Mississippi State University Extension Personnel Communication Needs Assessment

Brittany Bowman
Department of Agricultural Education, Communications and Leadership
Oklahoma State University
448 Agricultural Hall
Stillwater, OK 74078
405-744-8036
brittany.bowman@okstate.edu

Quisto Settle
Department of Agricultural Education, Communications and Leadership
Oklahoma State University
448 Agricultural Hall
Stillwater, OK 74078
405-744-8036
qsettle@okstate.edu

Elizabeth Gregory North
Office of Agricultural Communications
Mississippi State University
Box 9625
Mississippi State, MS 39762
662-325-2262
elizabeth.north@msstate.edu

Keri Collins Lewis
Office of Agricultural Communications
Mississippi State University
Box 9625
Mississippi State, MS 39762
662-325-2262
keri.lewis@msstate.edu

Mississippi State University Extension Personnel Communication Needs Assessment

Introduction

Extension personnel's responsibilities include promoting programs and knowledge to their clientele. Changes in clientele communication methods, such as increased cell phone ownership (Smith, 2017) and a preference for faster information (Rodewald, 2001), require Extension personnel to be versatile and adapt to a variety of communication mediums. While the majority of Extension personnel are using smart phones and social media personally (Hopkins, 2013), step-by-step media training and social media guidelines are still needed to apply these technologies in Extension (O'Neill, 2011) because Extension personnel likely "do not have the skills or inclination to work in online environments" (Diem, 2011, p. 6). Because analyses of Extension personnel's communication skills and needs have focused on individual states outside of Mississippi or have not compared newer communication platforms, such as social media, to more traditional communication methods (Erichsen, 2008; Jernigan, 2015; McClure, 2014; O'Neill, 2011; Telg, 2007), more research is needed to compare newer and traditional communications methods in different states. This study fits within Research Priority Area 2: New Technologies, Practices, and Products Adoption Decisions in the AAAE Research Agenda (Roberts, Harder, & Brashears, 2016).

Theoretical Framework

The Innovation-Decision Process (Rogers, 2003) consists of five stages: knowledge, persuasion, decision, implementation, and confirmation. In the knowledge stage, individuals are aware the innovation exists, while in the persuasion stage they develop an attitude, either favorable or unfavorable, toward the innovation. The knowledge stage is more cognitive, while the persuasion stage is more affective. In the decision stage, individuals take actions that lead to their choice of whether or not to adopt the innovation. In the implementation stage, an individual makes use of the innovation, and in the confirmation stage, individuals do more research about whether adopting the innovation was the right decision. As individuals are going through this process, there are factors that can improve adoption rates. This includes observability, which is the ability to see others trying an innovation first. As it applies to this study, if Extension wants more personnel to engage in a specific communications activity, the early adopters' comfort or discomfort with an activity can affect future adoption rates.

Methods

A questionnaire was developed for this survey of Mississippi Extension personnel, including county agents, area agents, associates, regional specialists, and state specialists/faculty. The questionnaire was distributed online to 356 personnel and 129 responded (36.2%). This study addressed which communications activities Extension personnel engaged in and their comfort with each activity they engaged in. Personnel did not report comfort with activities if they did not engage in those activities. The project, not reported here, also included perceived importance of communications activities and professional development preferences. The instrument was reviewed by personnel in the Office of Agricultural Communications to ensure it would meet the needs of the organization and address the variety of communications activities personnel engage in.

Results

The highest percentage of Extension personnel have given speeches (92.4%), taken photos (90.9%), edited writing for grammar and clarity (82.6%), marketed Extension (81.8%), and written an educational newsletter (81.8%). The fewest personnel created Snapchat posts (17.4%), created Instagram posts (16.7%), engaged in other social media (13.6%), wrote for a

blog (12.9%), or managed a blog (6.8%). If survey respondents had performed a communication activity, they ranked their comfort from 1= *Uncomfortable* and 5 = *Comfortable*. Personnel were most comfortable writing a handout for class (*M = 4.78)*, managing a Pinterest account (*M* = 4.71), writing an educational newsletter (*M* = 4.63), making a speech (*M* = 4.60), taking photos (*M* = 4.57), and writing a promotional newsletter (*M* = 4.57). They were least comfortable with creating webpages (*M* = 3.61), doing graphic design for promotional handouts (*M* = 3.95), creating Snapchat posts (*M* = 4.00), writing an editorial column (*M* = 4.03), and editing video (*M* = 4.07).

Conclusions & Recommendations

Mississippi Extension personnel were more likely to use written communication, such as press releases and newsletters, than Florida agents (Telg, 2007) but similar use of written communication compared to Oklahoma Extension personnel (Erichsen, 2004). Mississippi Extension personnel's use of social media platforms is similar to findings that the most common social media platforms used by Arizona Extension personnel (Hopkins, 2013) and family economics agents nationwide (O'Neill, 2011) are Facebook, YouTube, and Twitter, respectively.

Facebook had both the highest use and comfort level of social media platforms, possibly because, amongst social media platforms, Facebook is the most similar to the written communication mediums that agents reported high comfort in, such as newsletters. Although blogging is also heavily based in writing, Mississippi personnel's low use is similar to past research (Cater, 2013; Hopkins, 2013), with the most common reasons Extension personnel list for low blog use being "I don't have time," (58.3%) and "I don't know how to make blog posts easily accessible for me to read" (15.5%) (Cater, 2013). Although comfort was low for social media platforms such as Snapchat and Instagram, comfort was unexpectedly high for Pinterest. Agents who adopt Pinterest seem to become comfortable easily. Future research should consider whether this high comfort level can be attributed to use of Pinterest for Extension communications or whether personnel adapt skills learned from personal Pinterest use for their jobs.

There are many factors that could influence Extension personnel's communication outside of comfort level. Extension personnel's perceptions of clientele's access to internet (Alston, 2011), clientele's preference for information sources (Steede, 2012), clientele's familiarity with Cooperative Extension programming (Telg, 2007), and Extension personnel's own demographics (Harder, 2007) affect Extension personnel's communication choices. Future research should evaluate how these factors cumulatively influence Extension personnel's communication decisions and which factors are most influential. Additionally, change over time of comfort level as Extension personnel try new communication mediums should be measured. Research should be done on beyond state level to build continuity in the literature because many studies consider only one state when evaluating Extension personnel communication.

Given the low costs of using online and social media, increased use of those activities is important in a time when Extension budgets facing cuts in many states. Professional development is needed to train Extension personnel for online and social media to increase use rates and comfort with the technologies. Past research (Cater, 2013) indicates Extension personnel prefer webinar professional training over other types of online skill development, though these results only include one state. More research is needed on the professional development preferences of Extension personnel.

References

Alston, A. J., Hilton, L., English, C. W., Elbert, C., & Wakefield, D. (2011). Analysis of the North Carolina Cooperative Extension Service's role in bridging the digital divide. *Journal of Extension, 49*(6).

Cater, M., Davis, D., Leger, B., Machtmes, K., &Arcemont, L. (2013). A study of Extension professionals preferences and perceptions of usefulness and level of comfort with blogs as an informal professional development tool. *Journal of Extension, 51*(4).

Diem, K., Hino, J., Martin, D., & Meisenbach, T. (2011). Is Extension ready to adopt technology for delivering programs and reaching new audience? *Journal of Extension*, *49*(6).

Erichsen, A. R. (2008). *Oklahoma Cooperative Extension Service educators' accessibility to resources and training regarding communications and marketing: A needs assessment* (Master's thesis). Available from ProQuest Dissertations and Theses database. (UMI 1453038)

Gharis, L. W., Bardon, R. E., Evans, J. L., Hubard, W. G., & Taylor, E. (2014). Expanding the reach of Extension through social media. *Journal of Extension*, *52*(3).

Harder, A. M. (2007). *Characteristics and barriers impacting the diffusion of e-extension among Texas Cooperative Extension county agents* (Doctoral dissertation). Retrieved from http://oaktrust.library.tamu.edu/handle/1969.1/2

Hopkins, S. (2013). *Arizona Extension agents' use of communication technologies* (Master's thesis). Retrieved from http://arizona.openrepository.com/arizona/

Jernigan, H., Edgar, L. D., Miller, J. D., & Cox, C. K. (2015). Communication technology training beyond the university campus: A case study of skill development in the Arkansas Cooperative Extension service. *North American Colleges and Teachers of Agriculture*, *59*(2), 122-129.

McClure, C., Buquoi, B., Kotrlik, J. W., Machtmes, K., & Bunch, J. C. (2014). Extension youth educators' technology use in youth development programming. *Journal of Agricultural Education*, *55*(3), 17-31. doi: 10.5032/jae.2014.03017

O'Neill, B., Zumwalt, A., & Bechmen, J. (2011). Social media use of cooperative extension family economics educators: online survey results and implications. *Journal of Extension*, *49*(6).

Roberts, T. G., Harder, A., & Brashears, M. T. (Eds). (2016). *American Association for Agricultural Education national research agenda: 2016-2020*. Gainesville, FL: Department of Agricultural Education and Communication.

Rodewald, A. D. (2001). Delivery systems- Is the "latest" technology the greatest? *Journal of Extension*, *39*(4).

Rogers, E. T. (2003). *Diffusion of Innovations* (5th ed.). New York, NY: Free Press.

Smith, A. (2017). Record numbers of Americans now own smartphones, have home broadband. *Pew Research Institute*. Retrieved from http://www.pewresearch.org/

Steede, G. M. (2012). *Educational and informational delivery method preferences of Mississippi beef cattle producers* (Master's thesis). Available from ProQuest Dissertations and Theses database. (UMI 1516398).

Telg, R., Irani, T., Hurst, A., & Kistler, M. (2007). Local marketing and promotional efforts of Florida Extension agents. *Journal of Extension, 45*(2).

Xu, X., & Kelsey, K. D. (2012). Will eXtension survive? Oklahoma Cooperative Extension Service employees' perceptions of adopter attributes of eXtension. *Journal of Extension*, *50*(6).