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AGRICULTURE EXTENSION

### Social Media Activity of Agriculture Extension Graduate Students in India

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#### **ABSTRACT**

An increasingly important channel of communication, social media has made its presence in every sphere of our life: social, economic, physical, human and political. It has great potential for sharing news, communicating new technologies, and making available of products and services. However, several questions have emerged about this new media with respect to agricultural extension education, research, and extension services. Given the expanding scope and enormity of use of social media, the researchers sought to identify the activities and the level of their use related to extension education that are being shared in this platform. The objective of our research was to determine the types and extent of social media use in relation to students' subject discipline. The study was conducted at four Indian agricultural universities. Information from students on communication techniques and activities related to agricultural extension was collected through a stratified random sampling, and data were analyzed using mean, SD, chi-square and correlations. It was revealed that the students of extension education were engaged in eighteen activities on social media. In addition, the three activities which majority of Indian extension students performed in social media were creating, strengthening and debating on extension forums (98%), writing blogs related to extension education (74%), and videoconferencing (61%). The evidence shows that in the future social media will increase its role in educating students, as well as training farmers and other agriculture stake holders in India.

#### Highlights

Mass media plays a crucial role in distribution of information and in shaping public policy.

Keywords: agriculture, extension, students, social media, use

The term "social media" refers to a set of online tools for disseminating information to a broad audience, often with shared interests. It has become a huge and integral component of how people spend their time online. Between wikis, blogs, Face book, twitter, and many others, people are spending enormous amounts of time on websites used to share information and connect with people (Acar, 2008). Not surprisingly, people are easily connecting with others and sharing information more than ever before. Many people get their news, gossip, and friendship updates via social network sites, sometimes even before breakfast from the

convenience of their mobile phone or laptop. In particular, college students form a large proportion of users on social media networks. Lenhart, Purcell, Smith, and Zickuhr (2010) found that 72% of all college students have a social media profile with 45% of college students using a social media site at least once a day. As far as agriculture extension was concerned the Land Grant Mission, 2010 agreed that Cooperative Extensions can incorporate Social media into their outreach programs and reach a larger number of people while providing a greater amount of higher quality information to anyone interested. This paper aims to provide empirical



research about social media perceptions and use by Extension educators and students.

#### Statement of problem

Extension activities are generally performed by chalk, painting, poster, chart paper. As the time changed the way of performing extension activities also changed. There was no idea that extension activities can perform through mobile but now a days it is performing as big channel for extension activities. In similar fashion the social media is playing a great role in communication of technology to regional, national and global clients. The experimentation of co-operative extension in the USA has proved that Face book and other social media can be used as platform to reach the farmers along with the traditional channels of communication. Since social media is a larger channel for sharing of news, views, communication, selling and advertisement of product and services so it is necessary to know the happening and discussion being carried out in social media? During the review of literature an attempt was made to know different studies of social media related Extension Education, but there were found no such relevant documents, reports and researches about social media focused on Agricultural extension. So it was decided take up the study with following questions.

#### **Research Question**

How the graduate students of extension education are engaged in social media?

#### MATERIALS AND METHODS

This study is based on survey method of research. A survey is always concerned with some particular of persons, firms, organization, or the like. The totality of persons, firms, organization and other items under the study is called population. A survey that indicates every element in the population is known as census. The study has been conducted in the state agricultural universities of Uttar Pradesh. There are four State Agricultural Universities, one Deemed to be university and two central universities with agriculture faculties located in U.P. There are six universities/ institutes in U.P. To reduce the sample size four universities (65%) out of six were selected for research purpose. The population of the present

study is postgraduate and research scholar students of Extension education studying in the Institute of agricultural sciences, B.H.U. Varanasi, Narendra Dev University of Agriculture and Technology Faizabad, Chandra Shekhar Azad University of Agriculture & Technology, Kanpur and Sam Higginbottom Institute of Agriculture, Technology and Sciences (SHIATS) Allahabad. The researcher made content analysis of different social sites mainly Facebook, Orkut, LinkedIn, MySpace etc. Different issues related to extension which were shared by different professionals of extension were collected. The enlisted item /issues were shown to different scholars of extension education who read them and edited for preparation of interview schedule. This type of activity was carried out four times for final interview schedule. It was exercised by interviewing with few respondents for pre-testing. Suitable modifications were made according to the need of the study. Thereafter, the data were collected from respondents, through schedule by face to face interaction. Statistical package for social science (SPSS) version 9.1 was used for analysis of collected data. Various other techniques like Frequency, percentage, chi-square test were used to analyse the data for making interpretation.

#### RESULTS AND DISCUSSIONS

## Asking questions or replying of extension query

Here there are some activities which are normally performed by social media users on social networking sites. Activities may be of different types related to different fields. In extension, the activities were related to asking questions and replying the extension queries. An attempt was made to know whether the students of Extension education perform such activity! Their responses were collected in terms of 'do' or 'don't'. The score for measurement were assigned as 0 and 1 assigned respectively.

**Table 1:** Asking questions or replying of extension query

Performance category	Frequency	Percent	Cumulative Percent
Don't	22	22.0	22.0
Do	78	78.0	100.0
Total	100	100.0	



The above table 1 shows that majority i.e. 78% of the students perform such activity while remaining i.e. 22% of the respondents do not perform such activity. This activity basically depends on curiosity of the respondents. So it may be reason that majority of the respondents involve themselves in such type of activities. Such kind of findings has been observed by Jackson 2017 in his study fifteen Social Media Questions and answers.

#### Sharing of knowledge related to extension

In this research the respondents are students of P.G. and Ph.D. in Extension education. They have sufficient knowledge to share his views and ideas related to extension education. Sharing of knowledge is an activity which is now most prevalent on social media. An attempt was made to study the performance of respondents'. During the collection of data score '0' was assigned for don't and '1' was assigned for doers after that it was counted and frequency, percentage was calculated for relevant inference.

Table 2: Sharing of knowledge related to extension

Performance category	Frequency	Percent	Cumulative Percent
Don't	24	24.0	24.0
Do	76	76.0	100.0
Total	100	100.0	

The above table 2 shows that most of the respondents perform such activity. They are 76% while only 24% of the respondents do not perform such activity. It can be inferred from the table that this activity is popular among extension professionals and the respondents do not perform this activity are less in number. This is popular activity among extension P.G. and Ph.D. students and majority of the students are aware with such issue. The reason may be that P.G. and Ph.D. students have sufficient knowledge related to their subject so they try to share their knowledge and wants to get the feedback of the others for their career development.

However, Bhattacharjee & Raj, 2016 also found that students follow the social media to gain knowledge regarding agriculture and allied sector. Also Wahlroos (2010), in his thesis entitled "Social media as a form of organizational knowledge sharing: a case study on employee participation at Wartsila",

investigated the role of Social Media Tools is in the sharing of knowledge.

### Looking for information about books/journals related to extension

This activity is career oriented for extension professionals because the respondents who are in P.G. and Ph.D. look for books, magazines and journals related to extension education. The researcher tried to group the respondents on the basis of namely 'do' and 'don't for which the score 1 and 0 assigned respectively. It was counted and frequency, percentage was calculated for relevant inference.

**Table 3**: Looking for information about books/ journals related to extension

Performance category	Frequency	Percent	Cumulative Percent
Don't	25	25.0	25.0
Do	75	75.0	100.0
Total	100	100.0	

The above table 3 shows that three fourth of the respondents i.e. 75% are perform such activity and remaining i.e. 25% do not. Most of the respondents are involve in looking for information about books/journals related to extension the reason may be that they wants to gain more knowledge related to extension and wants to make their career in this field.

#### Reading statistical information

Statistics is used in research work so reading statistical information gives idea to students. The researcher tried to group performance of the students namely 'do' and 'don't' for which score 1 and 0 assigned. It was counted and frequency, percentage was calculated for relevant inference.

**Table 4 :** Reading statistical information

Performance category	Frequency	Percent	Cumulative Percent
Don't	50	50.0	50.0
Do	50	50.0	100.0
Total	100	100.0	

The above table 4 shows that the respondents who are doing such activity are equal to respondents



who not performing such activity; they are in ratio of 50:50%.

### Looking for news or information about agricultural extension

It is very important for the professionals to keep update themselves with all news and information related to their subject. In agricultural extension there are various societies and forums that are directly or indirectly useful for extension students. An attempt was made to study the performance of respondents'. During the collection of data 0 was assigned for don't and 1 was assigned for doers. After that it was counted and frequency, percentage was calculated for relevant inference.

**Table 5 :** Looking for news or information about agricultural extension

Performance category	Frequency	Percent	Cumulative Percent
Don't	45	45.0	45.0
Do	55	55.0	100.0
Total	100	100.0	

The above table 5 shows that most of the respondents' i.e. 55% are involved in such type of activity while remaining i.e. 45% of respondents are not busy in doing such type of activity. Majority of the respondents involve themselves in such activity, behind this the reason may be that they try to update themselves with news and other information shared by different professionals.

#### Searching for new contacts

This activity helps an individual to gain more knowledge and information from different renowned persons. To know this researcher categorized performance of respondents as 'do' or 'don't' aware for which score 1 and 0 assigned. It was counted and frequency, percentage was calculated for relevant inference.

**Table 6:** Searching for new contacts

Performance category	Frequency	Percent	Cumulative Percent
Don't	56	56.0	56.0
Do	44	44.0	100.0
Total	100	100.0	

The above table 6 shows that majority of the students are not interested to doing such activity. They are 56% while 44% of the respondents are not involved in such type of activity. It can be broadly inferred from the table that searching new contacts activity is not popular among the majority of the respondents and they are using it. The reason might be their interest related with such activity.

#### Videoconferencing

It is an activity by which a person can talk to a second person through video. This activity is just five to six years old and it is too much popular among all. Now a day's class is conducted through videoconferencing. In agriculture, extension scientists perform this activity with farmers. An attempt was made to study the performance of respondents'. During the collection of data 0 was assigned for don't and 1 was assigned for doers. After that it was counted and frequency, percentage was calculated for relevant inference.

Table 7: Videoconferencing

Activity	Frequency	Percent	Cumulative Percent
Don't	61	61.0	61.0
Do	39	39.0	100.0
Total	100	100.0	

The above table 7 shows that majority of the students i.e. 61% not perform such activity while remaining i.e. 39% are doing such activity. Less numbers of the respondents do such activity. The reason may be that resources and instruments which are important for videoconferencing are not available everywhere. Given a choice and available of infrastructure may promote this activity.

Poellhuber and Anderson (2011) In terms of interest in using social media for academic practice, the study respondents demonstrated a higher interest in using those social media tools for which they were most familiar. Ranked by the percentage of interested respondents, the list includes the following: video sharing (58.2%), social networking (52.8%), Web conferencing (42.6%), blogging (40.2%), photo sharing (36.4%), podcasting (33.7%), wikis (31.3%), electronic portfolios (28.5%), virtual worlds (19.4%), tweeting (18.5%), and social bookmarking (18.1%).



### Searching for Agriculture College / university / organization

This helps professionals to get a better way for their career. There are different colleges and universities in India and other countries too. Such activity helps individual to get information about other institute. During the collection of data score '1' was assigned for don't and '0' was assigned for doers. It was counted and frequency and percentage was calculated for relevant inference.

**Table 8:** Searching for Agriculture College/ university/organization

Performance category	Frequency	Percent	Cumulative Percent
Don't	37	37.0	37.0
Do	63	63.0	100.0
Total	100	100.0	

The above table 8 shows that the majority of students' i.e. 63% are involved in searching of new college/ university while remaining i.e. 37% are not doing such activity. Most of the respondents are doing such activity behind this the reason may be that majority of respondents are P.G. students and they look new colleges for their Ph.D. programme and other career related activities.

#### Visiting government sites

There are various governmental websites and portals where the respondents visit for updating themselves on various governmental initiatives. An attempt was made to study the performance of respondents'. During the collection of data 0 was assigned for don't and 1 was assigned for doers. After that it was counted and frequency, percentage was calculated for relevant inference.

**Table 9:** Visiting government sites

Performance category	Frequency	Percent	Cumulative Percent
Don't	37	37.0	37.0
Do	63	63.0	100.0
Total	100	100.0	

The above table 9 shows that majority of students i.e. 63% are involved in searching of new college/university while remaining were i.e. 37%. The reason may be that governmental sites update new

initiative and new schemes of the government that are informative for students.

### Looking for information about jobs related to extension

In this activity extension professionals looks for job related to extension. Some of net users post different type of link on social media so that it can come in the work of others. An attempt was made to study the performance of respondents'. During the collection of data 0 was assigned for don't and 1 was assigned for doers after that it was counted and frequency, percentage was calculated for relevant inference.

**Table 10**: Looking for information about jobs related to extension

Performance category	Frequency	Percent	Cumulative Percent
Don't	29	29.0	29.0
Do	71	71.0	100.0
Total	100	100.0	

The above table 10 shows that the majority of the respondents' i.e. 71% are doing such activity while remaining i.e. 29% of the respondents do not involve in such type of activity. It is a career oriented activity so this may be the reason that majority of the respondents are doing such activity.

### Creating, strengthening and debating on extension forums

There are various activities performed on social media for strengthening the extension forum. Some professionals take initiative to start it and other either like, follow the forum. Debating is an activity which is mostly performed on forums that gives better result for discussion. An attempt was made to study the performance of respondents'. During the collection of data 0 was assigned for don't and 1 was assigned for doers. The information was collected, tabulated for inference.

**Table 11:** Creating, strengthening and debating on extension forums

Performance category	Frequency	Percent	Cumulative Percent
Don't	02	02	98.0
Do	98	98	100.0
Total	100	100.0	

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The above table 11 shows that there is big difference between 'doers' and 'not doers'. The respondents who are busy in doing such activity they are just 2% while the respondents who are not doing such activity they are 98%. Very less numbers of the respondents are involved in such activity. The reason may be skill to talk and debate on a forum as everyone not has such skills.

#### Communicating through chats/e-mail

Chatting on social networking sites may be related subject or any other is essential for extension professionals. An attempt was made to study the performance of respondents'. This was studied in terms of 'do' and 'don't' for which score 0 and 1 was assigned respectively.

**Table 12:** Communicating through chats / e-mail

Performance activity	Frequency	Percent	Cumulative Percent
Don't	36	36.0	36.0
Do	64	64.0	100.0
Total	100	100.0	

The above table 12 shows that the majority of the respondents' i.e. 64% are involved in such type of activities while remaining respondents' i.e. 36% do not do such activities. Chatting on social networking sites is performed by most of the respondents. This may be the reason that majority of respondents comes under the doers category. However, Baruah (2012), also found that social media are very useful towards communicating to other persons.

### Searching for workshop and conference related to extension

Workshop and conference are very important to strengthen of candidate for an interview. Professionals share the post related to conference and workshop. An attempt was made to study the performance of respondents'. During the collection of data 0 was assigned for don't and 1 was assigned for doers. After that it was counted and frequency, percentage was calculated for relevant inference.

**Table 13:** Searching for workshop and conference related to extension

Performance category	Frequency	Percent	nt Cumulative Percent	
Don't	42	42.0	42.0	
Do	58	58.0	100.0	
Total	100	100.0		

The above table 13 shows that the majority of the respondents' i.e. 58% are involved in doing such activity while remaining i.e. 42% of respondents are not doing such activity. In this research the respondents are the P.G. and Ph.D. Students. Some of them may want to make their career in academics so they search for workshop/ conference/symposium.

### Searching for new agricultural or rural welfare plan

It is liked and shared by different professionals of different fields. These plan and schemes are an important part of agriculture extension that empowers the general aptitude of the extension students. So to know researcher tried to group performance category namely do or don't aware for which score '1' and '0' assigned respectively. It was counted and frequency, percentage was calculated for relevant inference.

**Table 14:** Searching for new agricultural or rural welfare plan

Activity	Frequency	Percent	Cumulative Percent
Don't	35	35.0	35.0
Do	65	65.0	100.0
Total	100	100.0	

The above table 14 shows that the majority of respondents are doing above activity. They are 65% in number while respondents who are not doing such activity they are just 35% in number. Being an extension student, respondents want to update themselves with new agriculture plan.

# Searching new agricultural information from paper-based publication such as newspaper and magazine

Newspaper and magazines plays vital role in the academics. They are published from various reputed institutions and provide information related to extension education. It helps extension professionals to update them with newspapers and magazine. The researcher tried to group performance of the respondents into two category namely do or don't aware for which score 1 and 0 assigned. It was counted and frequency, percentage was calculated for relevant inference.



**Table 16:** Searching new agricultural information from paper-based publication such as newspaper and magazine

Performance category	Frequency	Percent	Cumulative Percent	
Don't	32	32.0	32.0	
Do	68	68.0	100.0	
Total	100	100.0		

The above table 16 shows that the majority of the students are involved in doing such activity they are 68% while 32% respondents are not doing such activity. It is a career oriented activity and it also helps respondents for research work so this may be the reason that majority of the respondents are doing such activity.

In a survey of undergraduate students, Head and Eisenberg found that over 80% of respondents used Wikipedia for everyday-life information seeking. Adesope and Ogan-Charles 2015, found out that most of the students who use social networking sites for education use social networking sites in carrying out group projects and assignments. However, LeBoeuf, Janice and co. identified that 79% of the people usually get agricultural information from paper based publication such as newspaper and magazines.

### Assistance for building organization among farmers

A social site promotes many functions for the people. Many people launch platform. The purpose is to bring the farmers to social sites for their benefit. To study this data was collected. During the collection of data 0 was assigned for rural and 1 was assigned for urban background after that it was counted and frequency, percentage was calculated for relevant inference.

**Table 17:** Assistance for building organization among farmers

Activity	Frequency	Percent	Cumulative Percent
Don't	41	41.0	41.0
Do	59	59.0	100.0
Total	100	100.0	

The above table 17 shows that the majority of the respondents' i.e. 59% are doing such activity while remaining i.e. 41% of the respondents are not involved in such type of activity. Interest and awareness of the respondents may be the reason so most of the respondents' are doing such activity.

#### Reading blogs related to extension

Blogs are a medium through which a person can express his views and ideas among public through social networking sites. It is generally performed by professionals for their knowledge. During the collection of data 0 was assigned for rural and 1 was assigned for urban background after that it was counted and frequency, percentage was calculated for relevant inference.

**Table 18:** Reading blogs related to extension education

Activity	Frequency	Percent	Cumulative Percent
Don't	56	56.0	56.0
Do	44	44.0	100.0
Total	100	100.0	

The above Table 18 shows that most of the respondents i.e. 56% are not performing such activity while remaining 44% of the respondents are doing but the difference between doers and don't doers is mot more. Reading blogs is a habit and pastime for individuals, in this research majority of the respondents are not doing such activity the reason may be their interest regarding such activity.

#### Writing blogs related to extension education

Writing blogs is an activity and creativity of person who writes the blogs. Normally fraternity of different fields performs this activity on regular basis. They give their ideas and opinion about any specific topic. To study this data was collected. During the collection of data 0 was assigned for rural and 1 was assigned for urban background after that it was counted and frequency, percentage was calculated for relevant inference.

**Table 19:** Writing blogs related to extension education

Activity	Frequency	Percent	Cumulative Percent
Don't	74	74.0	74.0
Do	26	26.0	100.0
Total	100	100.0	

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**Table 20:** Association of independent variables with activity

Variables	Chi-square cal. value	df	Chi-square tab. value	Нуро.	Association
Age	7.479	2	5.991	Reject	Yes
Sex	2.828	1	3.841	Accept	No
Class	9.250	1	3.841	Reject	Yes
Background	5.076	1	3.841	Reject	Yes
Parents' occupation	13.887	6	12.591	Reject	Yes
Family income	13.297	5	11.070	Reject	Yes
Fathers' qualification	13.986	5	11.070	Reject	Yes
Mothers' qualification	0.024	2	5.991	Accept	Yes

The above table 19 shows that most of the respondents i.e. 74% are not performing such activity while remaining i.e. 26% of the respondents are doing so but the difference between doers and don't doers is mot more. Majority of the respondents are not doing such activity the reason may be that they are not aware that how to write a blog or they have no interest in such activity.

From the above table 20 it is evident that in case of age the calculated chi-square value is 7.479 and the table value is 5.991 with 2 degree of freedom. Since the calculated value is more than the table value, the null hypothesis that there is no relation between age and activity and hypothesis was rejected and the alternative hypothesis stating that there is an association between age and activity of the respondents towards the issues of extension education appearing in social sites.

As for as the sex is concern the chi-square calculated value is 2.828 and the chi-square table value is 3.841 with 1 degree of freedom. Since the table value is more than the calculated value. The null hypothesis that there is no relation between sex and activity was accepted and the alternative hypothesis stating that there is no association between sex and activity of the respondents towards the issues shared in social networking sites.

The chi-square calculated value of the class is 9.250 and chi-square table value is 3.841 with 1 degree of freedom. The calculated value is more than the table value. The null hypothesis that there is no association between class and activity was rejected and in the alternative hypothesis that there is an association between class and activity of the respondents towards the issues shared in social media.

From the above table it is seen in case of family background the chi-square calculated value is 5.076 and the chi-square table value is 3.841 with 1 degree of freedom. The calculated value is more than the tabulated value. Previous research shows that in null hypothesis that there is no association between family background and activity was rejected and in the alternative hypothesis that there is an association between family background and activity of the respondents towards the issues of extension education appearing in social sites.

As for as the parents' occupation is concern the chi-square calculated value is 13.887 and the chi-square table value is 12.591 with 1 degree of freedom. Since the table value is more than the calculated value. The null hypothesis that there is no relation between parents' occupation and activity was accepted and the alternative hypothesis stating that there is no association between parents' occupation and activity of the respondents towards the issues shared in social networking sites.

Another dependent variable is family income; the chi-square calculated value is 13.297 and chi-square tabulated value is 11.070 with 5 degree of freedom. In this case the chi-square calculated value is more than the chi-square tabulated value. The null hypothesis there is no association between family income and activity was rejected and in the alternative hypothesis it is reasonable to conclude that there is an association between family income and activity of the respondents towards the issues of extension education appearing in social sites.

The chi-square calculated value of Fathers' qualification of the respondents 13.986, chi-square tabulated value is 11.070 and degree of freedom is 5. In this case the chi-square calculated value is more



than chi-square table value, the null hypothesis that there is no relation between age and activity and hypothesis was rejected and the alternative hypothesis stating that there is an association between fathers qualification and activity of the respondents towards the issues shared in social sites.

As for as the Mothers' occupation is concern of the respondents, the chi-square calculated value 0.024 and chi-square tabulated value is 5.991 with 2 degree of freedom. The chi-square table value is more than chi-square calculated value, it is known in the null hypothesis that there is no association between mothers' qualification and activity and hypothesis was accepted and the alternative hypothesis stating that there is no association between mothers' qualification and activity of the respondents towards the issues of extension education appearing in social sites.

#### CONCLUSION

The power of social media for those who have access-is truly remarkable. Globally, nearly one in four people connect to social networks on a monthly basis. More than one billion accounts are registered on the single most popular social network, Face book. These numbers continue to climb every quarter as populations in developing nations increasingly come online. For agricultural development practitioners, social media tools can expand the reach of your community, strengthen partner relationships, support programmatic initiatives, and provide a vital means to increase the visibility of your public profile and engagement. The study, out of which this paper is prepared gives a solid base of social media use in Agricultural extension.

#### REFERENCES

Acquisti, Alessandro, and Gross, Ralph. 2006. Imagined Communities: Awareness, Information Sharing, and Privacy on the Facebook. In Golle, P. and Danezis, G. (Eds.), Proceedings of 6<sup>th</sup> Workshop on Privacy Enhancing Technologies. (pp. 36--58). Cambridge, U.K. Robinson College. June 28-30. (conference paper).

- Acar, A. 2008. Antecedents and Consequences of Online Social Networking Behavior: *The Case of Facebook. Journal of Website Promotion*, **3**(1/2): 62-83.
- Adesope, Y.R. and Ogan-Charles, G. 2015. Extent of Social Media Usage by Students for Improved Learning in Tertiary Institution. ISOR *Journal of Mobile Computing & Application*, **2**(2): 02-07.
- Baruah, Doverah Trisha. 2012. Effectiveness of social media as a tool of communication and its potential for technology enabled connections: A micro-level study. *International Journal of Scientific Research Publications*, **2**(5): 1-10.
- Bhattacharjee, Suchiradipta and Raj, Sarvanan. 2016. Social media shaping the future of agricultural extension and advisory service. GFRAS Interest Group on ICT4RAS.
- Head and Eisenberg, 2013. "How College Students Use the Web"; Kyung-Sun Kim, Eun Young Yoo-Lee, and Sei-Ching Joanna Sin, "Social Media as Information Source: Undergraduates' Use and Evaluation Behavior," Proceedings of the ASIST Annual Meeting 48 (2011), available online at http:// onlinelibrary.wiley.com/doi/10.1002/meet.2011.14504801283/full [accessed 1 August 2012]; Sei-Ching Joanna Sin and Kyung-Sun Kim, "International Students' Everyday Life Information Seeking: The Informational Value of Social Networking Sites," Library & Information Science Research, 35(2): 107–16.
- Jackson, D. 2017. Fifteen common social media questions and answers. Retrieved from https://sproutsocial.com/insights/social-media-questions/
- Kalpidou, M., Costin, D. and Morris, J. 2011. The relationship between Facebook and the well-being of undergraduate college students. Cyberpsychology, *Behavior & Social Networking*, **14**(4): 183-189.
- LeBoeuf *et al.* Exploring Social Media and Smartphone Use in Ontario Agriculture. OMAFRA. janice.leboeuf@gmail. com.
- Lenhart, A., Purcell, L., Smith, A. and Zickuhr, K. 2010. Social media and young adults. Pew Internet and American Life Project. Retrieved June 20, 2011, from http://www.pewinternet.org/Reports/2010/Social-Media-and-Young-Adults.aspx
- Wahlroos, J.K. 2010. Social media as a Form of Organizational Knowledge Sharing: A Case Study of Employee Participation at Warsila. Master's Thesis, University of Helsinki, Helsinki. Retrieved: November 5, 2014, from helda.helsinki Available at https://helda.helsinki.fi/bitstream/handle/10138/24624/Thesis.Johanna.Wahlross.pdf?sequence=1