

Farmers Club Agricultural Educator Award 2014

A report on the visit to the University of Guelph by:

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Period of visit: 19-30 May 2014

August 2015

## 1. Background and purpose of the visit

Worldwide, there has been an explosion in the use of social media, including, for example, Facebook, Twitter, LinkedIn, Google Plus, and YouTube. It is estimated that worldwide people spend over 500 billion minutes per month on Facebook; there are 200 million registered Twitter accounts; 70 million people use LinkedIn; two billion people view YouTube per day; and 70% of Internet users read Blogs.

Such an astronomical increase in the use of social media has generated massive interests among academic institutions, businesses, and government and non-governmental organisations (NGOs) worldwide in using this exciting new media as strategic tools to advance their interests and achieve their organisational goals. For educational institutions, social media are increasingly seen as innovative tools for improving the effectiveness of teaching and delivering flexible distance learning courses. This, many believe, can help enhance the competitiveness and sustainability of educational institutions. For institutions and agencies involved in agricultural and rural development, whether it is a global institution like the UN Food & Agriculture Organisation (FAO) or a national department like the UK Department for Food Environment and Rural Affairs (Defra), social media are recognised as important ways to promote Knowledge Transfer and Exchange (KTE) in the agriculture and food sector that lie at the heart of technological change and innovation – a prerequisite for enhancing the competitiveness and sustainability of the sector.

These recent developments surrounding social media attracted my interest and I considered this an exciting opportunity to bring about some educational and research innovations within the school of Animal Rural and Environmental Sciences (ARES) of Nottingham Trent University. The ARES has been trying to expand its postgraduate education and research in sustainable agriculture and food security and, as one of the key academics in this area, I became interested in exploring whether and how social media could help in this regard. However, I felt that it would be ideal if I could learn some lessons from those agriculture-based universities/institutions that have already been at the forefront of using this new media. Through my personal contacts I became aware that the University of Guelph (UoG) in Canada was such an institution and, accordingly, I submitted a proposal to the Farmers Club for a travel grant (Agricultural Educator Award 2014) to enable me to undertake a visit to the university.

## 2. Objectives of the proposed visit

The specific objectives of the proposed visit were to:

- a. Learn from UoG colleagues about the use of social media in course delivery, especially involving international students;
- b. Learn about the use of social media in KTE with the farming community within the Ontario province, and
- c. Identify possible areas of academic collaboration between the UoG and Nottingham Trent University.

## 3. Details of the visit

After winning the award I flew to the UoG on 18<sup>th</sup> May 2014 and left Guelph on 31<sup>st</sup> May 2015, i.e. I stayed at Guelph for a total of 12 days (from 19<sup>th</sup> though to 30<sup>th</sup> May). During my visit I was able to carry out most of the activities that I had proposed, including: consultation with colleagues at the UoG with expertise in social media and agricultural communication, in particular, Dr Hambly and Dr Chowdhury; discussions with staff from the Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA); discussions with senior members of staff (Dr Richard Gori and Mr Scott Douglas) involved in the management of UoG distance education courses; discussions with the Director & International Liaison Officer, Dr Lynne Mitchell, and also with senior colleagues from various courses, including: Professor Glen Filson from Capacity Development & Extension, and Professor Sally Humfries and Dr Craig Johnson from International Development. I have also had the opportunity to speak to several PhD and postdoc researchers and to participate at an international seminar called the “Glocal Classroom”. Below I describe in detail the lessons that I have learned from my visit.

### 3.1 Use of social media in course delivery

The UoG has a long history of online course delivery that dates back to the 1980s. At the time of my visit, the university was offering two types of online degrees in a distance education mode. These were: some MBA courses, with the Leadership MBA (30 students) being the regular one, and some certificates/diplomas. (The UoG did not still have an online undergraduate course.) These courses were some of the long-established ones and one reason why these were made online was their popularity. However, the courses offered were not 100% online, but were offered in a blended mode, i.e. there were face-to-face components alongside online contents. The management believed that this face-to-face delivery was important to address local needs and that a 100% online course would not be viable.

In terms of tools, the UoG used a virtual learning management system called “desire to learn” that was built around the idea of web 2.0 social media platforms. Within the system there were tools for coursework, making quizzes and puzzles, conducting exams as well as holding live meetings and discussions. There were also embedded videos sourced from a variety of sources. This online delivery was blended with a face-to-face delivery. In many ways, the “desire to learn” system was very similar to the one used by NTU (called “NOW”). Discussions with various members of staff revealed that, although the system was not used as widely as it could have been, it’s popularity was on the rise.

In terms of innovative use of social media, an interesting experience from the UoG was the “Glocal Classroom”, which was a pilot initiative undertaken by four universities located in four continents – Stellenbosch University in South Africa, Flinders University in Australia, Malmo University in Sweden, and University of Guelph in Canada. The aim of the project was “to bridge the existing gap between web-based learning (often understood as distance learning) and conventional forms of education on campus, by exploring innovative ways to combine the two.” In order to achieve this, the project intended to focus on the user level, not the technical system level, and to create a common ground for discussion on the pedagogical application of Information and Communication Technologies (including social media) in teaching and learning in general.

The main activities through which the project intended to deliver its primary aim were a series of seminars hosted by the partner universities, each of which was to select a theme of its own preference for the seminars. These seminars were expected to be a part of the course-contents of an interdisciplinary Masters programme named Communication for Development being offered by Malmo University. The seminars were expected to provide opportunities for the teaching staff and postgraduate students located in various continents to share and exchange their ideas and test various approaches to teaching and learning.

The second seminar of the Glocal Classroom was held at the University of Guelph in Canada during 22-23 May 2014 in which I had the opportunity to participate. The title of the seminar was “Communication for Social and Environmental Change” that was very relevant to my teaching and research interests. The seminar included several interesting presentations, panel discussions and media installations. The topics covered were quite varied, some of which included: digital social and environmental change, journalistic frames on representation, globalization, web 2.0 innovations for remote and rural community development, agricultural informatics, social entrepreneurship in remote rural communities in Canada, governmentality of open data and open aid, social media and activism in the Middle East, and so on. Each

presentation was followed by panel discussions and question-answering from students and staff based at the host universities and also from other parts of the world. Skype, Facebook and Twitter feeds were used in these question-answering sessions. I actively participated in all of these sessions and also acted as the “discussant” in one of the sessions in which Professor Shirley Thompson of the University of Manitoba made a presentation on food security and participatory video (a form of social media) in remote rural communities in Canada.

My participation in the sessions and discussions with colleagues from all over the world enabled me to understand the diverse use of social media and the innovative applications of such media in course delivery and also in agricultural and rural development interventions.

### 3.2 Use of social media in KTE within Ontario agriculture

As mentioned earlier, I was also interested to learn about the practical application of social media in Ontario agriculture and this was one of the key reasons for my visit. Accordingly, I hosted meetings with relevant members of staff from the UoG and also from the Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA). I learned that one of the key ways OMAFRA was supporting food security was through a partnership with the UoG. In this partnership, there were five thematic areas – production systems, food for health (covers nutrition), agricultural policy, rural development, and bioeconomy (research on crop residues for using for other purposes, e.g. biofuel, bioenergy, biocomposites). The programme was being funded by the OMAFRA and implemented in partnership with the UoG. A total of 14 research stations were in operation, some of which undertook long-term field trials going on for decades. Some trials included: crop field trials, trials on greenhouse gases and on livestock production. During my visit, they were building a large dairy research complex 20 km outside of Guelph in partnership with Ontario dairy farmers, OMAFRA, and the UoG. The partnership also supported two research labs – food safety and quality (tests food borne diseases, pathogens, etc), and animal health lab (disease surveillance of animals, diagnostics).

The programme had an active KTE component to promote technology transfer and agricultural innovations within Ontario agriculture. In the KTE process, a variety of communication methods were used. This included not only the traditional communication methods, such as magazines, posters, field days and conferences, but also increasingly, various kinds of social media, especially, Blogs, Twitter, and Facebook. Sometimes, they combined traditional media with social media, e.g. if they had a new video of a research they could send it out by Twitter and share it that way.

Unlike the UK, Canada maintains a cadre of well-trained, publicly-funded, agricultural extension workers, called technology transfer specialists. They are specialists in their particular fields, e.g. corn specialist, dairy specialist, pig specialist, horticulture specialist, field crops specialist, weed management specialist, pesticide specialist, etc. Quite often these commodity-specific specialists worked in collaboration with the UoG. Although due to government funding cuts since the 1990s, the number of specialists was on decline, they still played a vital role in technology transfer in Canada. Discussions revealed that, due to funding cuts and reduction in specialist numbers, the farmer-to-specialist ratio had gone up and one specialist had to deal with thousands of farmers. The use of social media played a vital role in maintaining this huge coverage.

Social media were used for a variety of purposes. For example, one specialist, Tracey Baldey, frequently used social media to communicate with farmers regarding tomato pests. She created a “bug blog” that was widely popular. Also, through social media, farmers sometime shared pictures with her that enabled her to diagnose the problems more effectively and send recommendations back to them. Unlike one-to-one contacts, social media enabled her to reach ca. 500 tomato farmers in Ontario quite easily. Specialists working at the Ridgetown campus of the UoG observed market pricing trends and provided recommendations on pricing, seasonal fluctuations, and so on. Producers, especially large farmers, could use this information as decision making tools. Social media like Twitter was also used in communicating about weather related information, e.g. whether the spring in Ontario would be really wet and whether this condition would affect the operation of tractors in land preparation. Another use of social media was in pest/disease surveillance and rapid response. For instance, when a pork diarrhoea had recently spread from the US to Canada, Ontario was one of the quickest in Canada to respond to this crisis. Within 2-3 days farmers were warned of the danger and informed of remedial actions through social media. Likewise, social media enabled specialists to quickly know about and respond to the outbreak of weed infestations through continuous monitoring of the communications on the social media spheres.

In addition to the above, social media, especially Twitter and Facebook, helped create relationships and build “communities of learning” through feedback and information sharing between specialists and farmers and also between farmers. Social media also enabled reaching out beneficiaries in many Northern and remote communities where there were lack of fresh, healthy foods, called “food deserts”. Educating and empowering such communities was crucial and social media played a huge role in achieving this goal. Moreover, farmers sometimes used social media as a political tool (something like an “advocacy” tool) to organise and exert their influences on government policy.

Although social media were increasingly being used in Ontario agriculture and rural development, there were several challenges, one of which was the equality of access. For the specialists, it was challenging to know who the audience was, whether they had access to requisite tools (devices), which tools the audience were actually using, etc. For example, Blackberry was no longer a widely used device and therefore was not very suitable. So, the specialists were required to adapt to this situation. There were other accessibility issues, e.g. most farmers didn't have good broadband and older farmers were not using Internet and broadband based tools. However, in terms of reaching the mainstream farmers in Ontario, especially, the large, commercial and innovative farmers, social media did play a huge role. Also, not all types of social media were equally useful. For example, although Twitter became a mainstream type of activity, the use of Facebook was not as widespread, since people used Facebook mainly to interact with friends and relatives, rather than discuss about agricultural issues. I was told that, quite surprisingly, whilst Facebook proved to be effective for getting health information out, the media seemed to be unsuitable for communicating about agricultural issues.

Another downside of social media was the liability issue that posed a considerably high risk for OMAFRA and also for UoG. The massive coverage, rapidity of transmission, and the informal nature of communication meant that there were rooms for providing erroneous messages to farmers that could potentially upset them and create liability problems. I was told that, this was one reason why the Canadian government was very cautious in using social media. However, although, initially, there were lots of scepticism and concerns within the Ministry bosses, and some pioneers of social media found it difficult to convince their supervisors, this situation was changing and the use of social media in KTE was becoming formalised as part of the job of the specialists.

Discussions further revealed that, although social media was widely perceived to be a need of the time, there was a realisation that such media could not be the alternatives to interpersonal communications between farmers and extension workers (specialists). Farmers still placed a huge trust on individual specialists, especially on those who had been working for a long time (e.g. 25-30 years in some cases), and considered the information received from those specialists as more credible.

### 3.3 Opportunities for collaboration identified

A range of opportunities for collaboration was identified and discussed during my visit. The key ones include the following.

- a. Cross-visit of teaching staff. Dr Helen Hamby, my key host, assured me of such an opportunity; however, she mentioned that such activities would require third party funding (e.g. from a donor). Another constraint was that the Masters course-curricula at UoG and NTU were not interchangeable, and to overcome such a constraint, Dr Hamby proposed me to consider developing new modules in line with the course-curricula at the UoG. In addition, Professor Sally Humphries, programme leader for MA International Development at UoG, said that she would be happy to visit NTU and contribute to teaching in the MSc/MRes in Global Food Security and Development course, if and when invited.
- b. I was told by Professor Oscar Homer and Dr Hamby that there was an opportunity for NTU to join the Glocal Classroom network and that they would be open to discussions if there was an interest from the NTU senior management.
- c. Dr Hamby and Dr Chowdhury expressed their willingness to collaborate with me in writing an edited book on the use of social media in agriculture, including lessons drawn from the UK. They also expressed their willingness to be co-investigators in any research project on the topic. However, we all recognised that funding was the biggest constraint on such a collaboration and therefore we agreed to look for a suitable call/grant and develop and submit a joint research proposal if and when such an opportunity was identified.
- d. Professor Glen Filson, and several of his postdocs, expressed their desire to collaborate on potential research on ethnic vegetables in the UK. At the UoG they had already completed a very successful economic/market study on Asian ethnic vegetables (that attracted considerable media and business interests) and were willing to collaborate on a similar study in the UK. Based on this UoG experience I have discussed with my ARES colleagues about the possibility of an action research on Asian ethnic vegetables at the Brackenhurst campus of NTU.
- e. I have also received assurances of research collaboration from Professor Shirley Thompson of the University of Manitoba in the area of food security, especially in remote, rural communities.



#### 4. Concluding remarks

Considering the above, I am pleased to state that the objectives of the UoG visit have mostly been achieved. This visit has generated valuable knowledge and insights for me that will help me enrich my teaching and extend my research on social media in agricultural and rural development. More importantly, this visit has helped me develop valuable academic networks, not only with the academics of the UoG, but also further afield. Moreover, during the course of this award the mentoring and support that I had received from Professor Ian Crute, CBE, enabled me to develop an innovative PhD proposal and win a highly competitive NTU Vice Chancellor's PhD scholarship for my current PhD student Niamh Mahon. I extend my sincere thanks to the Farmers Club for providing me the grant and to Professor Eunice Simmons, the then Dean of ARES (current NTU Pro-VC), for making me aware of this opportunity and for approving my visit.