
0590 A qualitative assessment of perception and communication barriers that interfere with the transfer of knowledge to dairy farmers.

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Efficient sharing of knowledge between consultants and dairy farmers is critically important to the success of the dairy industry. Awareness of how and where dairy farmers seek expert information when making farm management decisions is essential to understanding the communication network of scientists, agricultural experts, and farmers. This study investigated dairy farmer decision-making and communication networks as part of a larger research project on the relationships between farm management practices and milk fat and protein production on dairy farms in the Northeastern United States. Communication networks and barriers to successful information transfer were described by a subset of the farmers enrolled in the larger study. As managing a dairy farm involves complex decision-making processes across diverse knowledge areas, it was hypothesized that dairy farmers seek information from many sources and that barriers exist that are specific to the source and type of information. This research is framed within the “communication for innovation theory,” which acknowledges that a person’s experiences influence how he/she perceives and reacts to new information and that information transfer frequently encounters obstacles. Semistructured interviews were conducted with a heterogeneous subsample of farmers ($n = 9$) to collect detailed, diverse, and in-depth perspectives and experiences on decision-making and information transfer. To investigate the cooperative’s role in information transfer, additional interviews were conducted with two cooperative employees. Interviews were audio-recorded, transcribed, and coded to identify common themes expressed by farmers or cooperative employees. Farmers identified the cooperative (which communicates via the internet and field technicians), expert consultants (nutritionist, veterinarian, and agronomists), financial advisors, print publications, and other farmers as principal sources of information. However, barriers to the transfer of information include farm management and family dynamics, lack of access to high speed internet, and difficulties evaluating divergent recommendations from experts. Several farmers expressed an incorrect perception of their farms’ fat and protein production compared with cooperative averages, which reduced their motivation to incorporate management changes. Recommendations to overcoming these barriers were suggested by interview participants and include integrating management team meetings and facilitating informal discussion groups between farmers. Knowledge about improving milk fat and protein does not easily find its way to individual dairy farmers due to barriers within their

communication network, and the proposed recommendations may aid in overcoming these barriers.

Key Words: decision making, extension education, information networks

**EXTENSION EDUCATION SYMPOSIUM:
GROWING EXTENSION’S IMPACTS WITH
CHANGING BUDGETS AND PERSONNEL**

0591 Work-life balance for extension professionals: maybe it should be redefined as ‘work-life effectiveness’. G. P. Lardy*, *North Dakota State University, Fargo.*

The literature is littered with articles related to work-life balance for a variety of professions. Do extension professionals experience work-life balance any differently than other professional or academic careers? Should we redefine work-life balance to instead be referred to as work-life effectiveness as some writers have proposed? Let’s start with the first question. One can make the case for both sides of this argument. The case for being different includes the situations where we expect a considerable amount of night and weekend work from extension professionals. Many have split appointments with expectations in research and/or teaching, which tends to increase the expectations of their supervisor(s). However, the case against it includes the fact that many professionals in academia and industry have careers that require travel and many have multiple job duties, similar to split appointments in academia. While there may be some differences, there are likely more similarities. Let’s evaluate the second question, should we redefine work-life balance as work-life effectiveness as some writers have proposed? In many cases, I would argue that we should be looking for work-life effectiveness rather than balance. Balance may imply some sort of notion of equal time at work and outside of work. In reality, there are likely few times when that is the case. Effectiveness, however, denotes a system or situation that produces the intended result. So, how does an extension professional (or any other professional) enhance work-life effectiveness? Here are a couple of suggestions. 1. Define what success looks like. What does being an effective extension professional look like? This should be done in concert with your supervisor. As for your personal life, perhaps asking ‘What does an effective spouse, mother, father look like?’ is an appropriate question to ask. 2. Set boundaries/maintain control. This includes various aspects of your career, including your schedule. If there are important family events that you want to be there for, be sure you get them on the calendar. Schedule time for personal time. Don’t schedule every available minute. 3. Find time to ensure that your physical, emotional, and spiritual well-being are nurtured in addition to your professional development. In summary, I believe we should be discussing this topic as work-life effectiveness rather than work-life

balance. In addition, by asking some key questions, extension professionals may be able to better define what that looks like for them as individuals.

Key Words: extension, effectiveness, success

0592 Enhancing your extension program through a strong research program and vice versa.

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Faculty members with split appointments are successful in conducting joint research and Extension programs. Successful integration of research and Extension responsibilities may appear daunting at first; however, issue relevance provides a strong foundation for both resulting impact and funding alike. Thus, a well-funded research program contributes to impact-driven Extension programming. Similarly, an Extension program that is based on solid needs assessments integrates seamlessly into research support to develop and implement solutions. Perhaps the biggest challenge is finding a balance between research and Extension efforts. Expectations can appear overwhelming in that each responsibility, research, and Extension could be a full-time effort. Without clear goals and objectives, faculty can spend considerable time on Extension activities that don't result in measureable impact at the expense of demonstrating a research trajectory and scholarship needed for promotion. To avoid this pitfall, faculty should carefully and deliberately plan their time and activities such that the research and Extension programs complement each other and build on the other. This begins with an assessment of stakeholder needs and how identified needs tie to fundable research questions that translate into implementable solutions. Through constant and deliberate focus on the interconnectedness of a research and Extension program, faculty can balance a split appointment and achieve intended outcomes and scholarly outputs that lead to promotion in the academic system.

Key Words: impact, outcome, output, scholarship

0593 Culturing and leveraging allied industry support for academic programs.

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The mission of public universities includes undergraduate, graduate, professional, and continuing education, basic and applied research, and dissemination of information via extension programming. State-supported funding for academic positions has eroded, but its reductions usually pale relative to the cuts realized by extension departments. Delivery methods used by extension have changed dramatically in the last 30 yr concurrent with the changing structure of the dairy industry (fewer herds but more cows per herd), educational media, access to information, corporate industry support, and shrinking state economic support. One area of

potential support for consideration is allied industry; however, universities are under increasing scrutiny from the public pharmaceutical companies with whom they interact. How does academia experience productive relationships with industry representatives without appearing to "be bought and paid for"? Academic and extension programs should consider the synergistic potential that exists for collaborative efforts with allied industry and pharmaceutical companies. Both industry and academia want to conduct rigorous scientific studies to help improve the level of knowledge and to develop new products or technologies. Unfortunately, many faculty members see their corporate industry allies only as potential cash cows, ready to donate or pay for product promotion. However, this viewpoint is problematic and limited in scope. Consider how many former academics are employed in the corporate world. Many were hired away from universities specifically because of their talents and abilities. Some formerly advised graduate students, taught classes, and ran research programs of their own. There is a wealth of knowledge available to help team-teach portions of courses or to serve as adjunct faculty on graduate committees. Specific collaborative efforts experienced by the authors include the teaching of specialty courses in undergraduate, graduate, and veterinary medicine courses, guest authoring for university publications, serving on Masters or PhD committees as subject matter experts, partnering with faculty members to conduct and publish scientific work unrelated to any specific product or technology, speaking at animal health conferences sponsored by universities, and working with a core faculty group at a university on an annual basis for the purposes of simply brainstorming and sharing potential research ideas. Pre-established boundaries around product highlighting or advertising and an agreement around preserving the ability to publish negative research findings are both key to high integrity collaborative efforts. However, there are many additional opportunities to be experienced through healthy collaborative efforts between academia/extension and their corporate or allied industry.

Key Words: industry support, extension, collaboration

0594 Developing regional and multi-state extension collaborations.

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The new norm for extension includes smaller budgets, fewer individuals tasked with greater job duties, and rapidly changing clientele wants and needs. Consequently, historical state boundary-based extension personnel and programs don't make as much sense as they did previously. In many situations, regional and multi-state programs provide a viable alternative to meet the needs of clientele and state universities. Many extension programs recognize this and provide short-term multi-state conferences and workshops, which have been successful in attracting individuals from not only the participating

states but regionally and nationally. However, much less common are regional or multi-state programs where individuals are identified to provide direct support to commodity-based clientele in states other than their own. Utah State University has experience with this type of programming through MOUs developed to provide dairy extension expertise for Montana, Wyoming, and Nevada, which lack dairy specialists but were getting requests from clientele for support. The MOU for each state specified the amount of time spent within the state as well as other activities to be made available. In return, specialist time was bought by the participating state. Our experience provides evidence that these programs can be successful, providing that there is appropriate support from administrators, specialists from the host state, and local county agents. County agent support is critical for achieving the greatest success. Alternatively, there may be opportunities for agreements between states on a county-basis, rather than a state-basis because of proximity of a specialist to localized clientele. Our experience suggests that it works best if money is paid by the state receiving the support to the state that is providing the expertise; it is much cheaper than hiring a new specialist. If a state wants to provide support but doesn't want to provide in-state visits, training workshops via electronic media are an easy option. With the advent of internet audio and video capabilities, extension programming can also be accomplished faster and more economically than physically traveling to that site. Sharing extension expertise across state borders makes sense in many situations, allowing for support of underserved clientele; however, the development of agreements and sharing of a specialist's time requires administrators who are willing to work under a different extension model.

Key Words: extension, multi-state, programs

0595 Extension faculty navigating the tenure and promotion process. N. E. Cockett*, *Utah State University, Logan.*

Decisions of tenure and promotion are a critical mechanism by which a university shapes its future. In addition, each tenure and promotion decision directly affects a faculty member's future in academia. It is imperative that there is clarity in expectations for a faculty position as well as the availability of "best practices" so that a faculty member can be successful in achieving those expectations. Utah State University has developed documents that articulate expectations for Extension faculty (the role statement) and a framework for success (the roadmap). These documents are used not only by faculty members and their direct supervisors to set goals and review performance but also by others, such as the university's central tenure and promotion committee, who are not familiar with the Extension specialist role. The major areas of expectation for Extension faculty include programming and scholarship. Expectations for programming include the identification of needs and issues that lead to the

development of programs that disseminate information and address the issues. Extension specialists should emphasize long-term programs with measurable outcomes and impacts and strong working relationships with Extension county agents. The value of Extension programs can be assessed by the number of participants or contacts and the resulting impacts, such as change in behavior, dollars saved, or dollars generated. At Utah State University, specialists demonstrate scholarship through the dissemination of materials, such as journal articles, fact sheets, web sites, curriculum materials, and presentations and abstracts at professional meetings. All materials should be peer reviewed. The value of scholarship can be determined using standard measurements, such as journal impact factors, citations, invitations for presentations or participation on working groups, and recognition through awards. However, the value of Extension scholarship can also be measured by the uptake or adoption by Extension peers. At USU, Extension specialists are tenured within the academic college, whereas Extension county agents are tenured within USU Extension. While the USU Vice President for Extension does not have direct authority over the decisions of tenure and promotion for Extension specialists, there are annual performance review meetings that include the Extension administration, the department head, and the academic dean. This review provides the academic administration with insight on the performance of the specialists in his or her Extension assignment. A single letter is returned to the faculty member so as to avoid mixed messages on performance.

Key Words: extension, faculty, tenure, promotion, expectations

FOOD SAFETY

0596 Monitoring of pesticide residues in animal feeds from the republic of Korea. H. Park*, H. J. Kim, M. S. Jeong, C. R. Kim, E. S. Choe, Y. S. Youn, J. K. Kim, and J. H. Lee, *Experiment and Research Institute, National Agricultural Products Quality Management Service (NAQS), Ministry of Agriculture, Food, and Rural Affairs (MAFRA), Kimcheon, South Korea.*

Animal feeds can be contaminated with pesticides due to the large number of different ingredients from diverse origins. Safe animal feed is important for both animal health and the safety of foods of animal origin. To ensure the safety of animal feeds, the Ministry of Agriculture, Food, and Rural Affairs (MAFRA) regulates the amount of each pesticide that