluctant to learn more about social science group dynamics and interpersonal relationships.” – AA

4. Are there any other observations about the use of facilitation tools in international assignments that you might offer? A wealth of answers was provided. An overwhelming number of the responses focused on the importance of having a greater understanding of the local culture and time to know a community before embarking on extension interventions, especially facilitation. While it was recognized as an occupational hazard for short term international assignments it nonetheless left the extension workers feeling dissatisfied. Similarly, most cautioned that it was critical to be flexible and learner focused. Another strong message was that international extension support should focus on sharing practical, doable activities. Focusing on a community development approach and letting the tools follow was also an important theme.

“Without these tools (flipcharts, etc) it is difficult to have an effective facilitation. Also, we made an effort to keep things as simple as possible. This seemed to resonate with training participants who in many cases were being taught information they had never been exposed to in the pasts.” – AL

“Nothing works straight from the book – everything needs to be adapted to the country, culture, audience, situation, and where the group is at any given moment. I would also say that too much gadgetry is distracting in the field. Limited electricity, lighting, and roofs are all factors – there is a need to keep it simple.” – AA

“It’s important to start where the learners are. ... Understanding the importance of their local knowledge – the community, the political climate, the social system, etc. is vital in making the connection with the learners so they trust the educators.” – SB

“My observation would be that in terms of facilitating organizational inquiry and change, the tools themselves may not be so important. The best “tool” we may have to share is our experience diagnosing and understanding community needs before launching into the prescription phase of developing solutions, implementing, and evaluating them.” – AD

Conclusion and Recommendations

It was obvious from the comments and observations made by the UWEX-CES team members that they wished that they could have done more. There was some frustration with the time they had to work with the MOA-ES staff and the communities and the lack of control they had in developing their teachings. However, their “students” in Guyana did not see it that way, they were very pleased. By the UWEX-CES teams being very consistent in their learner focused, transformational education approach, and continuing to go back to the same communities to work, a trust was developed that was very important. In a time of constant change, trust is a critical commodity. Perhaps the most important lessons learned and/or affirmed were:

Facilitation and group process skills are valuable assets for extensionists in such a dynamic world. It can be very empowering for an extensionist to realize they do not need to always have the answer but methods and skills to help the people they serve find the answer together are equally important.

When teaching the skills try to be flexible, learner focused, and work with practical, doable activities that meet a community need.

There never seems to be enough time to work with a particular community so it is important to develop some kind of internal support network that can continue on once the project is over.

Be honest with learners that only a certain amount can be accomplished and find ways to celebrate small successes.

Acknowledgements

The authors would like to express their sincere gratitude to their UWEX-CES team members who took part in this project: Andrew Dane, Community Development Educator for Chippewa and Barron Counties; Julie Keown-Bomar, Family Living Educator for Eau Claire County; Art Lersch, Community Development Educator for Lincoln County; Greg Wise, Community Development Specialist for the UWEX Center for Community Economic Development; Dave Berard, Community Development Educator for Sawyer County; Sue Buck, Director of the UWEX Administrative Leadership Program; Rick Klemme, Interim Dean and Director of UWEX-CES; and their Wisconsin county partners who allowed the county faculty time away from their jobs to travel to Guyana. They would also like to thank their wonderful partners in the Guyana MOA-ES, Brian Greenidge, Deputy Permanent Secretary, and Joseph McAllister, Technical Manager, and the dedicated POA staff Kelvin Craig and Shaun Francis.

References

- Blewett, T., Kiem, A., Leser, J., & Jones, L. (June, 2008). Defining a transformational educationl model for the engaged university. *Journal of Extension*. 46 (3). Retrieved January 27, 2009 at <http://www.joe.org/joe/2008june/index.shtml>.
- Brewer, F. (200). Extension systems in the developing world. In F. Brewer (ed.), *Agricultural extension systems: An international perspective* (100-111). Ann Arbor, MI: XanEdu Orginal Works.
- Brown, J. & Issacs, D. (2005). *The world café: Shaping our future through questions that matter*. San Francisco: Berrett-Koehler.
- Cyr, L. (2008). Facilitation competence: A catalyst for effective extension work. *Journal of Extension*, 46 (4). Retrieved August 20, 2008 from <http://www.joe.org/joe/-2008august/rb2.shtml>.
- Krueger, R. (2002). *Evaluation: A practical guide*. Unpublished manuscript, University of Minnesota.
- Lillis, S. (2000). Republic of Ireland approach to extension. In F. Brewer (ed.), *Agricultural extension systems: An international perspective* (100-111). Ann Arbor, MI: XanEdu Orginal Works.
- University of Wisconsin Cooperative Extension. Program development and logic model training, Retrieved January 27, 2009 from <http://www.uwex.edu/ces/-pdande/index.html>
- Patton, M. (2002). *Qualitative research and evaluation methods*. Thousands Oak, CA: Sage.
- Transformational Education - <http://www.uwex.edu/ces/admin/transform/>