Journal of Extension
www.joe.org

September 2018
Volume 56
Number 5
Article # 5FEA4
Feature

Special Issue on Innovation 2018

Taking the Leap: Exploring a Theory of Program Innovation

Abstract

Innovation in Extension is often referred to as something tangible, such as a new resource or technique or new concepts. However, these things result from a program innovation process. In this article, we elaborate a grounded theory of how this process unfolds in the context of Extension. Through analysis of data from a national survey of practitioners from innovative programs, a panel presentation, and interviews with faculty at the University of Minnesota, we describe seven factors that influence what prompts innovation and how the process tends to unfold. We synthesize a capitals-based conceptual model and discuss implications for diagnosing and strengthening program innovation.

Keywords: program innovation, program development, innovation process, future of Extension, organizational development

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Introduction and Background

Catalyzing and supporting innovation is a historic purpose and ongoing mission of Extension. In celebration of Extension's golden anniversary, for instance, C. M. Ferguson (1964) claimed, "Extension's history has been one of innovation—in methods, in subject matter, in audience. . . . Its success was measured by the innovations it succeeded in getting adopted" (p. 153). Rogers (2010) has described Extension as a model for innovation diffusion. Gould, Steele, and Woodrum (2014) celebrated the Extension centennial as a "century of innovation" (title). Given changes in our competition, participant preferences, learning technologies, and other external pressures, however, there is a growing recognition of the need for innovation in our own structures and practices to sustain and refresh our institutional viability. Acknowledging that Extension is no longer a unique business model, West, Drake, and Londo (2009) cautioned that "dramatic transformations must occur to ensure Extension's future" ("Extension at a Crossroads," para. 2). Franz and Cox (2012) called for widespread efforts toward disruptive innovation to sustain the relevance of Extension programs. Meyer, Boyce, and Meyer (2015)

issued a call to embrace innovation as a core process for growing and strengthening program impact and value.

Those of us who work in Extension are called on to be innovative in our organizational and program development. Meyer et al. (2015) drew from research in the fields of innovation, education, and evaluation to propose an integrative theory of how tangible organizational and program improvements result from an innovation process, or an ongoing, iterative process of translating new ideas into improved program performance. They contended that the productive tensions that arise between our reflexive practices of designing, constructing, and evaluating programs over time ultimately drive innovation to strengthen impact and value. They also suggested that individual, team, and organizational factors are likely influential in reinforcing or resisting program innovation. However, it remains unclear how the process really unfolds in the context of our Extension practice and, more precisely, what factors can prompt, reinforce, and sustain innovation.

Purpose and Research Questions

For the research described herein, our purpose was to develop a more grounded and practical understanding of program innovation. We were guided by three key research questions:

- What prompts innovation?
- How does it feel to have taken that leap?
- What were the challenges along the way?

Through a qualitative analysis of data from University of Minnesota Extension and other Extension organizations across the country, we aimed to elaborate how the concept of innovation is operationalized in the context of Extension programming and what factors are perceived to reinforce or resist the program innovation process.

Methods

We used a grounded theory approach (Corbin & Strauss, 1990) to develop our theory of how program innovation unfolds in the context of Extension by systematically examining real-world practice. Following a sequential mixed-methods approach (Creswell, 2003), we administered a protocol of open-ended and semistructured questions using three different data collection methods: (a) an online survey sent to a nationwide group of 63 Extension practitioners who have been spotlighted as program innovators on the *Working Differently in Extension* podcast, (b) a University of Minnesota Extension conference panel presentation and world café discussion, and (c) in-depth interviews with three University of Minnesota Extension teams from different content areas who have been recognized as innovative in their programming. All qualitative data were transcribed and coded according to emergent themes (Patton, 2015).

To strengthen context validity, we drew from our different research and content backgrounds in family development, youth development, and natural resources as we collaborated in analyzing the data. To strengthen reliability, we used a modified data jam approach to simultaneously explore our data set for the purpose of producing initial theories and visualizations (University of Wisconsin Extension, n.d.). A data jam involves colleagues' working together on a data analysis project that can be conducted over a short period and results in increased reliability because researchers have worked together to code materials and develop an analytical manuscript. Starting with themes generated from the conference panel presentation and accompanying discussion, we worked together in the Google Documents and Google Sheets platforms to repeat cycles of

analyzing our survey data and interview transcripts and discussing and refining our themes and codes.

Finally, we collaborated online to refine our conceptual model and produce this article.

Results

Demographics

We received and analyzed 27 surveys (43% response rate) from individuals describing the natures, prompts, and processes of their program innovations. Responses represented programs from 20 Extension organizations (19 state organizations and one multistate grouping) that were distributed across the country and involved different program content areas. Participants represented a range of county-, region-, and university-based positions, although the majority (14 respondents) characterized themselves as researchers or specialists. Participants also were relatively career mature, insofar as 19 participants reported having 7 or more years of experience with Extension. The majority (14 respondents) characterized their programming as formative to mature. However, some participants (9) described their programming as "other," typically because of an ongoing process of tinkering. In the words of one participant, "Some program events and resources have been developed and delivered, and they are constantly evolving."

We also conducted and analyzed three 1-hr interviews with five individuals. These interviewees were from University of Minnesota Extension and represented a range of experience, from 3 to over 20 years. Two of the participants were statewide program specialists or directors. Three were regional educators who develop and deliver programming in a specific content area. Three individuals representing two cases characterized their programming as formative. Two individuals representing one case described their program development as ongoing or periodic and not really fitting conventional formative-to-mature categorization.

Thematic Results

Analysis of qualitative data from 27 surveys and three interview transcripts resulted in over 200 individual coded segments of text. Through collective analysis of these coded segments, we identified seven discrete, but interactive, factors perceived to prompt, reinforce, or resist program innovation. These factors are needs, opportunities, individual characteristics, team characteristics, approach to innovation, institutional support, and stakeholder support. In this section, we describe these factors, and their associated themes, and then identify some interactions among the factors.

Needs and Opportunities

Needs and opportunities—external forces that drive program change in either a positive or a negative way—were often the prompt for innovation. Needs are the various external pressures on program performance such as changing demographics, reduced funding, or changes in organizational policies that seem to necessitate innovation to sustain program performance. Participants also perceived opportunities in such forms as new audiences, emergent technologies, additional funding sources, and changes in the field that called for them to be innovative to grow or improve programming. Quotes in Table 1 exemplify needs and opportunities that drive program innovation.

Table 1.

Needs and Opportunities

Theme	Quote
Needs are organizational or other external pressures that compel changes in programming.	This is especially challenging in contexts in which institutions are forced to operate within grant-driven context, because evaluation/analysis can easily become checkboxes that need to be cleared, rather than being adequate and methodologically responsible assessments. In addition, current financial restraints overly draw attention to innovation that aims at issues that allow for bringing in grants; but grants are typically 5–10 years behind the curve. It has been challenging to draw folks' attention to the issues that are on the horizon in such a context.
Opportunities are perceived possibilities for strengthening program performance that call for innovation.	I have discovered the importance of helping Extension professionals understand the "why" of changing their approach to their work before getting to the "how," which typically includes tech adoption. Otherwise, we continuously try to fit a square peg (technology) into a round hole (how we currently work, reach and engage audiences, and deliver programming). This discovery, among many others, is what initially prompted my need to model innovation and change, and hopefully inspire others to do the same.

Individual Characteristics

Individuals with certain mind-sets and capabilities were commonly perceived as more apt to pursue innovation in tackling needs and responding to opportunities. Such individuals were described as being both sensitive to program needs and on the lookout for opportunities. As illustrated in Table 2, these individuals are attuned to conditions for innovation, oriented toward trying new things, and able to persist through resistance. Participants recounted a dedication to cultivate buy-in from their colleagues and administrators and develop the social capital to finance and drive innovation. It also became apparent through our interviews that these individuals are capable of managing their egos to work with colleagues and stakeholders. This characteristic seemed especially critical for growing and working with formal and informal teams, endeavors that are necessary for growing and scaling program innovation.

Table 2.

Individual Characteristics

Theme	Quote
Perceptiveness is an ability to recognize and act on needs and opportunities for innovation.	What worked well is that I had anticipated and positioned myself to catch the wave of public interest just as it was starting. I also had the relevant experience, skills, creativity, information, and gumption to do it. As always, there was a little bit of luck involved, but my preparation and insight allowed me to take advantage of circumstances and be the right person, at the right time, in the right place.
Commitment is persistence to stick with an innovation trajectory.	In order to work innovatively, I have had to dismiss the barriers that many in the system use as excuses to not innovate . . . and created [*sic*] my own path around the barriers. This often included doing the work, getting results, and asking for forgiveness later.
Collegiality is an orientation toward cultivating the support and social capital needed to make innovation possible.	I think some of my permission to be innovative comes from the fact that I've really spent a lot of time developing real and authentic relationships with community partners. . . . Then, there's, like, this reputation of this is how stuff works in the community, and that starts to, in some ways, trickle back to people within the organization that make decisions. . . . I think there's something really powerful in that, to be honest. So I do think some permission comes from the fact that community partners are embracing your way of working with them, and they see that as valuable, and . . . it feels like that gives you a degree of permission.
Ego management is an ability to uplift and navigate the work of colleagues and supporters.	Sometimes when you're . . . doing sort of leading-edge work, or you're pushing, you're not always the best messenger. And so what I think we do . . . also comes from

	knowing when we need to step back and allow others to lead, or step back and allow others to be sort of a champion or advocate for something. So when there's all of this interpersonal stuff, it's like ego management, right, like you need to manage egos. And I think if you start to feel like your . . . hair on your neck starts to stand up. I often, like, when I'm in that place, I'm like, "Okay what is that about? Is that me, or is that something else?"

Team Characteristics

Although teams are substantially variable in form and composition across different institutions and programs, the role of teams also emerged as a common factor in helping individuals develop and enact program innovation. Survey and interview participants perceived these organized groups of individuals, whether formal work teams or more informal affinity networks, as encompassing the collective capacity necessary to grow and scale innovation. As evident from Table 3, effective teams provide the organized structure for making sense of needs and opportunities and divvying up and carrying out work.

Table 3.

Team Characteristics

Theme	Quote
Varied expertise is a capacity of teams to spark and scale new ideas and strategies.	The work was done by a [existing work team], and so we knew what strengths each of them [team members] brought to the table, and we just farmed it out in terms of those strengths. Some of them were better at organizing in detail, and some are better at creativity. . . . And so we just relied on the strengths of those around the table, each doing something that they were good at.
Communication is an ability of team members to share and understand innovative ideas, strategies, and work plans.	A key area that can always be improved is communication—internal communication with team members, external communication with funders and program participants.
Trust is a characteristic of team members who feel safe in sharing their ideas and providing critical feedback and feel	And, we have a trust level too within that group that if you say you're going to get it done, you follow through. You know, I've

assured that others will follow through on commitments.	been in many groups where, if I'm not invested in the work, my follow-through isn't really as strong as it should be perhaps. But, in this case, you just never feel like you want to let the team down.

Some interview participants described the value of intentionally building teams of individuals with the right mix of areas of expertise and characteristics to drive program innovation. Participants also noted the important role that specific kinds of positions have or could have in driving program innovation. For example, the role of Extension evaluation specialists was mentioned in a number of survey and interview responses. One interview participant also suggested investing in "network weavers."

It was also evident that functional teams encompass high levels of interpersonal trust and communication capability. In more than one interview, participants talked about trust among team members, both in terms of following through with committed work and creating safe spaces to share and push against novel ideas. Trust was perceived as especially critical in welcoming individuals into productive program innovation and enabling collective action.

Approach to Innovation

Participants described two structured ways that teams "did" innovation—systematic or organic (Table 4). They described a systematic approach as an intentional and prescribed process. An organic approach allowed for a more natural, ambiguous process of innovation to unfold. Participants taking a systematic approach talked about "doing" innovation in a concrete, sequential way. For participants who took an organic approach, the process evolved gradually and unfolded in an almost simple-to-complex manner. The process they described was not linear but rather involved a series of incremental experiences, each building from the preceding one and informing the next. A perception of having the autonomy to be innovative seemed to help drive and support an organic approach. Participants also frequently talked about how reflection on failure fueled the innovation process in both structures.

Table 4.

Approach to Innovation

Theme	Quote
Systematic approach is an intentional and prescribed process of program innovation.	I start with an idea, pilot it on a small scale, scale it up and bring in more partners if it works, then evaluate it, and often write about it.
Organic approach allows natural development to unfold and evolve.	Learn as you go. The most important thing was that I continued to ask questions to increase my understanding of the initially identified need. The program planning process was organic and informed by a web of conversations. There was no

	straight path.
Autonomy is a capacity to work in novel and unprescribed ways.	. . . because I don't work traditionally (and partially because I am sometimes ignorant of how things are "supposed" to be done), I didn't bother with any formal needs assessment, logic model or typical evaluation. This allowed me to work organically, modifying and adapting as needed, sometimes very quickly. I was not under any program or committee, and did not have to justify any of my actions before taking them.
Reflection is being attuned to the process and learning from failure.	What worked well is that we listened to a key need and were willing to fail. . . . From the beginning, we evaluated what worked, and what didn't work, and made adjustments quickly. We used evaluation for process improvement throughout. We were committed to a steep learning-curve in order to deliver in non-traditional settings with non-traditional audiences. We utilized a daily feedback loop—some of which was formal, most of which was informal. We listened to, and took advice from everyone, and made decisions based on the best information at the time.

Institutional and Stakeholder Support

Interview and survey participants consistently described the importance of institutional and stakeholder support in prompting and sustaining program innovation (Table 5). They noted that institutional administrators, incentives, and structures give permission to fail and provide the financial and human resources support necessary to sustain program innovation. In a similar way, participants perceived support from external stakeholders as strengthening recognition and prioritization of relevant needs and opportunities, enabling recruitment of experts and participants, and cultivating financial support for program innovation. One interview participant described intentionality in considering how support from community stakeholders can increase institutional buy-in and permission for program innovation.

Table 5.

Institutional and Stakeholder Support

Theme	Quote
Institutional support is the permission,	Of course, institutional support (in terms

expertise, and resources from within an Extension organization that allow for the pursuit of innovation.	of resources—money—as well as flexibility in evaluations) is crucial. If you are judged on hitting a homerun every time you put in a program, versus given some leeway to have a bit less successful innovative program in the beginning, and show improvement, that would be important.
Stakeholder support is the expertise and resources from outside partners that allow for the pursuit of innovation.	We developed a model, and then we brought [administrator] back again. And we were very clear with her that if we were going to do this work that it wasn't something that our plates could absorb realistically without assistance, that we needed more help than that. And so the first thing that we did is went to [ag professional association], and we got our startup dollars from them. And they invested in something that was pretty much blue sky quite frankly at that point.

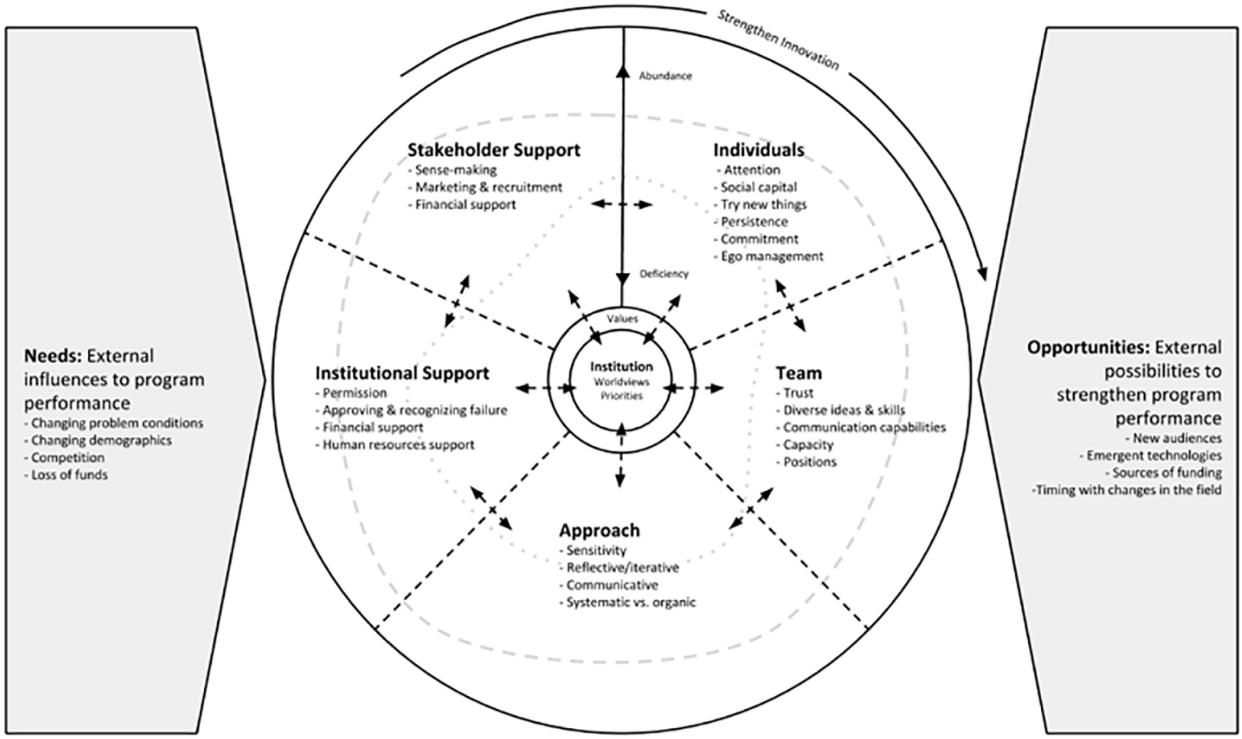
Interrelatedness of Factors

When individuals are working in concert with trusted and trusting colleagues, supportive administrators, and engaged members of their community, program innovation can thrive. It is clear from our results that individual characteristics, team communications, and approaches that support innovation are all interrelated factors that coordinate to amplify or restrict processes of program innovation.

Preliminary Conceptual Model

After analyzing our data, we undertook an effort to synthesize our findings into a conceptual framework. Figure 1 illustrates our preliminary attempt to visualize the interrelationships and substance of factors that enable program innovation.

Figure 1.
An Innovation Capitals Model



After we considered many different archetypes that could be useful, our data led us to use a capitals-based model to represent what we learned from our interviews and surveys. Specifically, we adapted Visser's (2000) wealth wheel model to conceptualize the factors supporting innovation in the context of Extension. Echoing Visser, we defined strengthening program innovation as increasing capacity through growing and balancing different kinds of capital resources, or "wealths"—individual and team characteristics, an innovation approach, and institutional and stakeholder support. Capacity is identified as "wealth," or human and material resources that help sustain an ongoing, iterative process of translating new ideas into improved program performance (Meyer et al., 2015). Accordingly, it is our fundamental assumption that more abundant capitals tend to support and enable program innovation. Deficient capitals resist or stall the process. We concur with Visser (2000) that a more balanced set of capitals (represented by the gray dashed line in Figure 1) enables and drives program innovation, as reflected in the clockwise rotation of the "wheel." Imbalance (represented by the gray dotted line in Figure 1) impedes progress. However, we also believe it is possible to increase and balance capital "wealth" through individual, team, and organizational development and stakeholder engagement.

Key to this model is the potential interaction among the pieces. We contend that interaction among the capitals drives the innovation process. These can reinforce innovation (e.g., stakeholder support results in resources to fuel teamwork) or resist innovation (e.g., individuals are not committed and stall teamwork). Innovation does not happen in isolation.

In concert with Visser's (2000) model, we also hold it important to describe and consider the values and worldviews of different Extension organizations in interpreting the framework. It is clear from our results that what constitutes a lucrative opportunity, a functional team, or any other capital dimension varies from one organization to another. Thus, we contend that it is important to avoid suggesting that there might be one standard of abundance for each capital. Such standards must be initially defined for the specific context of each program or organization. Using this approach will make the framework more transferable across different content areas of Extension programming and organizational configurations.

Limitations

First, results of data analyzed in our study are not necessary generalizable to all types of programs and audiences. However, they can be considered transferable across many Extension programs and organizational contexts as our sample consisted of individuals representing innovative Extension programs from across the country and different content areas. That said, we recognize that our model is still in its conceptual infancy and has room for growth and development. Second, our data related to individuals and programs recognized for program innovation. Therefore, our results may be limited with respect to individuals or programs encountering resistance.

Discussion and Implications

Our model is a starting point for operationalizing how innovation happens across Extension programs and organizations. Drawing on this model, we in Extension need to continuously ask ourselves questions such as "What are the internal and external forces that are driving our programs?" and "How can we strengthen innovation to meet these needs and possibilities through our programmatic efforts?" It is our hope that our research will fuel discussions around the role of program innovation and set us on a path to better understanding the role of innovation in our work. This improved understanding is especially important as our results suggest that innovation is still considered outside of the norm in many Extension organizations. In the words of one survey participant, "Though I may come across as a rogue rebel, and sometimes do humorously consider myself one, I did nothing I was not 'allowed' to do."

The results of our data suggest that five innovation capitals are necessary to balance and grow conditions for program innovation. These are largely coherent with Meyer et al.'s (2015) summary of conclusions and recommendations for supporting program innovation based on research on innovation in business and other sectors.

We encourage further research so that we in Extension can better articulate and apply the model proposed in our study. Following Corbin and Strauss (1990) and others, for instance, it is important to seek out and explore new cases with potential to elaborate and/or disrupt our grounded theory. For example, it will be useful to identify and explore cases in which the innovation process stalled to determine whether factors described in our study or other factors were important. It will be useful to conduct studies that explore more closely the various factors in our model, such as investigation of how different kinds of institutional support affect innovation or how two different factors interact to influence innovation. To be truly diagnostic, we need to be able to answer questions such as "What is an adequate innovation approach?" or "What are important forms of institutional support?" Likewise, it will be useful to explore how organizational development can influence capital abundance and creation to drive program innovation. We therefore encourage different program teams and institutions to try to describe processes of using the model to strengthen program innovation.

We realize that there is still a long way to go in truly understanding and being able to grow innovation capacity in Extension. However, we believe that the innovation capitals described here provide an important starting point. Using our theoretical model, Extension professionals can now make more refined analyses of how to intentionally grow and strengthen innovation capabilities. Additionally, it is now possible to create more theory-grounded evaluations of innovation effectiveness. Finally, we contend that results of our study underscore the interrelation of individual staff, teams, administration, and communities in uplifting and strengthening Extension program innovation and impact.

Acknowledgments

We extend our appreciation and thanks to Bob Bertsch from North Dakota State University for his cooperation in allowing us to survey individuals from his *Working Differently in Extension* podcast, to the individuals with Extension institutions who participated in our surveys and interviews, and to the intrepid group of our colleagues who took part in our first panel discussion.

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