The Nature of Organizational Learning in a State Extension Organization

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Abstract: *Our complex and rapidly changing world demands a more nimble, responsive, and flexible Extension organization. The findings from a study involving interviews across a state Cooperative Extension Service paint a picture of organizational learning in Extension. Four key dimensions of learning surfaced. Of particular importance are the application of a model for organizational knowledge creation and the characteristics of transformational organizational learning for innovation. Recommendations focus on actively supporting organizational learning, developing ways to tap the vast knowledge and skills of Extension professionals, and institutionalizing means to transfer learning.*

The changing nature of state and local budgets, the need to be responsive and proactive in a rapidly changing and increasingly complex environment with a widening diversity of constituents, the increasing competition from other education organizations worldwide, and the expectations of accountability and engagement demand that the Cooperative Extension Service be able to learn as an organization. Like any mature organization, Extension's vitality, flexibility, creativity, and capacity to meet these challenges diminishes unless we are able to learn as an organization (Garvin, 2000).

Former Dean and Director of Oregon State University Extension Service, Lyla Houglum said, "We have to be willing to change. No, we have to enjoy change—and be ready to change again and again" (2003, para. 28). Extension leaders and workers today must be skilled at working in a constantly changing environment and "evolve as the needs of the people evolve" (McDowell, 2001, para. 29). Organizational learning is essential to achieving and sustaining change and engagement in higher education and Extension (Boyce, 2003; NASULGC, 1999, 2002).

Organizational learning has its own challenges and characteristics within Extension. Extension focuses on non-traditional, and usually non-credit, learners and seeks to integrate the research and teaching functions within land grant universities. The scope of Extension includes many disciplines, and the organization is literally spread across the geography within a state. With this unique make-up, research looking specifically at the factors contributing to organizational learning in Extension has been limited (Franz, 2003, 2007; Ladewig & Rohs, 2000; Rowe 2010; Venters, 2004).

Purpose and Methods

The nature of organizational learning within the Extension Service of a major Midwestern land-grant university was explored through qualitative analysis of semi-structured individual

and focus group interviews (Morgan, 1998; Patton, 2001) involving 68 Extension professionals and 11 State Extension Council members. The study occurred in the midst of a transition following a consolidation of the organization's administrative structure. Table 1 provides a summary of the participants in the study. Phase I involved gathering perspectives from top leaders—both former and those in new roles—and mid-level leaders. Phase II involved interviewing state and local specialists and the State Extension Council. The specialists were identified through descriptions of organizational learning obtained in Phase I and by snowball sampling.

Table 1.
Overview of Organizational Participants in Study

Extension Groups Interviewed	PHASE 1			PHASE 2		
	Top Leaders	**Program Directors**	**Regional Directors**	**State Specialists**	**Regional Specialists**	**State Extension Council**
Number of Participants	8	5	8	22	25	11
Type of Interviews	Individual	Individual	Two focus groups	Four focus groups and one individual	Five focus groups and one individual	One focus group
Representation	Current and immediate former top leaders	All except Community Development	All	All program areas except CD; included several other campuses	All program areas except CD; all regions of the state	All invited
Mode	Face-to-face	Face-to-face	Face-to-face and Centra®	Face-to-face	Centra®	Face-to-face
Centra® is a web-based meeting technology.						

Transcribed interviews were coded and analyzed for patterns and themes, using nVIVO 2 software and constant comparative analysis to develop concepts to explain the nature of learning in the organization. Several methods were used to check the credibility, consistency, and trustworthiness of the data (Merriam, 1998). These included comparing the interview data from various participants, comparing interview data with organizational documents, and the researcher reflecting as an organizational participant, using a non-Extension peer to also code data for comparison, presenting the data to participants for accuracy checks, and maintaining an account of the entire process.

Findings

The Nature of Organizational Learning

Participants' perspectives of organizational learning were not defined by their position in the organization or by their academic discipline. In general, they noted that organizational learning is a shared process of learning that intricately links individual learning with collaborative learning as a whole. Participants attributed the purposes of organizational learning as to carry out the mission of the organization, maintain its culture and history, and deal with internally induced and externally imposed changes in order to survive and thrive.

Participants described organizational learning with terms, including "mental models,"

"teamwork," "experimentation," and "communication." Analysis of their descriptions revealed four key dimensions of organizational learning in Extension (Figure 1).

Figure 1.
The Sphere of Organizational Learning: Four Key Dimensions
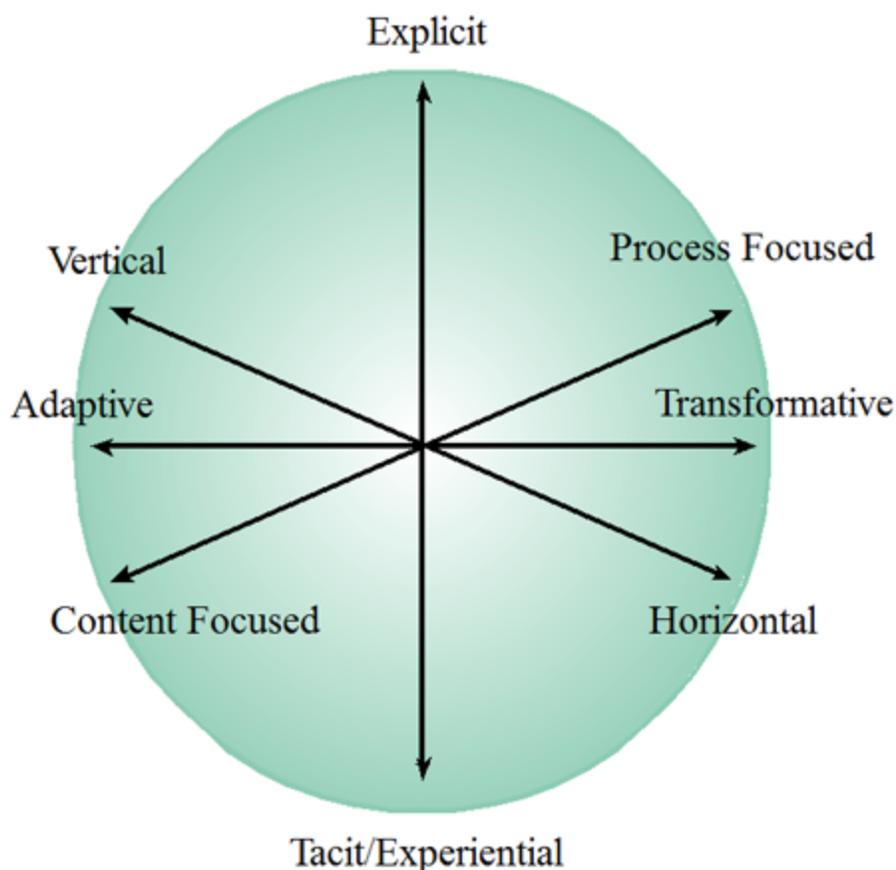
The Directional Dimension

Key differences were noted about the composition of the organizational positions held by those involved in the group learning process. Horizontal learning occurred within program units, regions, or teams through peer-to-peer experiences such as in-service education, the self-organized breakfast meetings of program directors, and program teams consisting of regional faculty or state faculty. Vertical learning occurred across the organization's hierarchy, with learning from the top down noted most often. Examples cited included faculty meetings consisting of interaction between leaders and faculty, and opportunities that engaged Extension council members interacting with leadership. Multi-directional learning included horizontal and vertical aspects. However, the context made a difference, as one participant noted how organizational learning requires all aspects.

> You can't just share with your co-workers at the specialist level, and it [new concept or way of doing] really becomes a statewide change in program. It has to be shared laterally, and . . . . it may not be straight up and down. It may be a zigzag path of learning.

The Formality Dimension

Informal, experiential learning consisted of hallway conversations, socializing at meetings, mentoring, and other casual information sharing. Formal organizational learning included annual conferences, planning meetings, task forces, program development teams, and in-service education programs.

The Focus of Learning Dimension

The focus of the organizational learning encompassed processes, the organization's mission, and culture (Martin, 2002), and the educational content itself delivered as part of the organization's mission. Some learning was program specific, while other learning was specific to an Extension region or to the whole organization. Regardless of learning locus, there was equal or more emphasis on the knowledge creation processes than the specific content of the learning. Like Von Krogh, Ichijo, & Nonaka (2000), some participants noted the most critical transfer of learning across the organization was a process, such as that of specific ways for engaging people in decision-making and collaborative learning; however, formal processes to transfer such knowledge did not really exist.

The Orientation to Dealing with Change Dimension

The most commonly cited adaptive learning entailed making adjustments to processes and programs such as altering curricula, changing a conference venue, or modifying new employee orientation. Participants described adaptive learning as "being reactive," "adjusting to change," and "having feedback systems and being able to listen to those systems and adjust accordingly."

However, the transformative learning was marked by thinking outside the box, challenging the underlying assumptions or status quo, and regenerating ways of doing business. One leader said it means, "to step back and view what is going on from the outside and look in" with a different set of eyes. Another participant said, "We can't be the way we used to be. We can't think the way we used to think. We can't perform the way we used to perform and succeed." Another participant cited eXtension as a key example that shows a radical shift in way of thinking.

Transformative Organization Learning

Like Franz (2007), Extension professionals in the study reported here noted how transformational organizational learning is crucial for dealing with the multiple changes and demands of the world and for creating breakthrough solutions. At the same time, they noted the difficulty in fostering transformative organizational learning. Not surprising, the examples that stood out as transformative learning were limited but provided a context for developing a richer understanding.

Examples of the rare, but rich transformative organizational learning that were frequently mentioned included the grass-based dairy program, the State Extension Leadership Development Program, the [Extension] Council Leadership Development Program, and the Community Development Academy. Each of these examples shared five key characteristics that are well supported by the literature and important for fostering transformational learning in the Extension organization.

- Involvement of a diverse array of people and perspectives, including state and local Extension educators, outside agencies, the target audience of our programs to work as a team (Franz, 2003; Hock, 1999; Morgan, 1997; Nonaka & Takeuchi, 1995);

- Team members working as "co-learners" (Bruffee, 1999; Nonaka, 2004)—which resulted in the a feeling of inclusion and empowerment (Axelrod, 2000) and change (Blewett, Keim, Laser & Jones; 2008);

- Inquiry and questioning of the status quo in a safe and non-threatening environment (Argyris & Schön, 1996; Franz, 2007; Gozdz, 2000; Morgan, 1997; Nonaka & Takeuchi, 2004; Rowe, 2010; Stewart, 2001);

- Drawing on past organizational experiences and processes, using analysis and reasoning, and engaging the senses and emotions for collective learning (Nonaka & Takeuchi, 1995, 2004; Von Krogh, Ichijo, & Nonaka, 2001); and

- Incorporation of the various aspects of learning—multi-directional, formal and

informal, process and product, and adaptive—into a cycle of learning and organizational knowledge creation (Nonaka & Takeuchi, 1995, 2004).

Knowledge Creation and Transfer of Learning

Organizational learning in Extension—whether adaptive or transformative—illustrates Nonaka and Takeuchi's (1995) model of organizational learning as knowledge creation, application, and transfer (Figure 2). They demonstrated that newly created knowledge can "spiral" throughout an organization to result in ongoing interaction, reflection and innovation.

Figure 2.
The Knowledge Creation Process (Nonaka & Takeuchi, 1995)
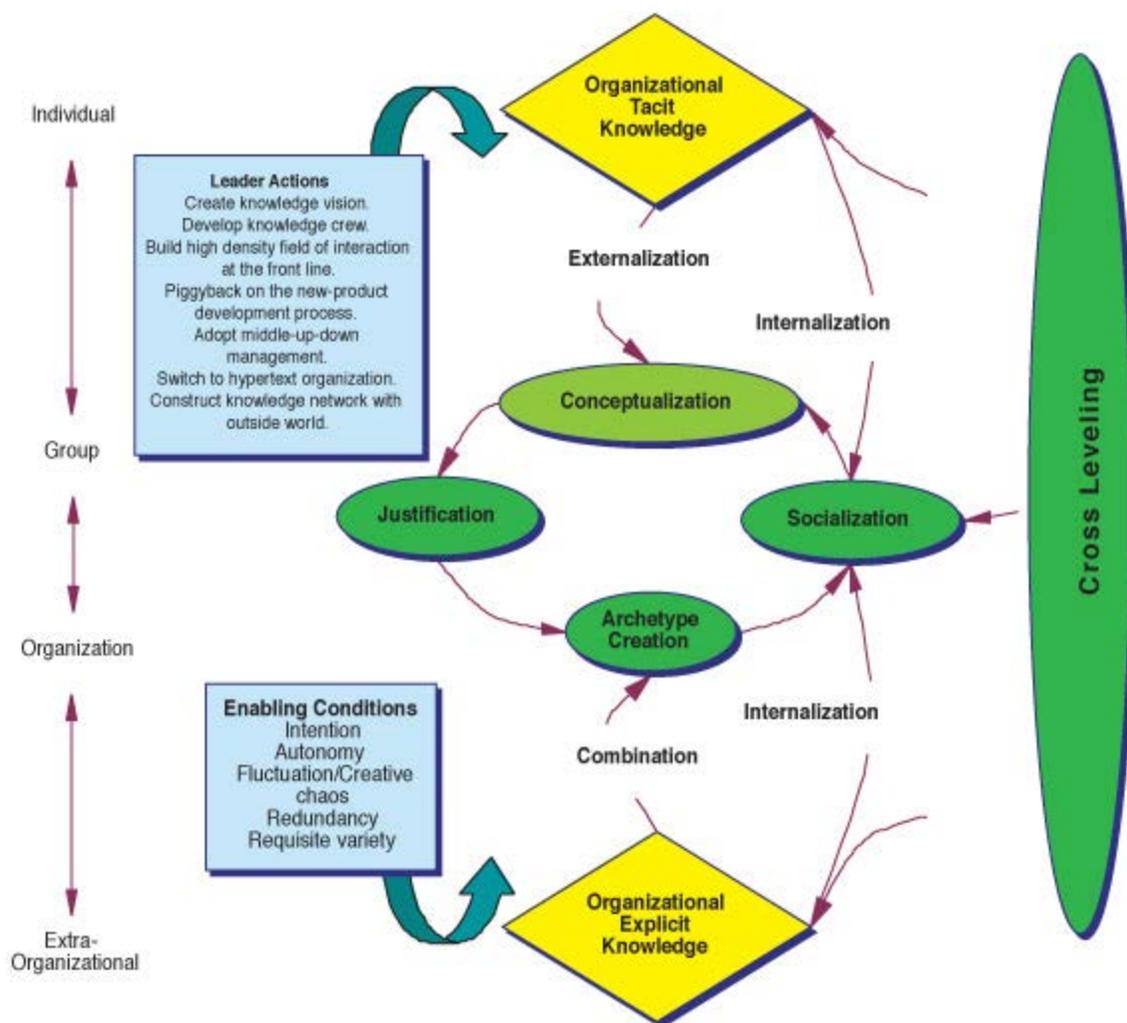
Extension participants often noted how organizational knowledge creation occurred in smaller groups, regardless of location in the organization or the focus of learning. Axelrod (2000), Eales (2003), Gozdz (2000), Nonaka and Takeuchi (1995), and Von Krogh et al. (2000, 2001) found that organizational knowledge creation and learning requires cross-organizational, diverse, and autonomous teams or micro-communities. Several aspects of organization learning in these micro-communities surfaced in the study specific to Extension.

- A micro-community for learning was not always synonymous with officially designated teams. Some learning communities were effectively self-developed and governed (Leholm & Vlasin, 2006). Both configurations fostered organizational learning.

- The program leaders group was one emerging micro-community. This group was based on reciprocal relationships, a shared desire to learn, and common goals and

vision (Katzenbach & Smith, 2003; Leholm & Vlasin, 2006). New knowledge most often emerged through the informal socialization and time spent together. Then the group began officially designating tasks, initiating action, and developing internal coherence and identity (Von Krogh et al., 2000).

- Some of the micro-communities functioned as communities of practice focused on professional disciplinary learning within or across program areas (e.g., the pasture-based dairy group). Some learning focused around tasks, such as work groups established to deal with transitional issues resulting from organizational consolidation (Wenger, 1998; Engestrom [in Eraut, 2002]).

- Often cited barriers to effective organizational learning were frequently associated with individuals or groups focused on self versus the organization or a focus on individual learning (Von Krogh et al., 2000). Terms used by Extension faculty and leaders to illustrate these barriers included "competition," "silo mentality," "turfism," and "unwillingness to engage."

Context for Learning

Participants spoke about the various means for creating, sharing, and transferring learning that applied to all four dimensions of organizational learning in Extension. The face-to-face interactions were crucial to sharing of tacit (and taken for granted) knowledge among individuals and having group conversations to develop new ideas and concepts. Extension professionals noted virtual interaction to be appropriate for creating the right context for internalizing and reinforcing knowledge (individuals making explicit knowledge tacit) and documenting and/or converting knowledge into written or visible forms (explicit knowledge) such as policies, curricula, and new programs (Von Krogh et al., 2000). An array of experiences was important to creating opportunities for interactions as part of Extension organizational learning. These included regular meetings, brainstorming sessions at a retreat, via the Internet or conference call, or when two professionals talked over lunch, dinner, coffee, etc. outside of work.

Extension professionals emphasized that creating the right context appropriate to the learning situation is critical (Marsick & Watkins [in Pace, 2002]; Örtenblad, 2001; Stewart, 2001). This explains why choosing a particular technology or venue to foster learning was cited as successful for one program or regional director and not another, or why one director experienced success and failure in different contexts. Von Krogh et al. (2000) used the Japanese term "*ba*" for this essential creation of shared space for interaction and learning.

The bottom line? Communication is essential to organizational learning. As one state specialist explained:

> WE'VE GOT TO TALK TO EACH OTHER! [original emphasis] You can have whatever system and processes set up, but if you're not talking very frequently in non-critical situations, there is just not the ability to pass along the kinds of conversation where you're going to transfer knowledge. Yeah, it takes time. . . . Talk to each other!

Recommendations

Organizational learning is key to managing change and organizational survival. To transcend and transform the organization includes adaptive and transformative learning, multi-directional learning, experiential and formal learning, and focus on both content and process. Following are a few key recommendations for Extension professionals to use in their situations regardless of where they sit within the organization.

- *Build in the concept of organizational learning—learning as group—into the vision for the whole organization, for teams and working groups, for multi-state and multi-organizational work, and for program learning experiences.* The responsibility for learning lies across the organization at all levels. We all have a responsibility to

creating more opportunities for "learning up the organization," as one professional put it. This means we have create safe and real opportunities for those "below" us (even when we are a local educator) to teach us and help us learn. We have to be willing also to engage with those "above" us as well as our peers and outside partners.

- *Incorporate—don't bash or negate—socialization as a key part of organizational learning.* Create space—informal and formal times for relationship building, interaction, and learning. Create experiential learning opportunities. Budget pressures notwithstanding, providing mentors and opportunities to interact and learn from those who have traveled the path is important. Use technology to reinforce the relationships and face-to-face learning. With the advent of Facebook and social media, the opportunities to use these venues for additional means informal learning and socialization are also growing. Remember, "We have got to talk to each other!"

- *Work to overcome the "silo" mentality.* Create cross-disciplinary or cross-functional teams, work groups, and micro-learning communities at any level to foster learning and the transfer of knowledge (Venters, 2004). We have to integrate a "systems" approach into the practices of Extension in order to learn and change vs. simply adapt. We have to think and act outside the box.

- *Support teamwork, communities of practice, and the emergence of self-directed teams.* Providing time and training in good team development, reinforcing processes for collective creation of new knowledge, and rewarding those involved in the shared process for their results are critical. So is modeling the process.

- *Change ground rules to make it safe and expected that one should challenge the underpinning assumptions or the status quo.* We have to practice this and apply it in the situations where we have the ability to allow this permission. Local Extension professionals all the way to the director of Extension have this ability in the context of our work. One program director laid out the challenge, saying, "We operate in an educational institution that places the highest value on learning. And yet I would probably have to say that the way in which we operate does not always line up with what we say is our highest value."

- *Create space for competing interests and ideas through dialogue that leads to common understanding.* Exploring and synthesizing opposing and differing ways of thinking (even those that threaten us) occur as part of the learning process and contribute to the competitive advantage of an organization (Nonaka & Takeuchi, 2004). Processes of dialogue and synthesis help build trust and reduce the "silos" so frequently mentioned by Extension professionals.

- *Invest in systems that aid in organizational learning and transfer.* As one study participant advocated, successful organizational learning requires "some kind of mechanism that captures that learning over time so the learning doesn't just reside with individuals" and is "captured within the organization." We need to use excellent knowledge management systems and state-of-the-art technology in order to communicate, learn, make decisions, transfer knowledge, and apply to new situations and contexts. But we also need to pay attention to ways of knowing and accessing the range of skills and experiences of Extension professionals.

- *Pay attention to how we make organizational knowledge and experience available and understandable for new and existing Extension professionals for application in new contexts.* We need to learn from our processes and translate them into new situations and make them available for new professionals and participants in our organizational learning processes. As one Extension leader in study pointed out, "If a program achieves results, how that program achieved those results should be shared and should be adapted within the organization." It can be as simple as providing ways for new faculty and staff to learn and observe how we do things, get effective results, engage our public, and share what is being learned.

> *Enhance the knowledge base of the organization* by supporting organizational learning through reflection, evaluation, and constant feedback in every aspect of Extension work both internally and externally.

Conclusion

The "future has no shelf life" (Bennis, 2001, p.5), and living in a learning society is a matter of survival that has led to organizations emerging as networks that place "great emphasis on 'learning how to learn' or creating the 'learning organization'" (Duckett, 2002, p. 62). The increasingly complex and changing world is demanding a nimble, responsive, and flexible Extension organization. Cultivating an organizational learning culture cannot be left to chance. It necessitates negotiating a balance between providing structure and control, and allowing sufficient freedom and autonomy for innovation. Extension's engagement with communities, constituents, partners, and the rest of land-grant university requires the collective ability to adapt, challenge previous assumptions, and chart new paths. All of these are necessary to remain proactive and responsive to change, carry out the mission, and create value added outcomes. As Houglum (2003) concluded, a great deal of work is needed to learn, un-learn, and re-learn in order to renew and fulfill the social contract of Extension and the land-grant university.

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