Special Focus Areas and Professional Development Programming for K-State Extension Agents: A Survey

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Introduction

The Kellogg Commission on the Future of State and Land-Grant Universities (1999, p. 3) opened its report by stating that ". . . the clear evidence is that, with the resources and superbly qualified professors and staff on our campuses, we can organize our institutions to serve both local and national needs in a more coherent and effective way." The report chastised land-grant institutions for having "academic departments" while "society has problems" and continued to challenged land-grant institutions to increase their 'engagement' with society and develop solutions to society's problems. McDowell (2003) pointed out that extension has been involved in engagement for many years but it is time for scholars and scientists to engage with society too. He argued that such engagement of scholars with society to solve real, practical problems has the potential to contribute to the advancement of discovery scholarship as well as solving theoretical problems.

With increasing clarity about the potential benefits from engagement, many land grant institutions are repositioning engagement at the center of their mission, using new structures to bring more than extension into engagement activities to effect the required changes. Despite their renewed commitment to engagement, increased resource constraints are requiring many land grant institutions to be innovative in their engagement programs and programming.

Kansas State University and K-State Research and Extension (KSRE) are also refocusing on engagement. For example, the theme of the 2006 K-State Extension Conference was "Excellence through Engagement." A policy shift discussed at the conference was to increase extension agents' efficiency by encouraging them to develop special focus areas. The expected outcome from this shift is an increase in agents' programming capacities through a focus on a few program areas, which will increase the quality of solutions they bring to their clients. The logic of the shift is that agents will move from working independently and participate in a network of agents with diverse expertise to enhance the value they add to each other's solutions when addressing client problems.

Although more complex than specified here, the traditional extension system is organized to have agents serve as a conduit for knowledge from academic and research faculty (specialists) for solving client problems. The policy shift being discussed at KSRE recognizes the subject matter knowledge and capability gaps among extension agents and the need to develop and deliver effective professional development programs to address them.

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But how do we know what the gaps are? We may use a metaphor of market research to address this question. Suppose we think of the KSRE system as a market where extension agents are customers for professional development programs and specialists are the producers and/or distributors of professional development programs. Then, in a typical product development and commercialization process, it behooves the producer to ask the potential customers what their needs are and recruit them to help design a product they will demand.

This, then, defines the objective of this research: to determine the need for professional development programs among extension agents at KSRE to help specialists design, develop and deliver the appropriate solutions to achieve the desired outcomes in the most efficient manner. The results of this research provide a customer's viewpoint in the search and development of solutions that enhance the overall effectiveness of the system. However, this research ultimately contributes to the ongoing conversations at KSRE about how to effectively collaborate with each other in our attempts to become more engaged with our communities.

We used an electronic survey method to collect information from extension agents about their *subjectively* defined needs in the performance of their duties. The survey was open only to county extension agents on the K-State "oznet" and "fcs" listservs. Out of about 240 potential respondents, we received 86 responses to the survey, giving us a response rate of about 36 percent. This report is based solely on the responses from the survey and does not provide any prescriptions.

The report is divided into three parts. The first part provides an overview of the characteristics of the respondents to the survey. The second part discusses respondents' identification of their special focus areas and their willingness to commit resources to build their skills and competences in the selected areas. The final section draws on the comments that respondents provided to help specialists in their effort to design, develop and deliver professional development programs to extension agents.

Characteristics of Respondents

There are thirteen program focus areas at KSRE and county extension agents are often involved in a number of them (Figure 1). The mode number of program focus areas respondents were involved in was seven and nine, each with 18 percent of respondents. At the tails, we had two respondents involved in only one program focus area and one respondent involved in all 13 program focus areas.

The program focus areas with the most agents were youth development (78 percent), volunteer development (69 percent) and leadership development (64 percent) (Figure 2). Community and economic development has about 60 percent of respondents indicating their involvement. The program focus areas attracting the least number of participants were adult development and aging (33 percent), family resource management (33 percent) and farm management (35 percent).

Figure 1: Distribution of Respondents by the Number of Program focus Areas in which They Are Participating (n=85)

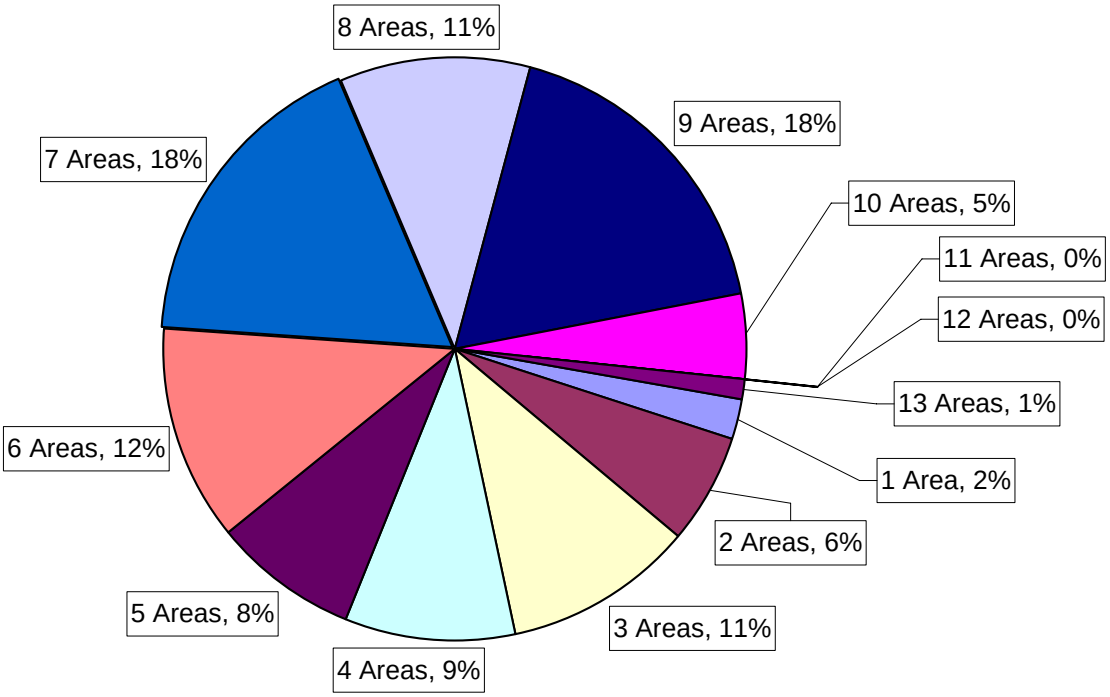
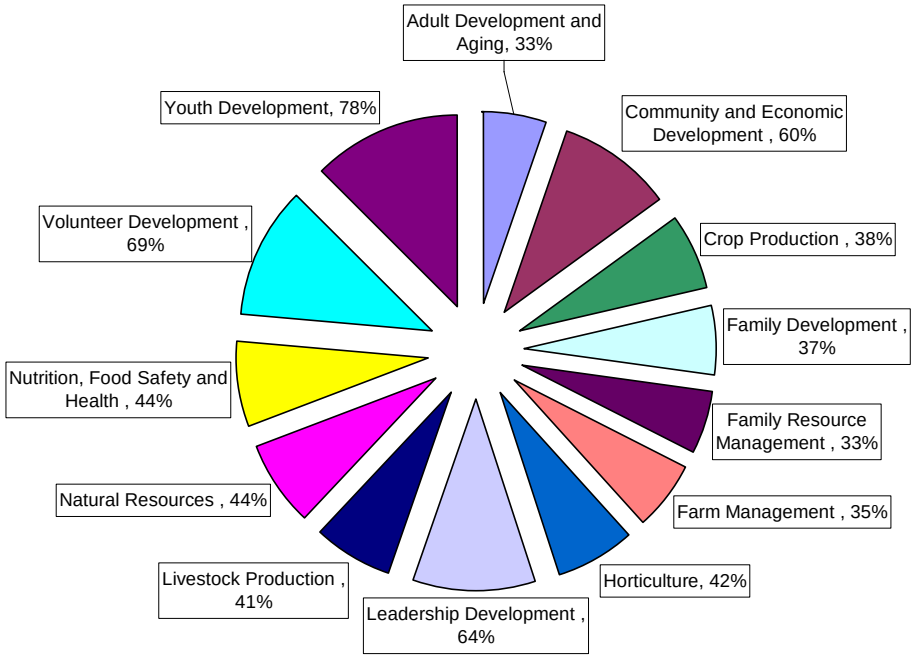
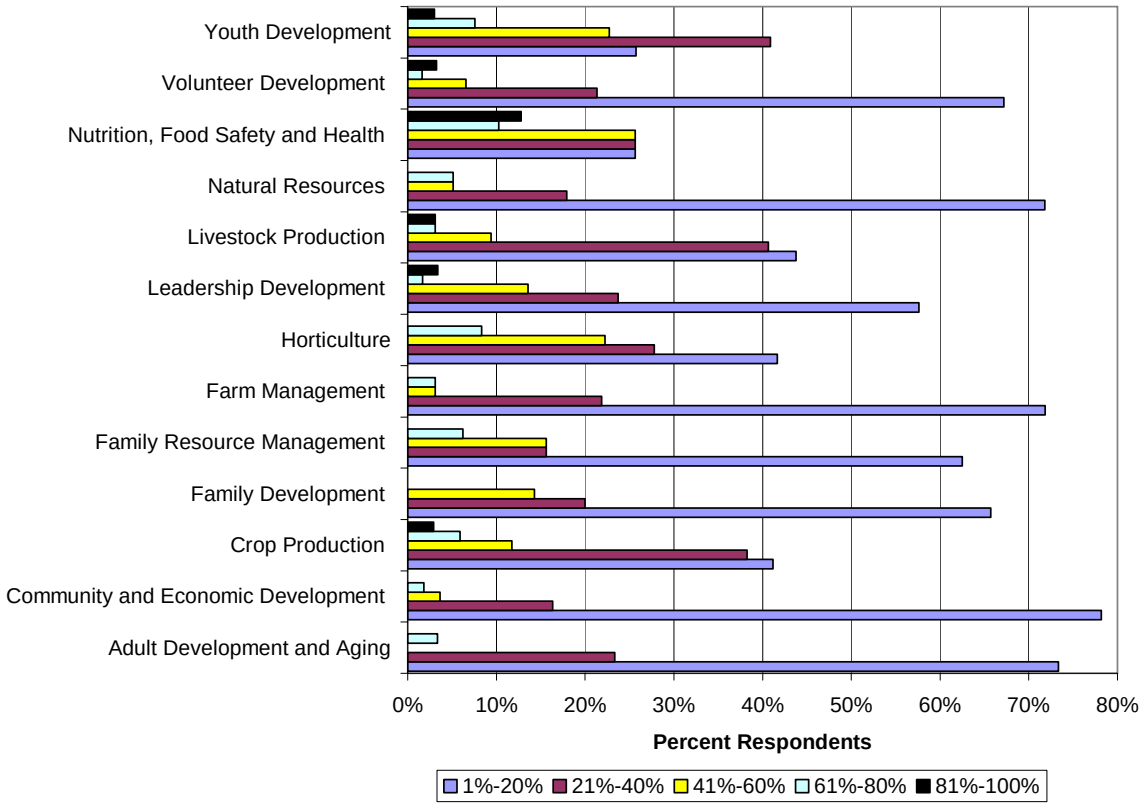


Figure 2: Distribution of Respondents by Program Focus Areas (n=86)



We wanted to know how extension agents distributed their time among the different areas in which they we were involved. The results show that the majority of extension agents allocated between 1 percent and 20 percent of their time to all program focus areas they were involved in, except youth development where the majority of respondents indicated allocating between 21 and 40 percent of their time (Figure 3). As expected, very few respondents allocated more than 80 percent of their time to any one program focus. This is in line with the fact that very few extension agents do *'only one thing'* regardless of their job description.

Figure 3: Allocation of Time among Program focus Areas



Only 86 percent of the respondents to the survey provided information on their gender. Of these, 33.8 percent was male and 66.2 percent was female (Figure 4). With respondents' age, we observed that the majority are between 41 and 50 years old (Figure 5). Figure 6 shows the distribution of respondents by the number of years they have been employed at K-State. We observe that 61 percent of them have been at K-State for ten or more years and about 15 percent of respondents have been at K-State for between six and ten years. When asked how long they have been doing their current jobs, 45 percent indicated that they have been at it for between six and 10 years while 31 percent have been at it for between one and three years (Figure 7).

Figure 4: Distribution of Respondents by Gender (n=75)

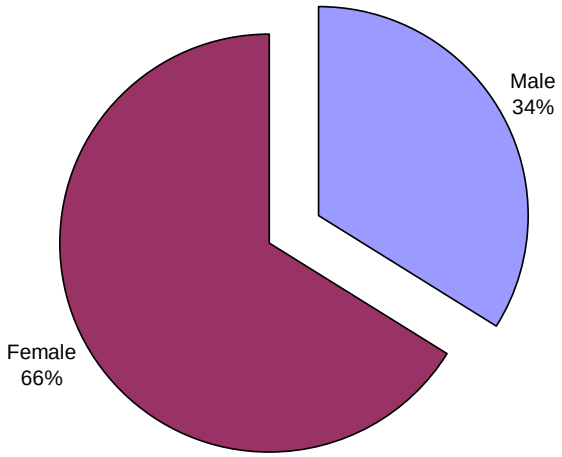


Figure 5: Distribution of Respondents by Age (n=74)

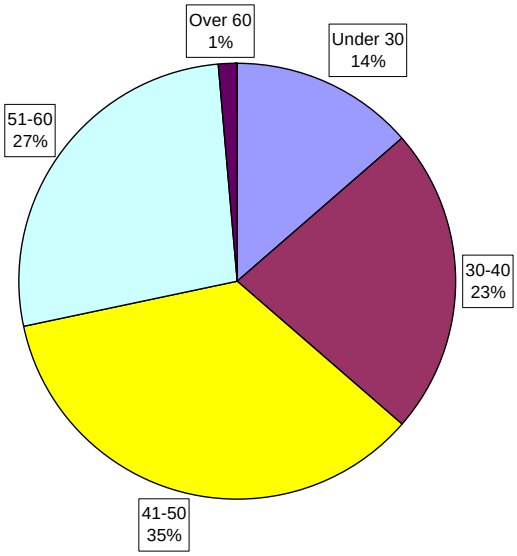


Figure 6: Distribution of Respondents by Employment Duration at K-State (n=73)

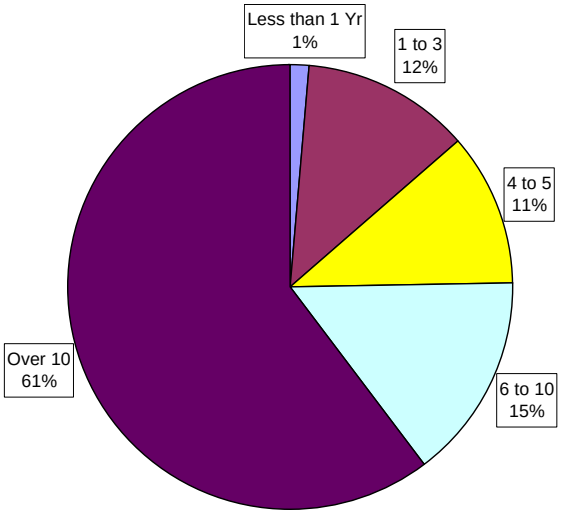
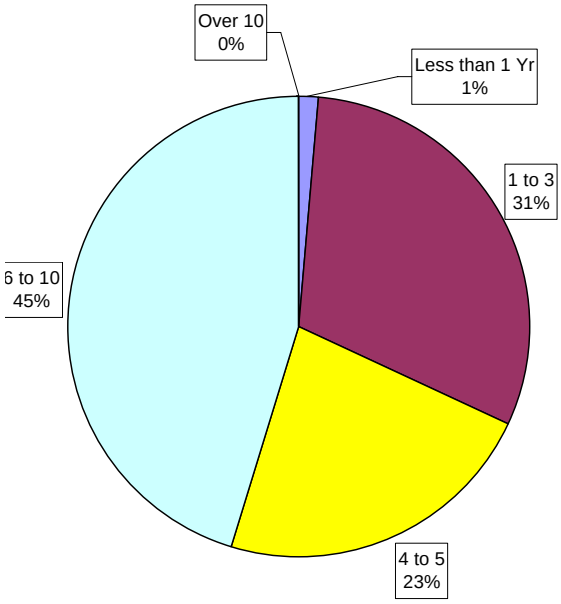


Figure 7: Distribution of Respondents by Duration at Current Job (n=75)



We looked at the distribution of the age of respondents by gender (Table 1). The results show that male respondents tended to be younger. For example, 44 percent of male and about 33 percent of female respondents fell in the 40 years or younger category. However, there was no difference between the genders for respondents over 50 years.

Table 1: Gender and Age Frequency Distribution

			Age				
	Frequency						
	Percent						
	Row Pct						
	Col Pct	Under 30	30-40	41-50	51-60	Over 60	Total
Gender	Male	3	8	7	7	0	**25**
		4.05	10.81	9.46	9.46	0	33.78
		12	32	28	28	0	
		30	47.06	26.92	35	0	
	Female	7	9	19	13	1	**49**
		9.46	12.16	25.68	17.57	1.35	66.22
		14.29	18.37	38.78	26.53	2.04	
		70	52.94	73.08	65	100	
	Total	**10**	**17**	**26**	**20**	**1**	**74**
		13.51	**22.97**	**35.14**	**27.03**	**1.35**	**100**

We used a t-test approach to determine if there were differences among respondents by gender for age, duration of employment at K-State and duration of current job. This was necessary because we needed to know if the 2:1 response by females created any biases in the other variables. The results showed that there were no significant differences between the genders on the basis of age, employment duration and current job duration (Table 2). This would imply that we can assume off gender in the interpretation of the results if age, employment and job durations are deemed as influencing the perceptions respondents bring to their answers.

Table 2: Testing for Differences between Males and Females Regarding Age, K-State Employment Duration and Current Job Duration

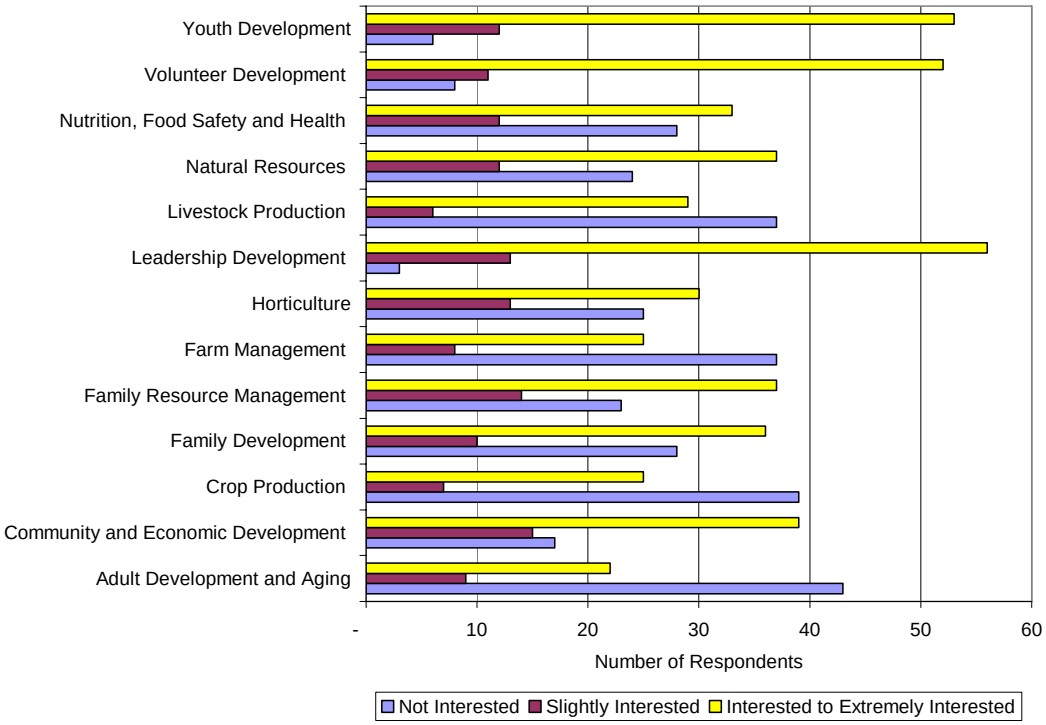
Variable	Gender	N	Mean	DF	t Value	Pr > |t|
Age	Male (1)	25	2.72			
Age	Female (2)	49	2.84			
Age	Diff (1-2)		-0.12	72	-0.46	**0.649**
Employment Duration	Male (1)	25	4.48			
Employment Duration	Female (2)	47	4.04			
Employment Duration	Diff (1-2)		0.44	70	1.56	**0.1239**
Job Duration	Male (1)	25	3.32			
Job Duration	Female (2)	49	3.00			
Job Duration	**Diff (1-2)**		**0.32**	**72**	**1.46**	**0.1493**

Special Focus Areas

We hypothesize that although agents are involved in many program focus areas, it is because they have to be, and given the opportunity, they would like to invest time and effort in a few special focus areas. Such investment would be in enhancing their competence and capabilities in the selected special focus areas through participating in professional development programs. We test this hypothesis by asking extension agents to indicate their preference for the different program focus areas as a special focus area.

There were 30 or more respondents expressing interest in selecting a particular program focus area as a special focus area in nine out of the 13 program focus areas (Figure 8). Leadership development attracted the most respondents, with 56 out of the 72 respondents indicating they were interested or extremely interested in pursuing it as their special focus area. Adult development, farm management, crop production and livestock production had between 22 and 29 respondents out of 72 indicating interest to extreme interest as special focus areas. We define the number of people expressing interest as the potential market for professional development programs for each program focus area.

Figure 8: Number of Respondents Expressing Special Focus Area Interest by Program focus Area



The demand for professional development programs will be determined by agents' interest and their subjective perception of the gap between the current competence in the selected area and the competence required in providing excellent service in the special focus area. We have already identified the interest level across program focus areas so we needed to determine the perceived competence gap in their ability to deliver services in the selected focus areas.

How does the selection of the various program focus areas as special focus areas correlate across individuals? The answer to this question provides insights into how different program focus area specialists may collaborate to design, develop and deliver professional development programs to enhance effectiveness. We conducted a correlation analyses to identify program focus areas that selected together more frequently (Table 3). Adult development and aging correlates strongly with family development and family resource management while family development correlates strongly with family resource management and nutrition, food safety and health.[2] Similarly, crop production correlates strongly with farm management and livestock management which correlate strongly with farm management.

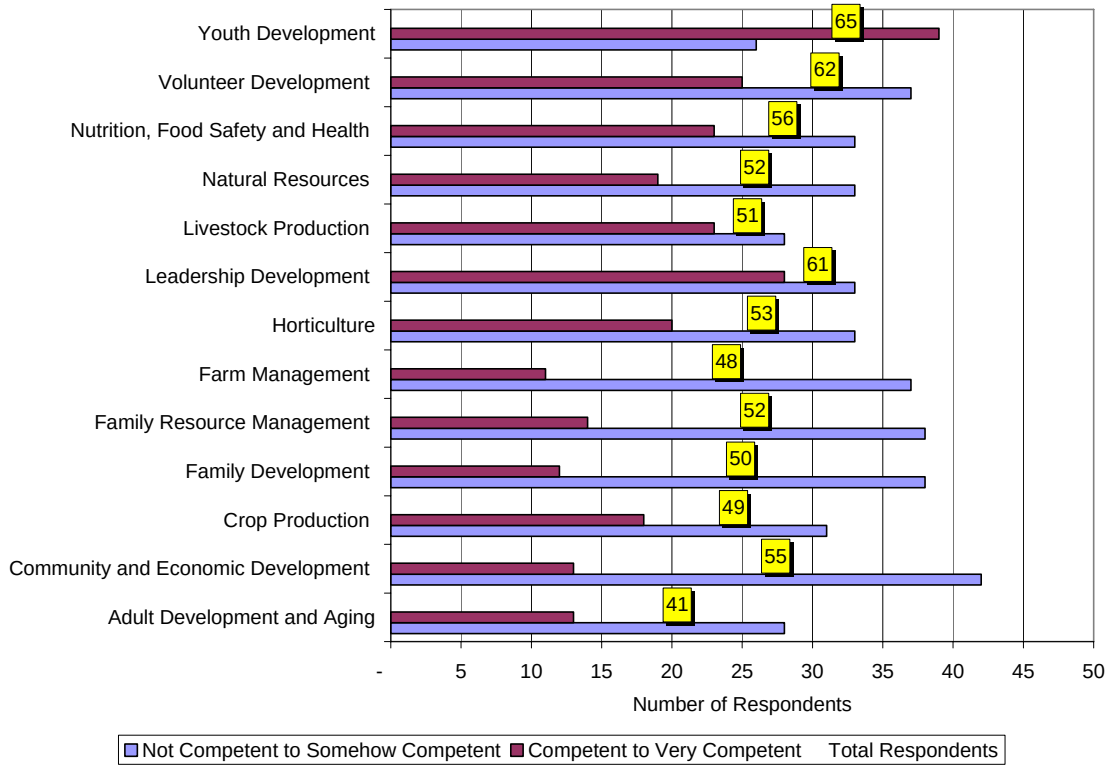
Table 3: Correlation Coefficients between Program Focus Areas Selected as Special Focus Areas

	X1	X2	X3	X4	X5	X6	X7	X8	X9	X10	X11	X12	X13
X1	1.00	0.00	-0.38	0.72*	0.63*	-0.35	-0.14	0.02	-0.44	-0.23	0.64*	0.15	0.10
X2		1.00	0.27	-0.08	-0.09	0.21	-0.01	0.09	0.17	0.25	0.02	-0.02	-0.06
X3			1.00	-0.34	-0.34	0.84*	0.30	-0.10	0.77*	0.67*	-0.43	-0.09	-0.05
X4				1.00	0.73*	-0.30	-0.24	0.25	-0.35	-0.31	0.67	0.26	0.34
X5					1.00	-0.31	-0.14	0.12	-0.38	-0.15	0.62	-0.03	0.04
X6						1.00	0.18	-0.08	0.78*	0.65	-0.41	-0.11	-0.04
X7							1.00	-0.17	0.20	0.42	-0.19	0.00	0.02
X8								1.00	0.00	-0.09	0.14	0.56	0.48
X9									1.00	0.58	-0.42	-0.05	0.08
X10										1.00	-0.28	-0.06	0.02
X11											1.00	0.08	0.19
X12												1.00	0.66
X13													1.00

We were interested in respondents' perception about their current competence at delivering services. This assessment will define the recognized need for professional development. The results show that with the exception of youth development, the majority of respondents did not think their current competence level allows them to deliver effective services to their clients in the selected special focus areas (Figure 9). For example, 28 out of 41 respondents (68 percent) with interest in adult development believe they do not have the requisite competence to deliver excellent services in the area (Figure 9). Similarly, 33 out of 53 respondents (62 percent) with interest in horticulture do not feel competent to deliver excellent services in the area. We found that 37 out of 48 respondents (77 percent) did not feel competent to deliver excellent services in farm management. The same is true for community economic development (76 percent), crop production (63 percent) and livestock production (55 percent). Thus, we show that there is interest and there is a perceived competence gap. These two together create an opportunity for creating demand for professional development programs improve competence levels and enhance confidence among extension agents in all program focus areas as we move to become a more engaged institution.

[2] Strong correlations are defined as those greater than 0.6 at a 0.01 percent significance level. These have asterisks in the table. X1, X2, . . . and X13 refer to Adult Development and Aging, Community and Economic Development, Crop Production, Family Development, Family Resource Management, Farm Management, Horticulture, Leadership Development, Livestock Production, Natural Resources, Nutrition, Food Safety and Health, Volunteer Development , and Youth Development.

Figure 9: Respondents' Assessment of their Competence to Deliver Services in Special Focus Areas

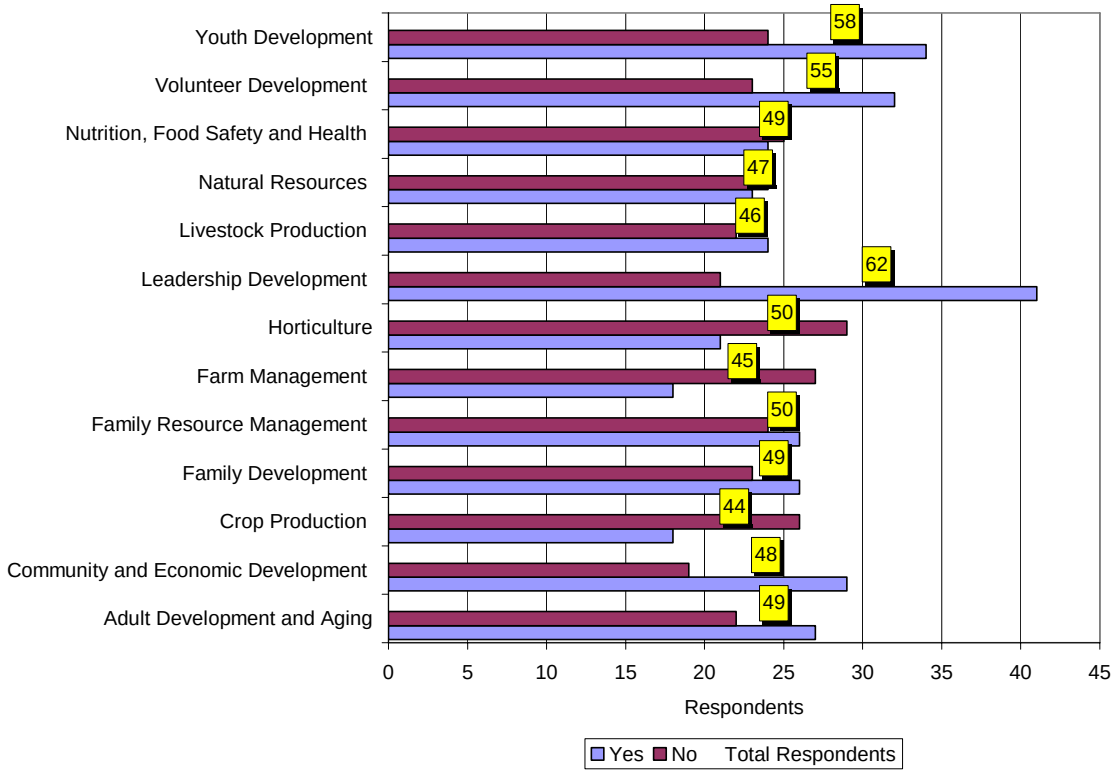


The foregoing provides an inference of the demand for professional development programs. But how many people think they **need** professional development to enhance their capabilities? The answers to the question were inconsistent in certain program focus areas when compared with the personal assessment of competence. For example, although 31 of the 49 respondents and 37 of 48 respondents under crop production and farm management respectively indicated that they did not feel competent to deliver excellent services, only 18 of the 44 and 18 of 45 respondents said "yes" to a need for professional development (Figure 10). On the other hand, while the majority of youth development respondents said they felt competent to deliver excellent service, 34 out of 58 of them still said they needed professional development to improve their performance. Despite these inconsistencies, we find that all program focus areas had more than 15 respondents expressing interest in professional development programs.

For specialists at KSRE, the foregoing implies there is sufficient interest among agents to warrant investment in the development and delivery of professional development programs to meet the skills and competence needs of extension agents. We discovered that the majority of respondents indicating they needed professional development suggested that they need programs to begin at the intermediate level.[3] Very few (less than 10 percent) in each program focus area suggested they would need advanced level programs in order to increase their performance within their special focus area of interest.

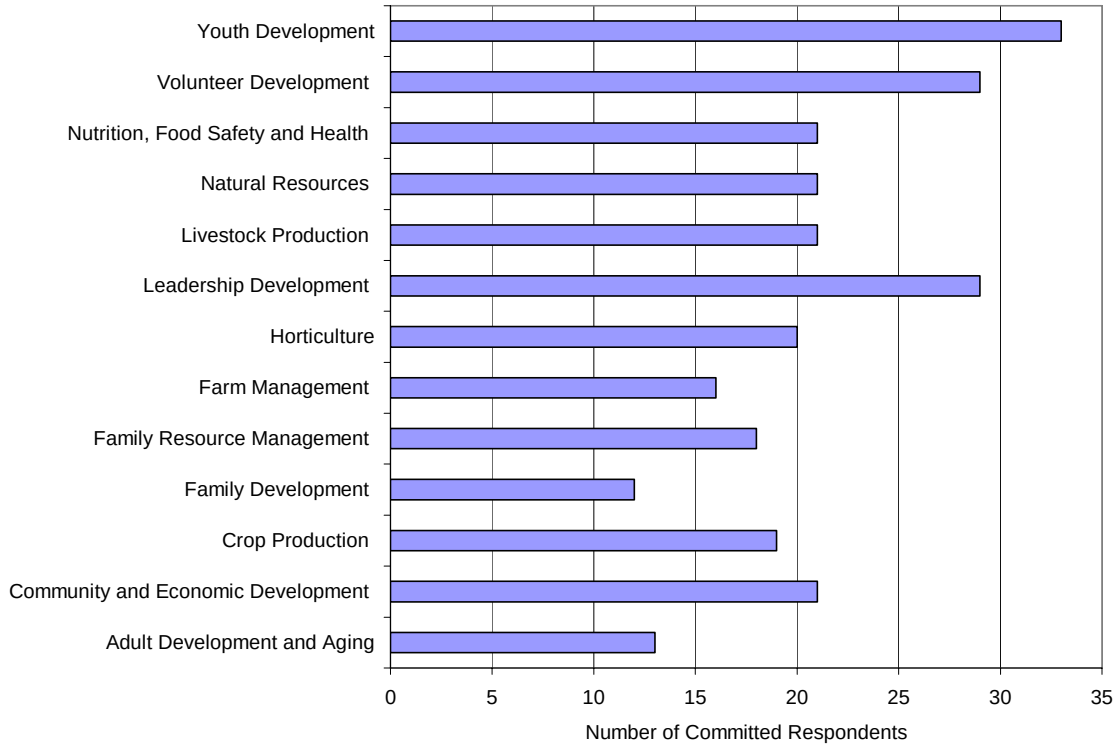
[3] We did not define 'intermediate' and 'advanced' levels of professional development programs because they will be very different across program focus areas.

Figure 10: Number of Respondents by Need for Professional Development



The willingness of extension agents to invest time and effort in professional development programs, if they are available, provides a good indicator of their demand for such programs. The results show that with the exception of family development and adult development and aging program focus areas, all others had more than 15 people indicating a willingness to do whatever it took to participate in professional development programs if such programs were offered (Figure 11). For example, 68 percent of crop and livestock production respondents indicated that they would do whatever it took to participate in professional development programs. Similarly, 20 out of 31 respondents for horticulture said they would do everything to participate in any professional development programs. What we see here is a consistency in the resolve of those who say they need professional development and those who say they would make the necessary commitment to avail themselves to such programs if they were available. This provides a strong signal to specialists that there are a minimum number of people interested in their program focus areas who are willing to make the required investments in professional development programs to enhance their competence levels.

Figure 11: Number of People Willing to Commit Time and Effort to Professional Development Programs by Special Focus Area of Interest

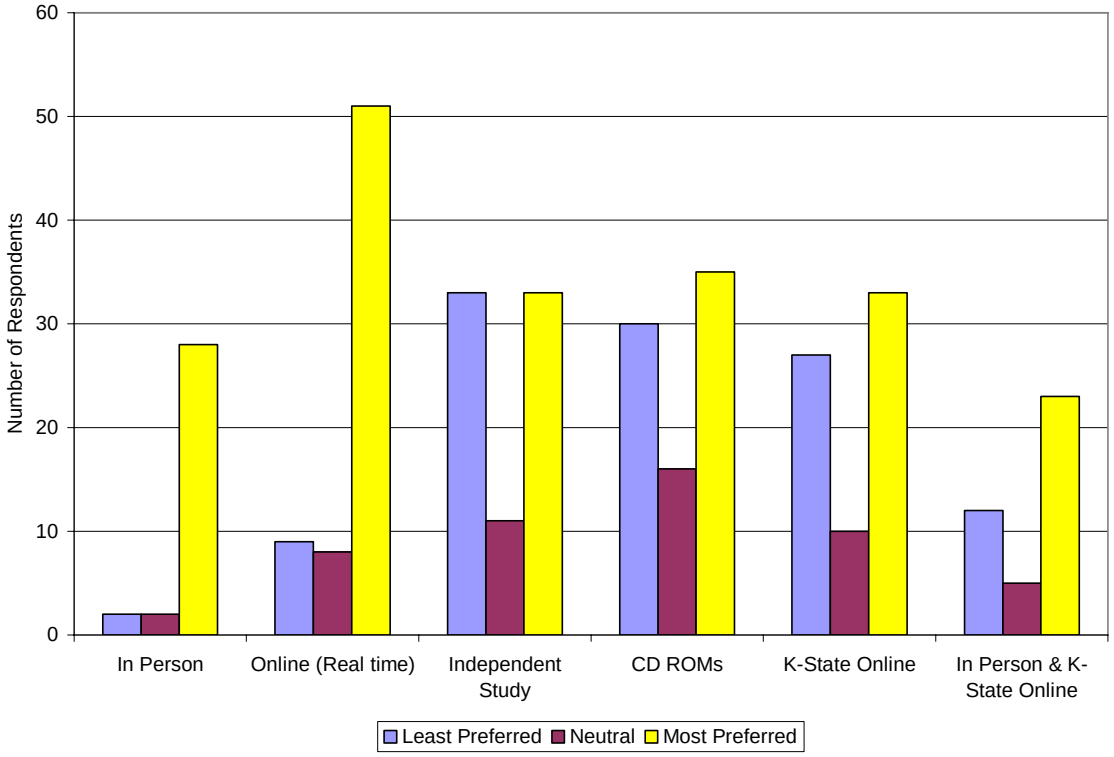


Professional development programs may be delivered through various methods, e.g., in-person, online (live) and the asynchronous K-State Online tool. There are pros and cons about the different methods and these differ from person to person based on their learning style and convenience needs. Recognizing the preferred delivery format of extension agents facilitates the adoption of formats that maximize learning and enhance learner commitment to the program.

The most popular delivery method for professional development programs identified by respondents is real time online delivery (Figure 12). This will encompass the use of such technologies as Kansas Regents Educational Communication Center (http://www.telenet2.ksu.edu/krn/krn.html) Polycom Video Conferencing (two-way, real time) or the chat tools embedded in K-State Online (http://public.online.ksu.edu/). The former can be broadcast to specific locations around the state; so it does not completely eliminate travel time for everybody. The later is web-based and can eliminate all travel time. However, participants have to have an account on K-State Online in order to have access to the tools.[4] For small groups, it is also possible to use such public technologies as Microsoft's MSN Messenger (http://get.live.com/messenger/overview) or Netmeeting (http://www.microsoft.com/windows/netmeeting/default.asp) or Skype (www.skype.com). Respondents were ambivalence about independent study, CD-ROMs and K-State Online. This implies that specialists need to engage their specific agents to identify the most effective delivery method to achieve program objectives.

[4] Fortunately, this is not difficult to arrange with Continuing Education at K-State.

Figure 12: Delivery Preferences of Respondents



Preferred delivery days for in-person delivery format were Tuesdays, Wednesdays and Thursdays in that order. There was no difference between males and females or among the different age groups with respect to this preference order. This implies specialists need to recognize these preferences when selecting presentation days for their programs.

Advice to Specialists

Surveys are never complete because the need for completeness is always balanced with a recognition of respondents' time constraints. Furthermore, ideas are often triggered in respondents' minds as they complete surveys which the survey developer could not have framed questions to extract. For both of these reasons, we invited respondents to provide input about anything relating to professional development that we may have overlooked. We received only 17 responses but they did provide some insights into how we may go about developing products that would be useful to extension agents.

Professional development programs presented to K-State extension agents, according to the respondents, must be original, exciting and effective in enhancing their capabilities to meet the expectations of their changing work environments. The best way to develop such content, they said, is to work closely with those who have indicated interest in the particular program focus area. "If specialists can ask agents what they need to know to be effective, then they can develop highly relevant program content," was one suggestion. Thus, respondents saw the process of designing and developing professional development programs as a collaborative activity between specialists and agents.

Respondents also suggested that program developers try and minimize recycling content that has been used at producer meetings since these are often not content-rich enough for professional development programs. "I really get upset," noted one, "when I drive 60 miles one way to have a specialist read their lesson materials that I have seen at a previous producer meeting to me." Respondents opined that since the internet provides an increasing number of their clients with 'the basic information they need,' professional development programs must be designed to take them to the "next level" so they can maintain their relevance to their clients in the supply of information and knowledge. In developing content, it was suggested by a number of respondents that KSRE must endeavor to bring the best programs to agents and not limit itself only to programs developed by its staff. "Look for the best program anywhere to help us be the best we can be" was one plea. This seems to suggest that specialists need to know where the best materials are for specific professional development content and who can best present such material. Bringing others to participate in KSRE programs enhances quality as well as expands collaborative opportunities for KSRE personnel.

Where appropriate, respondents suggested, program developers should include experiential learning and hands-on training modules in their programs. They also suggested leveraging technology to minimize travel time and delivery days. "What about developing intranet sites that staff could access for information and share information?" observed one respondent. The delivery options selected by respondents (Figure 12) provide insights into how effective and the extent to which emerging technologies may be leveraged to achieve the desired goals of a professional development program at KSRE. It is important to recognize the economic benefits of leveraging these technologies in the program delivery process – materials, time, travel, hotel, etc. – but it is also important to respond to customer needs regarding the methods used. But as observed by one respondent, "The counties are strapped for cash, therefore we have to be innovative if this is going to work for the long haul."

There was concern about continuity. Some people think that programs are often started but not sustained. As one person put it, "Can we make sure that this does not become a "flavor of the month" program?" To ensure continuity, it was suggested that KSRE work collaboratively across departments to development curricula that support *true development* of agents into excellent professionals. This may imply elevating some of these professional development programs to certificate programs or making them eligible for academic units so they can be used towards graduate degrees or other continuous education accreditation. Supporters of these incentives argued that they not only make it easier to get commitment from extension agents, but they increase the value of the programs in the eyes of those who may likely pay for them, i.e., the counties.

Concluding Thoughts

This research was motivated by the need to know and understand the professional development needs of extension agents across the KSRE system. The output provides the demographic overview of extension agents and their preferences for program focus areas as special focus areas. It also provides information on the potential opportunities for developing professional development programs for extension agents in the different program focus areas.

We were interested in whether extension agents would demand professional development products were they presented to them. The results show that there is enough interest in all program focus areas to warrant the development of specific professional development programs for agents. We also found that the majority of people want real time online delivery of these programs on Tuesdays, Wednesdays or Thursdays in declining order of preference. Extension agents indicated their interest in participating in the design, development and delivery decisions associated with professional development programs. Engaging customers in the definition of the product has always been an effective loyalty-enhancing process and cost effective.

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