eXtension Transformation Evaluation Project
Phase 1: Transformative effects on individual CoP members

Michael Lambur, eXtension Evaluation and Research Leader
Patricia Grace, Graduate Research Assistant, Department of Agricultural and Extension Education

Virginia Tech
July, 2010

Introduction

The purpose of the eXtension Transformation Evaluation Project is to assess the extent to which eXtension is having a transformative effect on the Cooperative Extension System. The purpose of Phase 1 of the evaluation is to identify what Extension staff are doing differently as a result of eXtension. This actually represents transactional change. As such, this is more of a formative evaluation effort.

During fall 2009 Pat Grace, a graduate research assistant working on the project, interviewed the Be Grow Create 2 (BGC2) state liaisons to get their feedback on an initial evaluation plan and to document their efforts in their respective states. In addition, Pat also analyzed the responses to the transformation questions in the Community of Practice (CoP) Profiles for 2009. In analyzing these two documents, several ideas coalesced to suggest a change in the plan (see http://about.extension.org/wiki/eXtension_Transformation_Evaluation for all project documents).

✔ All of the state liaisons believed that it may be too early to begin measuring transformation in these states because the process was going much slower than anticipated. The literature reviewed indicated that a strong, well-coordinated implementation strategy was necessary for transformation, especially within organizations. In addition, because states and institutions differ substantially in how they embrace, promote, and implement eXtension, efforts to evaluate transformation from a state/institutional perspective at this time may be premature and yield very different results.

✔ Several state liaisons suggested that we might want to look at transformation among CoP members because that is where we have put forth more of our efforts. This represents a much stronger implementation strategy than our BGC2 efforts with respect to transformation.

✔ The analysis of the transformation questions in the CoP Profiles yielded some rich information about transformation.
After subsequent discussions, we concluded that eXtension effort with CoP’s was the best place to start in measuring transformational/transactional change in the Extension system. Consequently, we revised our evaluation plan. Phase 1 of this revised plan would focus on the transformative effects to individual CoP members.

**Methods**

Two sources of data were used for this phase of the evaluation: 1) data from entries in the transformation section of the CoP Profiles submitted in June, 2009, and 2) individual interviews with CoP members. Individual interviews were conducted with members from CoP’s who submitted responses to the transformation questions in the CoP profiles to follow-up and discover individual transformative effects of eXtension. A snowball sampling technique was also used, whereby we asked interviewees, upon the completion of their interview, if there were other members of their CoP who had experienced transformative effects as a result of being involved in eXtension who we could interview.

**Study Approach**

For the CoP member interviews, a qualitative, phenomenological approach was undertaken to understand how participation in an eXtension CoP affected participants’ manner of working, educational partners, localization of programming, and barriers encountered and suggestions to overcome them. In addition, participants were asked to describe the past, present, and future “story” of Cooperative Extension and how eXtension might fit into that story.

**Participants**

A purposeful sample of twenty leaders or co-leaders of twelve active CoP’s were chosen to participate in the interviews. Approval from the Virginia Tech’s Institutional Review Board was applied for and received. Selected individuals were contacted via e-mail and/or telephone and requested to participate in the study. Twelve individuals representing nine CoP’s agreed to take part. The CoP’s represented were: Extension Disaster Education Network; Extension Wildfire Information Network; Families, Food, and Fitness; Goat Industry; HorseQuest; Imported Fire Ants; Map@syst; Sustainable Ag Energy; and, Urban Integrated Pest Management.

**Instrumentation**

An interview protocol was developed based on questions that had previously been asked in the COP profiles. It also included two additional questions regarding the “story” of Cooperative Extension and eXtension’s part in that story.

**Data Collection**

Telephone interviews were conducted with participants at pre-arranged times. Interviews ranged from approximately 10 minutes to 20 minutes in length and were conducted by a doctoral candidate in the Department of Agricultural and Extension Education in the College of Agriculture at Virginia Tech. All interviews were recorded and transcribed for accuracy.
Data Analysis

Colaizzi’s (1978) phenomenological method was employed in analyzing responses to the transformation questions in the CoP Profiles as well as participant interviews. In this method, all responses are read several times to obtain an overall feeling for them. From each set of data, significant phrases or sentences that pertain directly to the question response and individual’s experience are identified. Meanings are then formulated from the significant statements and phrases. The formulated meanings are then clustered into themes allowing for the emergence of common themes from the data. The results are then integrated into a description of the phenomena.

Results

Analysis of Data from June 2009 CoP Profiles

Data from the June 2009 CoP profiles, in which the CoP’s were asked to answer four questions on the transformation taking place within the Cooperative Extension System as a result of their engagement with eXtension, were analyzed. Eleven CoP’s provided responses including the Beef Cattle Clearinghouse, DaireXnet, Diversity Across Higher Education, Extension Disaster Education Network, Urban Integrated Pest Management, Extension Wildfire Information Network, Families, Food, and Fitness, HorseQuest, Imported Fire Ants, Map@syst, and Sustainable Ag Energy. Note that these responses were submitted collectively for the CoP. The four questions were:

- To what extent has eXtension content/technology pushed, stretched, or changed the CoP's way of thinking and doing its work?
- To what extent has eXtension helped the CoP reflect on content, process, or assumptions about its Extension work?
- To what extent has eXtension been a critical event that has changed how individuals work in your CoP and how they work in their states?
- To what extent has eXtension connected your CoP with educational partners who are different than usual and changed CoP members work as a result?

Seven major themes with subthemes emerged from the data provided by participating CoP’s. These are described below.

1. Changed Way of Doing Work

* Fostered Improved Teamwork

- Has changed the way we think about working together. Now becoming comfortable using the wiki, answering questions through Ask an Expert widget, and participating in conference calls with Adobe Connect.
- Collaborative work using online technologies for developing content, such as the wiki.
- Coordination of existing educational activity by each state active in Wildfire CoP.
• We are all more conscious as a team of preparing educational materials that suit our states’ needs and the eXtension FFF CoP.

• Major role in facilitating people from different states to work together.

• Through monthly meetings we are able to have discussions about new approaches to make our CoP continue to be a relevant source for learning.

• We are most successful where we have teams who have a clear goal, meet (phone/web) regularly, dole out responsibilities, and create timelines/deadlines.

• Although adoption of technical tools has not been unanimous, one thing that has been positive is the desire to contribute (to CoP) in more traditional forms.

• We are most successful where we have teams who have a clear goal, meet (phone/web) regularly, dole out responsibilities and create timelines/deadlines.

• Participating in the CoP has made members more aware of research and educational activities occurring in other states and countries.

**Adoption of New Technology (aka “Tools”)**

**For Communication**

• Some eXtension tools have been moderately adopted and new activities have been adopted such as the online chat or webcasts.

• eXtension has pushed some of the CoP members to work with new technology such as the wiki, breeze conferences, and the FAQ system.

• Now use wiki and Google Docs and these helped make things more organized and manageable in the CoP.

• CoP has targeted County Agents as a clientele group to be served by eXtension website.

• eXtension provides the technical expertise to allow individuals to learn and explore new technologies that are not readily (or easily) accessible on their campus. Normally a hurdle for adoption is the high upkeep and time sink involved with implementing new technologies on campus. The ability to have a place to operate without the technology overhead is appealing to members.

**For Developing Materials/Curriculum**

• eXtension is one more tool that helps the CoP accomplish its goal of helping our CoI.

• The CoP is now thinking ahead for curriculum development. Rather than creating content for their own state, they are asking peers if they are interested in the same topic before beginning and wrapping those ideas around a work team to create a new product for the system.
New Methods of Outreach and Increased Outreach Activities

• Began thinking of alternative communications options for delivery of technical information (e.g. Facebook, Twitter, etc.).

• Plan future podcasts on eXtension.

• Our CoP is enhancing content development with Moodle and Teaching Lessons. Such tools as these and others (modules for professional development) are enabling members to experiment with new methods of outreach.

• Educators and specialists increasingly recognize eXtension as a reliable source and are pointing their clients to it.

• CoP members found that participating in a collaborative work environment stimulated their outreach efforts because they were not responsible for being the sole source of all information.

2. Providing a Format/Platform to Interact among States and Nationally

National Platform (Internal to Extension)

Communication and Working Together

• The training programs and teleconferences are convenient methods of facilitating our meetings and communicating with interested individuals throughout the nation.

• Has provided an opportunity to utilize expertise nationally.

• The farm energy community has not really existed on a national level prior to eXtension. There is much interest in being able to work together on a more unified front.

Developing Materials by Working Together

• Having a format to interact and develop material from nationally recognized experts benefits the CoI and industry we serve.

• Has given our CoP a visual platform to create a national Extension team designed to develop and deliver educational materials.

• Our CoP plans to use members from throughout the nation to develop content that will appeal to the diversity of the CoI we serve.

• The advantage to CoP members is that they can create a reliable source of core content that gains credibility since it’s on a national site.

National Platform (external-clientele)

• As our CoP grows and continues to develop more material, we realize the opportunity that a public site through eXtension gives us to reach people all across the nation.
Cooperation among States

• Regional pages have given states a place to develop specific information that may not be applicable to other geographical areas.

• Both the idea of the CoP and the physical representation of a single source on the Internet make it much easier to collaborate and to develop core content that can be used in multiple states.

3. Establishing Different Educational Partnerships

Internal Collaboration

• Has enabled our CoP to work more closely with some of the specialists in other areas of expertise.

• Made it easier for CoP members with similar and different interests to connect and work together.

• Experts in this CoP are beginning to work more closely with members of other CoP’s. (Anecdote: Given questions regarding the differences between EDEN the network and EDEN the CoP, a document was written to guide us in our thinking about how our CoP work compliments that of the network and vice versa. The document, EDEN and eXtension, was distributed to Extension Directors and the eXtension director.).

• The use of Ning will help involve other states’ nutrition and physical activity programs with the FFF CoP.

• eXtension has given us the opportunity to reach not only nutrition and exercise experts but also those interested in the role technology and modern times play in our health status.

• We also hope to involve those interested in incorporating health and issues of national importance such as the economic crisis. This will make our CoP more applicable to the lives of young families in the U.S.

• It has been relatively easy to add members who are from a broad variety of backgrounds but have something to contribute and a desire to participate in a public outreach opportunity.

• Experts in the technical area have worked more closely with communication partners to develop materials.

• The national meetings and Content Management Board Meeting have allowed members of our CoP to interact with representatives of other CoP’s.

External Collaboration

• Our eXtension community includes a number of individuals from other government agencies – this brings in expertise that would not be available on a local scale.
• In the case of K-12 teachers, one of our impact areas, the ability to publish as part of a national effort was highly appealing because this group has few external opportunities for being an author.

• Although our CoP is well connected to many collaborating partners, it was not until eXtension that formal partnerships emerged and an effort to take these interests to an online environment emerged.

• The FFF CoP will indirectly partner with the Department of Education by including a link to our website in the Monday Letter released by the superintendent of education.

• The FFF CoP has recruited Chef Sara Labensky, author of the culinary textbook *On Cooking*, as a partner and expert with the “Prepare and eat more meals at home” behavior.

• The FFF CoP is working with the Culinary Institute of America to garner their expertise for the “Prepare and eat more meals at home” behavior.

• CoP has expanded to networking with external information systems (outside of Extension) to provide a broad knowledge base.

4. Barriers Removed

• The eXtension site has allowed us to collaborate, without the barriers sometimes imposed during cooperation directly between two land grant universities. Once the CoP develops and reviews content, it can be easily published to the eXtension site.

• Enabled us to work past traditional boundaries between land grand institutions to work together on content.

• eXtension has solved some of the “turf” and proprietary issues that sometimes can be problems (with external partners).

5. Reflections on Content, Process or Assumptions about Extension Work

*Evaluation*

• Facilitate development of logic model process.

• Mike Lambur was very helpful in Kentucky to look at how we can evaluate our site.

*Centralized Information Source*

• CoP members like the idea of having a large representation of information (all client oriented) in one location.

• CoP members report that one of the best things about eXtension is having so much information all in one place.
6. Miscellaneous Comments

• Provided a major foundation for assisting CoP members in obtaining vital resources that can be used in their organization or institutions.

• One more tool to provide unbiased, research based information and help people make decisions.

• Still attempting to engage more people in our CoP.

• Has pushed members to develop catchy and concise content that will adequately relay our message with creativity.

• eXtension offers a public forum for the individual members of our CoP.

7. Problem/Issues Identified

• CoP members are very positive about this process but struggle to find time to set aside to complete tasks and their eXtension work comes in waves.

• They (CoP members) make the most progress at face-to-face meetings.

• These (CoP) members are also very aware, concerned, and protective of their state’s county agents and how eXtension is or is not engaging them in the process of delivery of localized content.

• It is something of a struggle to get individuals comfortable with working in the wiki, and to maintain good working relationships between those who are wiki proficient and those who get confused at the log-in page.

• As a coordinator with an eye on Launch deadlines, team members let commitments and deadlines slide. My guess is that lack of personal contact makes it all seem very arbitrary, and since we don’t yet have a public face, the end value isn’t fully perceives. It would be wonderful to be able to pay Content Team leaders to ensure a commitment of time and energy to keep their team on track.

• We are working out our “style” for management and responsibility, though finding it difficult to harness all-volunteer labor.

• It has been a bit of a struggle to harness the power of the great expertise in our CoP. In trying to strike a balance of how we will work, we recognize that if we rigidly stick to working on the wiki only, we will lose many who don’t have the inclination to learn; conversely, by only working off-wiki, we lose some of the central tools, supports and systems that allow us to work as a community and build some stability of membership into the future.

• One of the major challenges that we see is that many institutions have their own websites. We are working to create a good resource base that enhances our members and partners’ work, rather than duplicating or overshadowing their efforts.
• I think it is fair to say that technical difficulties have hampered our creativity and we would have much more interactive material if the Moodle-wiki interface meshed better.

• We are still moving in fits and starts. Some embrace the collaboration efforts. Other experts have not warmed to this way of working – some issues are fundamental, others are system preferences collaborating with individuals they have never met in person, creating material for online, instead of local audience and working on wiki instead of “comfortable” programs.

Analysis of Interviews with CoP Leaders/Members (May-June 2010)

Provided below are the results from interviews with individual CoP leaders/members.

Q1. In what ways has eXtension pushed, stretched, or changed your way of thinking and doing your Extension work?

Q2. In what ways had eXtension helped you reflect on content, process, or assumptions about your Extension work?

Themes for Questions 1 & 2

One main overarching theme emerged from responses to questions one and two. This was “doing things differently.” Contained within this broad description, respondents reported significant changes in the following areas, which may be viewed as sub-themes: teamwork, client-oriented materials, new educational methods, broader content, and improved knowledge and skills.

• Teamwork: A majority of respondents talked about how they now spend time working in teams rather than individually and how doing so has improved their educational outreach efforts.

• Client-oriented materials: Respondents found that the materials they were producing were at a level too advanced for average clientele and more appropriate to an expert audience. They are now creating materials that can be readily understood and useful to the average citizen.

• New educational methods: eXtension has made available a whole new set of educational/outreach methods that are being used by respondents. These include webinars and interactive websites that allow client contact without the necessity of traveling to an on-site location.

• Broader content: Due to interactions within their CoP’s as well as interactions with other CoP’s, materials produced are broader in content. In addition, materials are being made available to a wider audience.

• Improved knowledge/skills: Respondents reported knowledge gains in their area of expertise as a result of working in CoP’s and preparing materials for eXtension. They also reported increased skills in preparing appealing, interactive materials and in the technology for making materials available remotely.
See Table 1 for direct quotes from interviews with respondents.

**Table 1: Selected Examples of Significant Statements of CoP Participants’ for Questions 1 and 2**

<table>
<thead>
<tr>
<th>Theme</th>
<th>Significant Statement</th>
</tr>
</thead>
</table>
| Teamwork                     | “Working in the CoP allows us to bounce ideas off each other.”  
|                              | “We take a team approach now.”  
|                              | “I don’t have to do it all myself!”  
| Client-oriented materials    | “I learned that materials I was producing were too advanced for clientele. Now I provide simpler, basic information that clientele need and can understand.”  
|                              | “Made us rethink the language we use, to explain things so clients will understand.”  
| New educational methods      | “It enlightened me on new ways to connect – new ways to communicate with clientele.”  
|                              | “It built my knowledge of new ways to do outreach and education.”  
| Broader content              | “Allowed me to look at the bigger picture because of interaction with others doing similar work on different aspects.”  
|                              | “I think about how things I develop could be used more broadly.”  
| Improved knowledge/skills    | “Has made me more aware of what’s out there.”  
|                              | “eXtension has made me better at what I do because I’ve had to put materials together.”  
|                              | “Helped me learn how I can make my work more appealing, more interactive, and how I can get it out remotely.” |

**Q3. In what ways has eXtension connected you with educational partners who are different than you and changed you?**

**Themes for Question 3**

Four main themes emerged from respondents’ answers to this question. They are: new partners, new perspectives, increased visibility, and new content source.

- **New partners:** A majority of respondents reported making contact with new partners in their own area of expertise, in related areas, in different areas, and with the communications group.

- **New perspectives:** Several respondents reported gaining new perspectives on their work, and learning from their new contacts.

- **Increased visibility:** One respondent reported that eXtension had helped her become nationally known which resulted in her successfully achieving tenure and promotion. It
was reported by another respondent that networking was the most important aspect of CoP participation.

- **Expanded content:** Respondents reported becoming aware of content created by their new contacts, feeling motivated to contribute materials to eXtension, and were pleased to be able to refer clientele to a single source for information.

See Table 2 for direct quotes from interviews with respondents.

### Table 2: Selected Examples of Significant Statements of CoP Participants’ for Question 3

<table>
<thead>
<tr>
<th>Theme</th>
<th>Significant Statements</th>
</tr>
</thead>
</table>
| New partners   | “It allowed us to work more closely with the communications group.”  
It’s given me the opportunity to get to know colleagues in the same area…that I would never have collaborated with before.”  
“I have ‘go to’ people now in related areas…broadening my expertise base.”  
“It has allowed me to interact with specialists and educators in fields other than communications….I really have a much broader network of colleagues.”  
“I have met so many people I wouldn’t normally…so it’s opened up a whole new world for me…” |
| New perspectives| “It’s been a way of developing…the opportunity to work with other people and learn from them.”  
“It has connected me with a lot of different partners…who are different than me…people who have different thoughts on things…”  
“I think it’s changed my broadness of thinking.” |
| Increased visibility | “Got promoted with tenure last year…eXtension really helped out…because it made me more nationally known as a specialist.”  
“…one of the most important aspects of working in a CoP is the networking.” |
| Expanded content | “Material wise, it enabled me to give them (clientele) a single location for a lot of different experts.”  
“I try to get more things on eXtension because of increased contact with partners.”  
“I connect with the content they (new partners) have developed.” |
Q4. In what ways have you worked to localize your eXtension content for use at the county/local level across the country?

Themes for Question 4

Five main themes emerged from respondents’ answers to this question. These are: regional information, local agent/educator participation, social networking sites, expose clientele to eXtension, and barriers to localization.

- **Regional information**: A number of respondents reported efforts to develop the ability to provide regionalized information on eXtension. They did this in several ways. Technology was employed to provide satellite imagery and map-based systems. A decision-making tool was being developed to allow people to develop their own plan based on the information they input.

- **Social-networking sites**: Encourage eXtension participation on other social-networking sites.

- **Expose clientele to eXtension**: Materials are being created that are appropriate and useful to local clientele. eXtension is being used as on-line support for state program.

- **Barriers to localization**: One respondent noted that it was difficult to localize since pesticide rules vary from state to state. Another stated that it was difficult to make data fit from state to state.

- **Local agent/educator participation**: Agents are being encouraged to participate in CoP’s, and information about eXtension and help with learning to use it is being provided to agents. Other local educators, such as school teachers, are being surveyed to determine what materials would be helpful at the local level.

See Table 3 for direct quotes from interviews with respondents.

**Table 3: Selected Examples of Significant Statements of CoP Participants’ for Question 4**

<table>
<thead>
<tr>
<th>Theme</th>
<th>Significant Statements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regional information</td>
<td>“What I have done…is develop a regional page for my state….”</td>
</tr>
<tr>
<td></td>
<td>“…develop a decision tool which allows people to develop their own plan based on their information.”</td>
</tr>
<tr>
<td></td>
<td>“…we covered everything by region. We did regional maps.”</td>
</tr>
<tr>
<td></td>
<td>“I work with utilizing satellite imagery for remote sensing in crop production and range management.”</td>
</tr>
<tr>
<td></td>
<td>“We’re working on developing a map-based system that’s based on vegetation or ecosystems throughout the nation.”</td>
</tr>
<tr>
<td>Social networking sites</td>
<td>“…we’re involved in social networking sites like Facebook and Twitter and participants are encouraged to become active…and use the Ask an Expert feature if they happen to have a question.”</td>
</tr>
</tbody>
</table>
Expose local clientele to eXtension

“We write in a way that the producer can understand.”
“I take it to all the local producer meeting that I do. I hand out brochures… encourage people to use the CoP.”
“I use the information on the website in my local programming to clientele. Instead of developing information on our state website…I refer them to eXtension.”

Barriers to localization.

“…the other real challenge…is making data fit all over the nation and writing articles that fit ….and that’s difficult.”
“…from state to state…the laws, the regulations…are different. When we put our information together we have to be very careful of the different local laws, rules, and regulations we have to deal with.”

Local agent/educator participation

“…have encouraged participation of extension agents in our CoP…and that helps to localize the content.”
“…giving them (local staff) an awareness of what is there by…sending things out electronically, e-mailing stuff to the county offices…helping them, encouraging them to work through problems.”
“…we try to get information to the extension personnel who work with the public.”
“…talking about it and …encouraging people to access it. I take it to the country extension meetings.”
“We’ve done …workshops with teachers to find out what information they’re using that we could make more available to them or find a resource for them.”
“…more interaction with county extension agents…helping them create more information for eXtension or just encouraging them to look at their local programs….and maybe finding resources that are available on eXtension that could help them…helping them navigate better.”

Q5. What barriers have you experienced in adopting eXtension as a resource in your programming efforts in your state/institution?

Themes for Question 5

Five main themes and three minor themes emerged from respondents’ answers to this question. Main themes are: lack of content, competition/confusion, learning necessary technology, lack of technological capacity, and credit for participation. Minor themes are: importance of face-to-face, eXtension hard to find, and not used on a daily basis.
• **Lack of content:** There is not enough content available in some areas and it is difficult to get people to contribute content.

• **Competition/confusion:** There is confusion over whether one should contribute to the national site or the state site. There appears to be competition among the various sites. It is not clear how to blend these competing interests. In addition, counties want agents and specialists to do local work.

• **Learning necessary technology:** The technology to use eXtension is viewed as difficult to learn and the task appears daunting to some people. Making the time to do so is also a factor.

• **Lack of technological capacity:** Some clientele, and even some staff, do not have the necessary technology to access eXtension.

• **Credit for participation:** eXtension is so collaborative it is difficult to get individual credit. Scholarship is not recognized and it is hard to get credit for working nationally. There is also the question of how tenure and promotion will be affected.

• **Importance of face-to-face:** It is important to continue face-to-face contact in order to assure continued support by local entities. Clientele expect this type of contact and some prefer it.

• **eXtension hard to find:** When you do a search, other sites come up rather than eXtension.

• **Not used on a daily basis:** Agents don’t see it fitting into their job on a daily basis.

See Table 4 for direct quotes from interviews with respondents.

### Table 4: Selected Examples of Significant Statements of CoP Participants’ for Question 5

<table>
<thead>
<tr>
<th>Theme</th>
<th>Significant Statements</th>
</tr>
</thead>
</table>
| Lack of content        | “…there isn’t enough content there.”  
“…extension people across the country have not put their material on eXtension.”  
“…the barriers I’ve seen involve getting people on board with eXtension as far as contributing content…people are busy developing programming for their states.”  
“…our biggest barrier is finding the appropriate way to get content on the eXtension website…without conflicting with other people’s programs (not duplicating).” |
| Competition/confusion  | “… (confusion over) whether they should be focusing their time and effort on eXtension or …on local websites.”  
“…there are competing interests… (national, state, local)…that one has to
satisfy to make sure that you are financially held in good esteem.”
“The university would like to see us doing...research and journal articles...for tenure and promotion. The county wants to see economic development or addressing needs they have.”
“…one challenge has been time management (to balance the demands)”
“I’m not sure our administration is totally bought into allowing eXtension branding over the top of them because…they still need money from the state to run…so we don’t lay people off.”
“…harder for administrator types to justify the existence of a given position if they’re doing things not specifically related to local issues and more related to national issues.”

| Learning necessary technology | “…some of the folks hesitate because of getting over the learning curve.”
|                             | “I think the technology part is still a little daunting compared to what they’re used to because nobody says you have to go through a webmaster and there’s not this whole set of guidelines that tells you how to get materials on line.”
|                             | “…thinking that you need a lot of high technology skills to be able to do stuff.”

| Lack of technological capacity | “…our state is so large and so rural… some of the folks (can’t access eXtension)…because of technology and the electronics.”
|                               | “…not having access to the internet because they live too far out. They don’t have high speed connections.”

| Credit for participation | “…very hard to convey the scholarship of eXtension…to determine any individual contributions ….documenting what I have done and how it should be interpreted.”
|                         | “It’s so collaborative that it’s hard to get individual credit.”
|                         | “..early on educators did not understand how the content could be used…without cutting them out of the picture.”
|                         | “„getting credit for doing these things (on eXtension)…we may not get promoted…”

| Importance of face-to-face | “..you still have a lot of very traditional folks that want to do face-to-face meetings which are still important and they don’t want to go to the website.”

| eXtension hard to find | “…what I find when I go to find some information about anything in particular…eXtension isn’t the first thing that pops up…it kind of befuddles me how people find the eXtension information.”

| Not used on a daily basis | “…a lot of people don’t understand why extension should go in this direction…they’re having a hard time understanding on a daily basis how eXtension fits into their regular job.”

6. What suggestions would you make to increase the adoption of eXtension as a resource to you in your programming efforts?

Themes for Question 6

Five main themes emerged from respondents’ answers to this question. These are: promotion/persistence/patience, target Extension agents, make more user-friendly, make site primary, and evaluation tools needed.

- **Promotion/persistence/patience:** A number of respondents stressed the need for continued promotion and advertising. There was also the thought that change just takes time.

- **Target Extension agents:** Agents need to become more comfortable using eXtension in their daily activities.

- **Make more user-friendly:** Make the site easier to find in a search, make materials on the site such that they could be easily understood by the average adult.

- **Make site primary:** Make eXtension the first “go to” site rather than state or local sites.

- **Create evaluation tools:** Evaluation tools are needed to measure impact to get sponsor support.

See Table 5 for direct quotes from interviews with respondents.

Table 5: Selected Examples of Significant Statements of CoP Participants’ for Question 6

<table>
<thead>
<tr>
<th>Theme</th>
<th>Significant Statements</th>
</tr>
</thead>
</table>
| Promotion/persistence/patience | “Across the system it’s just going to take time.”  
“…part of it falls back on us as far as the time do some in-state training and lead people through showing them what’s there, how to use it…the more people know what’s there and what kind of resource it is, the more familiar they get with it…the more the use will increase.”  
“…promotion…advertising…just making people aware that this information is out there.” |
| Target Extension agents        | “…what we want to do is make this just another tool in the toolbox that extension educators use which means that they would naturally think about eXtension instead of having to be prompted…”  
“…one of our target audiences for our CoP is actually other extension agents…I’m sure that throughout the U.S. many of us are doing the same work without knowing that there’s somebody else already holding that data.” |
Make more user-friendly

“…we are trying to take some of the materials that are in the network and break them down into content that is directly usable by the end user.”
“…I don’t know that it’s the most user friendly and easy to navigate. I have people say they have difficulty navigating it.”
“…I think it would encourage them (extension agents) if they found a way to take more relevant information to the public directly rather than having to interpret it at the local level…”
“(Provide) more ways to search and find what can be relevant at the local level than having to do a whole lot of work to find it…”

Make site primary

“…our Master Gardeners have really adopted it…probably out of necessity because they have so many questions they get asked every year and they use the FAQ system as a data base resource…”
“I think we’re going to have to have a shift of emphasis on eXtension and make a commitment as state and as regions to say, you know this is where our efforts are going to be, and if our efforts are there our content will be there and our resource area will develop. I have not found a state where it’s primary, only secondary. So long as that happens, the better content will almost always exist on the state level…there has to be a commitment to eXtension that it is primary.”
“Build the site as a national extension reference…getting them trained that’s the first place you would go to figure out what to do.”
“We need to have more support from higher up to really have eXtension be the number one resource (that extension professionals go to).”
“The state site gets far more hits than eXtension.”

Create evaluation tools

“…we’ve got to figure out better ways to evaluate it when the user goes there and gets some kind of life change…”
“…for us in academia to put the time into it to help build it…we’ve got to get some…impacts back out…some of the folks that we’ve approached as sponsors…want to know how many people are using it, what they are getting out of it to…give you some monetary support.”
7. You have been asked to tell a story about the past, present, and future of Cooperative Extension. What would that story be about? Please consider and comment on each time period.

Themes for Question 7

Five common themes emerged when considering the past, present, and future of Extension. These are: educational approach, the role of the agent, emphasis, funding, and audience.

The Past: The educational approach used in the past consisted of one-to-one contacts, onsite visits, and face-to-face meetings with groups of clientele. During these meetings, fact sheets and worksheets were often made available to clientele. The role of the agent involved making personal connections with people, gaining their trust, and fostering change. The emphasis was on local issues and technology adoption in agricultural and rural areas. Funding was adequate to meet local needs and employ a sufficient number of agents. If a local problem arose that required money to address the problem, funding could be obtained rapidly. The audience consisted of almost exclusively agricultural and rural clientele.

The Present: The educational approach includes little one-on-one contact, some face-to-face contact with groups - usually at conferences or workshops. Technology plays a significant role by providing information electronically to clientele via state and other (eXtension) websites. The role of the agent involves much more distant relationships with clientele providing information transfer. Agents are sorely pressed for time and some are experiencing health problems as a result. Part of the stress stems from the conflict between being of service to the local community and having to “tow the line” for the University by conducting research, writing journal articles, and obtaining funding through grants. Emphasis is on biotechnology with less emphasis on solving community problems. Funding continues to be reduced and fewer personnel are expected to do more. Extension has been downsized but its mission has not. Personnel are expected to seek grants to obtain funding for their work. Audiences served are much broader and include urban and suburban clientele and a much lower percentage of rural and agricultural people than in the past.

The Future: Educational methods will be almost exclusively web-based and will include webinars, podcasts, and other interactive and passive applications. There will be little or no travel and few face-to-face workshops. The role of the agent will involve little personal contact with clientele and consist of extending information on the internet. Agents will continue to be pressed for time as their numbers decrease and their duties broaden. Emphasis will be on providing information on the web so that computer-savvy and young people can rapidly access it. Funding will continue to decline. Audiences served will be those who have access to technology including high speed connections.

Concerns: When talking about the future, respondents also expressed a number of concerns including:

- People without technology will get left behind.
- People want personal contact.
- We will lose local connectivity and thus lose local support.
- The ability to effect change was based on personal relationships. We will lose that.
• There is lots of information out there. Who is to determine what is reliable?
• We are losing camaraderie within our own ranks. People are so consumed with technology there is little personal contact and relationship building anymore.

8. How do you see eXtension fitting into the story?

Themes for Question 8

Five themes emerged from responses to this question. They are: it complements what we do, it’s the next logical step, it has some benefits over traditional methods, and concerns.

• Complements what we do: We need to balance face-to-face contacts, which are important to people, with the technology eXtension has to offer.

• Next logical step: eXtension is going to be very popular due to the state of the economy.

• Benefits over traditional methods:
  o It’s better able to respond in a timely manner because information is already there on the web.
  o It is a great extender making it easy to bring people together to work and share their talents.
  o Able to get timely information out to educators.
  o eXtension makes us look like a unified agency that has credibility where experts will answer your questions.
  o Provides the interface between the internal network and the external network.
  o Being able to have contact with a real person makes it people-centric.
  o Younger people will use eXtension to find materials fast and efficiently.

• Concerns: Success depends on the commitment of administration to eXtension. If there is no commitment, eXtension will not grow and thrive. eXtension needs to become a trusted source of information to people which it has not done as of yet.
Conclusions

Transformative Effects

Based on the data acquired in this project, collectively from CoP’s and individually from CoP members, without question, eXtension is having a transformative effect in changing the manner in which these individuals do their Extension work. Key transformative themes and effects that emerged from the two data sets are:

• **Enhanced teamwork and professional contacts:** eXtension has changed the way that Extension professionals think and act about working together. A majority of individual CoP members commented on how they now spend time working in teams rather than individually. This has also led to an increase in their own expertise as a result of creating educational content in a CoP. Working in multi-institutional and state teams have made them more aware of research and educational activities occurring in other states and countries, has allowed them to make new contacts with other experts they may never have discovered (within other universities as well as other agencies), and has improved the scope of their educational outreach efforts. As one CoP member commented, “It’s given me the opportunity to get to know colleagues in the same area…who I would never have collaborated with before.” Finally, working in eXtension has allowed them to work past some of the traditional boundaries between landgrant universities to work together on content.

• **Increased utilization of new tools/technologies:** eXtension has provided the technical expertise to allow individuals to learn and explore new tools/technologies that are not readily or easily accessible on university campuses. As one CoP noted: “eXtension has pushed some of the CoP members to work with new technology such as the wiki, breeze conferences, and the FAQ system.” eXtension has made available a whole new set of tools/technologies (e.g., webinars, chats, Facebook, Twitter, YouTube, blogs) that are broadening and enhancing Extension’s capabilities to reach and interact with traditional as well as new digital audiences.

• **Broader content and outreach:** Due to interaction within and among CoP’s, educational materials are broader in content and are being made available to a wider audience than could have been achieved through an individual institutional/state focused effort. As one CoP commented, “CoP members found that participating in a collaborative work environment stimulated their outreach efforts because they were not responsible for being the sole source of all information.” This comment appears to emphasize the notion that Extension professionals involved in eXtension are realizing that we can leverage the resources of the entire system to meet the needs of state and local clientele by working collaboratively together.
**Barriers to Adoption**

In addition to the transformative effects noted above, CoP’s also commented on barriers to the adoption of eXtension.

- **Lack of content:** There is not enough content available in some areas and it is difficult to get people to contribute content.

- **Competition/confusion:** There is confusion over whether one should contribute to the national site or the state site. There appears to be competition among the various sites. It is not clear how to blend these competing interests. In addition, counties want agents and specialists to do local work.

- **Learning necessary technology:** The technology to use eXtension is viewed as difficult to learn and the task appears daunting to some people. Making the time to do so is also a factor. While CoP members are positive about the process, they still struggle to find time to set aside complete eXtension tasks.

- **Lack of technological capacity:** Some clientele, and even some staff, do not have the necessary technology to access eXtension.

- **Credit for participation:** eXtension is so collaborative it is difficult to get individual credit. Scholarship is not recognized and it is hard to get credit for working nationally. There is also the question of how tenure and promotion will be affected.

- **Importance of face-to-face:** It is important to continue face-to-face contact in order to assure continued support by local entities. Clientele expect this type of contact and some prefer it.

- **eXtension hard to find:** When you do a search, other sites come up rather than eXtension.

**Enhancing Adoption**

Suggestions for ways to enhance the adoption were also made by respondents.

- **Promotion/persistence/patience:** A number of respondents stressed the need for continued promotion and advertising. There was also the thought that change just takes time.

- **Target Extension agents:** Agents need to become more comfortable using eXtension in their daily activities.

- **Make more user-friendly:** Make the site easier to find in a search, make materials on the site such that they could be easily understood by the average adult.

- **Make site primary:** Make eXtension the first “go to” site rather than state or local sites.
• Create evaluation tools: Evaluation tools are needed to measure impact to get sponsor support.

How eXtension Fits into the Future of Extension

Finally, when asked how eXtension might fit into the future of Cooperative Extension (see question 7 above), the following themes emerged.

• Complements what we do: We need to balance face-to-face contacts, which are important to people, with the technology eXtension has to offer.

• Next logical step: eXtension is going to be very popular due to the state of the economy.

• Benefits over traditional methods:
  o It’s better able to respond in a timely manner because information is already there on the web.
  o It is a great extender making it easy to bring people together to work and share their talents.
  o Able to get timely information out to educators.
  o eXtension makes us look like a unified agency that has credibility where experts will answer your questions.
  o Provides the interface between the internal network and the external network.
  o Being able to have contact with a real person makes it people-centric.
  o Younger people will use eXtension to find materials fast and efficiently.

• Concerns: Success depends on the commitment of administration to eXtension. If there is no commitment, eXtension will not grow and thrive. eXtension needs to become a trusted source of information to people which it has not done as of yet.

Next Steps

We believe that we have provided sufficient substantive evidence through this project thus far that eXtension is indeed transforming the way in which individuals participating in CoP’s are doing their work as a result of eXtension. This is but a first step. Our next challenge is to determine the extent to which eXtension is changing the way Extension organizations do their business, especially at the local level. This is a challenging task because we have found that adoption and implementation of eXtension within a state Extension system is strongly influenced by support or non-support of the Extension administration. Efforts to promote adoption and implementation solely by eXtension without support of Extension administration have yielded poor adoption and implementation results.

With this in mind, our next steps are to partner with the University of Vermont in their efforts to develop a tool kit for eXtension. Under the leadership of Betsy Greene, they will be developing a set of materials (i.e., the tool kit) to promote eXtension at the local level. Part of this tool kit will be an assessment to determine local agents’ familiarity and use of eXtension. This will be administered prior to and then after the tool kit has been implemented. eXtension will be working with Betsy in the development of this assessment. We believe that the use of
this assessment instrument will give us a good measure of adoption of eXtension at the local level that can be utilized system-wide.

**Reference**