

Expanding the Reach of Extension Through Social Media

Abstract

With increasing numbers of the public using social media applications, Extension professionals have the ability to apply these same tools to connect with their clients. This article demonstrates how a social media toolset can be employed by Extension professionals by identifying how Extension professionals are currently using social media, illustrating how social media can be integrated into outreach and measured, and describing opportunities and challenges for Extension professionals enhancing their work with social media. With this information, Extension professionals will be better prepared to expand their outreach efforts using social media.

Laurie W. Gharis
Post Doctoral Scholar
North Carolina State
University
Raleigh, North
Carolina
lwilson@ncsu.edu

Robert E. Bardon
Associate Dean of
Extension and
Engagement and
Professor
North Carolina State
University
Raleigh, North
Carolina
rebardon@ncsu.edu

Jennifer L. Evans
Extension Assistant
North Carolina State
University
Raleigh, North
Carolina
jlevans3@ncsu.edu

William G. Hubbard
Regional Forester
Southern Regional
Extension Forestry
Athens, Georgia
whubbard@uga.edu

Eric Taylor
Silviculturist and
Extension Forestry
Specialist
Texas A&M Forest
Service
Overton, Texas
etaylor@tfs.tamu.edu

Introduction

Workloads, changing client demographics, and tighter fiscal environments are compelling Extension professionals to enhance traditional forms of technology transfers, such as face-to-face teaching, with Internet-based forms of dissemination. One such method of delivery is through social media applications. Social media offers Extension professionals the ability to reach out to new audiences, provide professional guidance and direction, and encourage peer-to-peer interactions while meeting the land-grant Extension mission of increasing knowledge, changing behavior, and assessing the impacts of their programmatic efforts.

With over 85% of adults using the Internet (Pew, 2013), the push to connect must resonate as a paramount objective with educators and Extension administrators. Social media tools are becoming

increasingly popular. Over 200 million people are regular Twitter users (Holt, 2013). Facebook users have increased from one million people in 2004 to over one billion people in 2012 (Associated Press, 2012). Clients are actively employing social media tools, regardless if whether experts are posting to the social media sites (Bonson, Torres, Royo, & Flores, 2012). By actively participating in social media, Extension professionals have an opportunity to ensure that reliable, up-to-date information is available to their clients. This article investigates Extension professionals' current use of social media tools and demonstrates how Extension professionals can successfully incorporate this toolset into existing programming to reach a significantly greater number of individuals.

Social Media in Extension

Social media includes a variety of dynamic Internet-based and mobile communication applications that can be selected according to target audience, purpose, or personal preference. These easily accessible and often free tools can be used to provide information to readers and/or to interact with clients in almost any location at any time. They can connect clients to other websites (Jones, Kaminski, Christians, & Hoffmann, 2011), supply information globally (Cornelisse et al., 2011), recruit additional clients (Case & Hino, 2010), and enhance group interaction (Gunawardena et al., 2009). Social media tools offer quick and widespread distribution of information, which can be valuable to Extension personnel reaching out to audiences who may not know about Extension otherwise (Cornelisse et al., 2011). Although Facebook, Twitter, LinkedIn, and YouTube might be the most cited social media applications, there are many other sites that allow users to interact and collaborate. These include blogs, mashups, rich site summary (RSS) syndicated Web feeds, podcasting, photo sharing, tagging, video sharing, virtual worlds, widgets, and Wikipedia (Dadashzadeh, 2010). Kinsey (2010) and Cornelisse et al. (2011) provide definitions and examples of social media applications.

Extension professionals should understand that social media tools are already used to inform the public on important events, trends, and decisions (Auer, 2011). Many Extension clients are willing to receive information electronically (Bardon, Hazel, & Miller, 2007) and are able to use electronic technologies (Guenthner & Swan, 2011). The following list provides examples of how Extension professionals are currently using social media applications to reach and to remain relevant to their clients.

- Agriculture
 - Extension professionals developed turfgrass blogs to communicate timely information to the turfgrass industry (Jones et al., 2011).
 - Secretary Vilsak discussed StrikeForce via Google+ Hangout. Questions were requested ahead of time via Twitter (USDA, 2013).
 - The University of Minnesota Equine Extension Program and Michigan State University's Online Horse management program developed Facebook pages to deliver interactive communication streams (Martinson, Skelly, & Fisher, 2011).

- Employment
 - Extension educators at Ohio State developed a Facebook page to provide support to clients who had lost their jobs (Brinkman, Hart, Olinsky, & Merkwowitz, 2011).
- Environment
 - Werts, Mikhailova, Post, and Sharp (2012) integrated WebGIS technologies, data sources, and social media to request voluntary geographic information on sediment pollution from abandoned developments in South Carolina.
 - Kocher, Lombardo, and Switzer (2013) demonstrated how social media could be employed to support wildlife and to reach new non-local audiences.
 - The Department of Interior sends out a weekly YouTube video to their customers that covers the week's most important activities in approximately 3 minutes (DOI, 2013).
- Youth
 - 4-H's official national Facebook page has over 420,629 likes. The Facebook page links to Twitter and Instagram. Daily posts with pictures invite likes, comments, and shares (4-H, 2013).

Integrating Social Media Tools

As social media Web-applications become ingrained in people's daily lives, including the tools in outreach becomes more important from a business perspective (Barnes & Barnes, 2009). An adequate number of articles and websites exist that can help individuals begin the process of integrating social media into their work. The following list identifies steps and resources, which can be helpful for including social media in planning, in building online communities, and in marketing efforts.

Step 1: The Planning Process

Dadashzadeh (2010) notes that five outputs are required for the social media planning process; outputs include social media governance, organizational information key performance indicator requirements, social media application portfolio, project ranking, and implementation schedule. Although each of the outputs is important for the social media planning process, special attention should be focused on the following items:

- Formalizing how the agency views social media usage, including employee involvement;
- Specifying decision rights, organizational responsibilities, and guidelines for engagement; and
- Connecting social media applications with specific agency objectives and defining what success looks like through an implementation schedule and metrics.

Step 2: Building an Online Community Process

Benson (2011) listed five steps for building an online community.

- Listen to your audience.
- Plan a strategy with metrics.
- Market the strategy electronically (listservs, eblasts, etc.).
- Engage the audience.
- Report your metrics.

Step 3: The Marketing Process

King (2013) posted 16 social marketing tips from the pros on August 13, 2013. These tips were tweeted 5645 times between August 13 and October 2, 2013. Tips that could be practical for Extension work include the following items.

- Use images to amplify your Facebook updates.
- Focus on 1-2 social media applications and do them well.
- Focus on social media applications where you expect your customers to be.
- Make real life connections.
- Make following/follower management part of your daily routine.

Social Media Metrics

Extension professionals are obligated to track the success and impact of their programming efforts. Fortunately, tracking Extension's effort should be less challenging for social media. Social media metrics can include the number of visitors, fans, friends, followers, mentions, incoming links to your site (Cornelisse et al., 2011), and/or likes. For example, on Twitter, individuals are able to follow people/entities that interest them, while on Facebook, individuals are able to be friends with people/entities that interest them. More meaningful engagement measures can include the following items:

- Conversation and conversation index,
- How fast the message moves, and
- Customer actions (Benson, 2008).

Engagement can be measured by the amount and level of interactivity not only with pictures, comments, and articles, but also by the ratio of comments received to comments posted (referred to as the "conversation index") and by how fast the message moves. With social media, clients have the opportunity to move the message to other individuals by reposting material that they feel is important. An example of moving the message would be through a retweet. Qualitative measures such as actual comments may also be viewed as indicators of success (Owyang, 2007); comments may demonstrate knowledge gained, practices adopted, and/or changes in action. Figure 1 provides an example of how engagement can be measured.

Figure 1.

Facebook Post from Texas A&M AgriLife Extension*



* Names have been changed for privacy.

This post identifies the quantity of likes (47), comments (2), and shares (15). Comments and shares can help demonstrate engagement through clients' actions. For example, this post was forwarded to 15 other people/entities. Forwards can be tracked to see who is sharing the information, whether new clients are being reached, and what information is shared most often. Comments can identify clients who want to take action or who played a role in the work. Notice that "Mark's" comment received feedback, also, in the form of two likes. Further interaction can take place by Texas A&M AgriLife Extension posting comments to the client's feedback for everyone to view rather than simply responding individually.

Social media does not remove the need for researchers to follow up with their clients through surveys, interviews, and other methods. Although conversations may demonstrate actions on the part of the clients, the comments are from a convenience sample. Researchers will still need to collect data from a representative sample to measure knowledge gained and behavior changes from

their social media efforts.

A Specific Example of How Social Media Is Included in Outreach

To demonstrate how social media can be included in outreach, an example is given for the Forestry Webinar Portal <http://www.forestrywebinars.net/>. This portal is an Internet-based learning portal and content management system that seeks to increase the value of the online learning experience and to give a nationwide network of Web-based educators/coordinators access to a common site for coordination, marketing, continuing education unit management, and registration. Although the webinar portal was originally developed by natural resource professionals at North Carolina State University, Texas Agrilife Extension Service, and the Southern Regional Extension Forestry office, a national guiding team was created in the fall of 2012 to provide expertise in expanding the reach of Extension with webinar technologies and social media.

Similar to Dadashzadeh's (2010) recommendations, the guiding team began the process of integrating social media into their outreach with planning. Specifically, a pre-communication plan was developed. The pre-communication plan included the product goal, communication goal, target audience, objectives, and outcomes. The plan will be carried out by a doctoral or postdoctoral student under the direction of the national guiding team. An example of a pre-communication plan objective is to increase awareness of the forestry webinar portal. It is expected that unique visits to the webinar portal page will increase by 10%. Since the doctoral student is from North Carolina State University, North Carolina State University's social media policies will be followed, including posting a caveat that views are from an individual and do not necessarily represent North Carolina State University.

The next step was to develop an online community. Following Benson's (2011) steps, we first listened to our clients through interviews and surveys of webinar producers and webinar users. Producers were asked how they marketed their webinars, while users were asked what social media applications that they used. In addition, forestry webinar users who view webinars on the forestry webinar portal were asked how they heard about the webinar. This information is currently being collected and will be used to turn the pre-communication plan into a communication plan that specifies the ~two social media applications that will be used to reach natural resource professionals and to meet organizational objectives.

Once the communication plan is developed, the webinar portal will be marketed online through social media outlets as specified in the communication plan. As stated above, social media applications will be focused where customers are expected to be as found in the surveys and interviews. Following tips from King (2013), only a few social media applications will be integrated into the outreach. The doctoral student will be responsible for monitoring social media applications and for engaging with the clients on a daily basis. Furthermore, to better engage customers, a YouTube video will be developed demonstrating the potential of the Forestry Webinar portal and will be sent to potential webinar providers through email and the chosen social media outlets. To further connections, webinar providers will be contacted through Skype and/or telephone to make a real-life connection and to ensure that their needs are being met by the forestry webinar portal.

Challenges

Although social media applications have many advantages, they may also pose challenges to the Extension professional. Some of these challenges may include time allocation to update content, the need for adequate Internet access and speed, and lack of adoption by the traditional Extension community (Jones et al., 2011). Furthermore, the ease of access for posting content, the lack of community standards for content, and the amount of information posted can cause challenges for the reader in deciphering which content is dependable and comprehensive (Auer, 2011). Other challenges can include acceptance of social media by administration, peers, and/or clients. Additionally, many Extension programs are designed to educate only through hands-on experiential learning, rather than through multiple avenues of learning.

Furthermore, even with a social media presence, encouraging your clients to access resources can still be challenging. To demonstrate an example of this challenge, a unique Web link for a social media toolbox was given to 25 participants at a Joint Council of Extension Professional's Galaxy IV presentation titled "How Social Media Is Being Used in Natural Resource Outreach." In addition, the unique Web links were tweeted and placed on the Southern Regional Extension Forestry's social media accounts. Between September 17 and October 2, 2013, only five of their 99 Facebook fans visited the toolbox via Facebook, and only three of their 236 Twitter followers visited via Twitter.

Opportunities

Studies such as Bardon et al. (2007) and Guenther and Swan (2011) demonstrate potential for social media tools, but what tools will be most appropriate for Extension? O'Neill, Zumwalt, and Bechman (2011) developed a social media questionnaire to gauge usage of members of the eXtension Financial Security for All Community of Practice members. The findings showed that of the options provided in the survey, Facebook was the type of social media most frequently used by respondents. Respondents also sometimes used Twitter, YouTube, and blogging.

In March 2013, the United States Department of Agriculture Natural Resource Conservation Services (NRCS) offered a webinar titled "How and What Social Media is Being Used in Natural Resource Outreach." The webinar consisted of 210 individuals, including 65 representatives from NRCS and 145 representatives from private, university, and other government agencies and organizations. The audience was polled during the webinar to find out what social media tools they used most often and considered most useful for their work place. Table 1 shows that of the options provided, participants use Facebook most frequently and think that Facebook is most useful for their work place mission. YouTube and Twitter were noted as the second and third most useful tools for work place mission, respectively.

Table 1.
Social Media Tools Used Most Often and Thought Most Useful for the Work Place Mission

| Question/Tool | Facebook | Flickr | LinkedIn | Twitter | YouTube | No Answer |
|---------------|----------|--------|----------|---------|---------|-----------|
| | | | | | | |

| | | | | | | |
|---|-----|----|----|-----|-----|-----|
| What social media tool do you use most often? | 53% | 0% | 9% | 10% | 16% | 12% |
| What social media tool do you think would be most useful for your work place mission? | 39% | 2% | 8% | 17% | 20% | 14% |

Extension's mission is to take the resources to the people (Seger, 2011). Extension educators should consider which outreach materials will reach the targeted audience at the widest level (Kinsey, 2010) and how to balance Extension's mission through traditional programmatic methods (e.g., face-to-face meetings) while, at the same time, earnestly investing in the infrastructure required to reach out to non-traditional clientele via Internet-based technology (Guenthner & Swan, 2011). Specific opportunities for social media in Extension are shown in the following list.

- Disseminate timely, practical, science-driven information to its constituents, while enhancing interactions between Extension professionals and the readers, and assessing immediate impacts (Jones et al., 2011)
- Help clients collaborate, stay abreast of changing market trends, brand their businesses, and communicate their stories (Hardesty, 2011).
- Increase the skillset of under-employed clients (Carroll et al. 2012) while demonstrating the effectiveness of new and innovative computer uses to low-income urban communities (Kudryavtsev, Krasny, Ferenz, & Babcock, 2007).
- Request information (Werts et al., 2012) and resources (Kocher et al., 2013) from your clients.
- Share information online instantaneously with a global community promoting rapid knowledge sharing and allowing real time interaction and/or collaboration between researchers and clients (Powell, Jacob, & Chapman, 2012).
- Provide background and transparency to clientele to encourage group consensus and decision making (Vuori & Okkenen, 2012).

Conclusion

This article demonstrates how some Extension professionals are using social media, illustrates how social media can be integrated into current outreach plans, and establishes opportunities and challenges for Extension professionals enhancing their reach with social media. Social media applications give Extension professionals the ability to reach out to new audiences, to provide individual feedback in a timely and convenient manner to their clients, and to use technology to

meet the increasing demands of Extension. Although integrating social media can take time, it will be imperative for Extension professionals to enhance their outreach toolset with social media applications, as social media usage increases.

References

4-H. (2013). Facebook. Retrieved from: <https://www.facebook.com/4-h>.

Associated Press. (2012). Number of active users at Facebook over the Years. Retrieved from: <http://finance.yahoo.com/news/number-active-users-facebook-over-years-214600186--finance.html>.

Auer, M. (2011). The policy sciences of social media. *Policy Studies Journal*, 39, 709-736.

Bardon, R., Hazel, D., & Miller, K. (2007). Preferred information delivery methods of North Carolina forest landowners. *Journal of Extension* [Online], 49(6) Article 5FEA3. Available at: <http://www.joe.org/joe/2007october/a3.php>

Barnes, N., & Barnes, F. (2009). Equipping your organization for the social networking game. *Information Management*, 43, 28-33.

Benson, C. (2008). Social media measurement. *Community Strategist*. Retrieved from: <http://conniebensen.com/2008/05/10/social-media-measurement/>

Benson, C. (2011). 5 essential steps to building community online. *Community Strategist*. Retrieved from: <http://conniebensen.com/category/best-practices/>

Bonson, E., Torres, L., Royo, S., & Flores, F. (2012). Local e-government 2.0: Social media and corporate transparency in municipalities. *Government Information Quarterly*, 29, 123-132.

Brinkman, P., Hart, M., Olinsky, C., & Merkowitz, R. (2011). Using technology 24/7 for regional assistance after shutdown of major industries. *Journal of Extension* [Online], 49(6) Article 6TOT3. Available at: <http://www.joe.org/joe/2011december/tt3.php>

Carroll, F., Jenkins, A., Woodward, C., Kop, R., & Jenkins, E. (2012). Exploring how social media can enhance the teaching of action research. *Action Research*, 10, 170-188.

Case, P., & Hino, J. (2010). A powerful teaching tool: Self-produced videos. *Journal of Extension* [Online], 48(1) Article 1TOT3. Available at: <http://www.joe.org/joe/2010february/tt3.php>

Cornelisse, S., Hyde, J., Raines, C., Kelley, K., Ollendyke, D., & Remcheck, J. (2011). Entrepreneurial Extension conducted via social media. *Journal of Extension* [Online], 49(6) Article 6TOT1. Available at: <http://www.joe.org/joe/2011december/tt1.php>

Dadashzadeh, M. (2010). Social media in government: From eGovernment to eGovernance. *Journal of Business & Economic Research*, 8, 81-86.

DOI. (2013). DOI Videos. Retrieved from: <http://www.doi.gov/news/video/index.cfm>

Guenthner, J., & Swan, B. (2011). Extension learners' use of electronic technology. *Journal of Extension* [Online], 49(1) Article 1FEA2. Available at: <http://www.joe.org/joe/2011february/a2.php>

Gunawardena, C., Hermans, M., Sanchez, D., Richmond, C., Bohley, M., & Tuttle, R. (2009). A theoretical framework for building online communities of practice with social networking tools. *Educational Media International*, 46, 3-16.

Hardesty, S. (2011). Agritourism operators embrace social media for marketing. *California Agriculture*, University of California, 65, 56.

Holt, R. (2013). Twitter in numbers. *The Telegraph*. Retrieved from: <http://www.telegraph.co.uk/technology/twitter/9945505/Twitter-in-numbers.html>.

Jones, M., Kaminski, J., Christians, N., & Hoffmann, M. (2011). Using blogs to disseminate information in the turfgrass industry. *Journal of Extension* [Online], 49(1) Article 1RIB7. Available at: <http://www.joe.org/joe/2011february/rb7.php>

King, C. (2013). 16 social media marketing tips from the pros. Retrieved from: <http://www.socialmediaexaminer.com/16-social-media-marketing-tips-from-the-pros/>

Kinsey, J. (2010). Five social media tools for the Extension toolbox. *Journal of Extension* [Online], 48(5) Article 5TOT7. Available at: <http://www.joe.org/joe/2010october/tt7.php>

Kocher, S., Lombardo, A., & Sweitzer, R. (2013). Using social media to involve the public in wildlife research-the SNAMP Fisher Sock Collection Drive. *Journal of Extension* [Online], 51(1) Article 1IAW3. Available at: <http://www.joe.org/joe/2013february/iw3.php>

Kudryavtsev, A., Krasny, M., Ferenz, G., & Babcock, L. (2007). Use of computer technologies by educators in urban community science education programs. *Journal of Extension* [Online], 45(5) Article 5FEA2. Available at: <http://www.joe.org/joe/2007october/a2.php>

Martinson, K., Skelly, C., & Fisher, L. (2011). Measuring the effectiveness of a Facebook fan page for equine Extension programs. *Journal of Equine Veterinary Science*, 31, 344-345.

O'Neill, B., Zumwalt, A., & Bechman, J. (2011). Social media use of cooperative Extension family economics educators: online survey results and implications. *Journal of Extension* [Online], 49(6) Article 6RIB2. Available at: <http://www.joe.org/joe/2011december/rb2.php>

Owyang, J. (2007). Web strategy: How to measure your social media program. *Web Strategist*. Retrieved from: <http://www.web-strategist.com/blog/2007/06/07/web-strategy-how-to-measure-your-social-media-program/>

Pew. (2013). Demographics of Internet users. Retrieved from: [http://pewinternet.org/Trend-Data-\(Adults\)/Whos-Online.aspx](http://pewinternet.org/Trend-Data-(Adults)/Whos-Online.aspx)

Powell, D., Jacob, C., & Chapman, B. (2012). Using blogs and new media in academic practice: Potential roles in research, teaching, learning, and Extension. *Innovative Higher Education*, 37, 271-282.

Seeger, J. (2011). The new digital [St]age: Barriers to the adoption and adaptation of new technologies to deliver Extension programming and how to address them. *Journal of*

Extension [Online], 49(1) Article 1FEA1. Available at: <http://www.joe.org/joe/2011february/a1.php>

USDA. (2013). StrikeForce Opportunities with Agriculture. Retrieved from:

<http://www.youtube.com/watch?v=FI1J70TBO5s>

Vuori, V., & Okkonen, J. (2012). Refining information and knowledge by social media application: Adding value by insight. *VINE*, 42, 117-128.

Werts, J., Mikhailova, E., Post, C., & Sharp, J. (2012). An integrated WebGIS framework for volunteered geographic information and social media in soil and water conservation. *Environmental Management*, 49, 816-832.

Copyright © by *Extension Journal, Inc.* ISSN 1077-5315. Articles appearing in the Journal become the property of the Journal. Single copies of articles may be reproduced in electronic or print form for use in educational or training activities. Inclusion of articles in other publications, electronic sources, or systematic large-scale distribution may be done only with prior electronic or written permission of the *Journal Editorial Office*, joe-ed@joe.org.

If you have difficulties viewing or printing this page, please contact [JOE Technical Support](#)