Title: Post, click, share! Exploring teachers’ use of Web 2.0 technology

# PREPARED BY: VIMALA JUDY KAMALODEEN

### Purpose of study

I am eager to hear (or read) what secondary school teachers currently in practice have to say about their use of Web 2.0. This would serve to satisfy both my professional and personal curiosity. I have found little research on teachers in a local setting related to Web 2.0 use. Unfortunately, teachers from different schools rarely have the opportunity to share their views publicly. I am only able to listen to their concerns when I visit classrooms or invite comments during a professional development programme. I believe this research can be beneficial to teachers and officers alike and I find support from Ziang (2009) who proposes that ‘continual research into supporting and enabling teacher communities (online and off-line) allow sharing of best practices’.

Indeed information from this research would be invaluable to me as an Information and Communication Technology (ICT) curriculum officer in the Ministry of Education, in light of planning future professional development programmes and in providing support to teachers in more effective ways. Is it any wonder that so many of our planned programmes for teachers fail as we neglect their needs and ignore their voices? It is my hope that this research could allow teachers to speak more openly than they have in the past and to have the freedom to express their views, whether or not I agree with them.

## Research Questions

1. Can the affordances of Web 2.0 tools enable teachers to incorporate technology in the classroom?

2. Are there benefits to teachers for sharing on an online social network?

3. Are teachers’ perceptions towards online social networks different for personal and professional use?

## Philosophical Underpinnings

Social constructivism provides an overarching philosophy under which my research can make sense as participants construct their knowledge through their interactions online. According to Costantino(2008)

‘Social constructivism addresses the ontological– epistemological questions of constructivism in describing the bodies of knowledge developed over human history as social constructs that do not reflect an objective external world. Everything we know has been determined by the intersection of politics, values, ideologies, religious beliefs, language, and so on’.

## Conceptual Framework

McLoughlin and Lee (2007) follow on the work of Boyd (2007) who claimed that ‘it is the sociability aspects (of Web 2.0) that have the most the most potential for enhancing education’. In a specific study of understanding teachers’ social networks, Coburn and Russell (2006) found that teachers seek out other teachers who are similar to them and who are readily available to ‘chat’ but when acquiring new information on using technology, they seek out those who are experts from among themselves. In a K-12 report, Johnson, Smith, Levine and Haywood (2010) claim that, in the future, collaborative networks such as Ning and document-sharing tools such as Google docs and wikis will become much more comprehensive. They assert that

‘teachers increasingly recognize the importance of collaboration skills and are finding that online tools to support collaboration provide them and their students with opportunities to work creatively, develop teamwork skills, and tap into the perspectives of people around the world with a wide range of experience and expertise that differs from their own’.

## The Proposed Methodology

Virtual ethnography

Due to the speed of communication over the Internet and the rapid increase in access not just in first-world countries but also in developing ones, the Internet as a social world brings new opportunities to study people and cultures in an exciting combination of real and virtual. Traditional ethnography usually occurs in a school setting where researchers act as participant observers. However, the setting in virtual ethnography is much more complex as it is virtual or not real. To even consider that ethnography can take place in a space that is not ‘real’ or bounded is contentious among many researchers Web 2.0 gives opportunity to teachers to interact outside traditional spaces like staff rooms with teachers from the same school or outside. Here, teachers can negotiate their own terms and identities which gives rich opportunity for different types of discussions where they can ‘negotiate their meanings by discussion, debate and critique’ (Figuerado 2006). Social software on today’s Web 2.0 would seem to facilitate increased interaction and networking between teachers, students and others and the co-creation of content (e.g., blogs, wikis, podcasting, videoblogs, social bookmarking sites, and online community spaces) both within and outside the classroom (Greenhow 2007). This is particularly important in ethnographic research where the researcher wishes to ‘uncover’ participants’ feelings and perceptions about the issues being researched.

## The Proposed Methods

Social Networks have become increasingly popular in recent years through the real-time communicative ability of Web 2.0 and tools such as Facebook, Ning, Classroom 2.0 or Twitter would be familiar and easy to use. Teachers using these networks could use the social space to chat about their social and professional practices as well as gain support and recognition from their peers and connect more readily with their students. However, most teachers use these networks for personal use, sometimes even to their detriment when they post pictures or text that may be interpreted as unprofessional (Carter, Foulger and Ewback 2008) and I fear that they may not treat the research seriously and may share superficially rather than become reflexive about their practice.

In order to effectively answer my research questions, I am considering a combination of methods including quantitative. Yuen (2010) did a quantitative study of teachers use and perceptions of Web 2.0 in teaching and learning and presented his findings at SITE conference 2010. He used a questionnaire on K-12 teachers to collect data while Wallace (2008) used a mixed method approach to his study on children’s use of the Internet. Due to the anticipated high numbers of teachers who may respond to an invitation to take part in this research, it may be desirable to use an approach like Friedman(2006) where an email or Web survey was used to solicit initial views and information on participants. Initial ideas about teachers’ familiarity with Web 2.0 tools may help to ensure that questions posted to the forum would be suited to their needs. Such a survey may require a quantitative approach to analysis for meaningful conclusions to be made.

## Methods of Analysis

Research shows that content analysis is used to analyze blogs, discussion forums and online social networks. Ray and Hocutt (2006) used content analysis of teacher created blogs in a qualitative study where written posts and comments were collected from 16 blogs and analyzed for emergent themes. The researchers read all written materials and noted recurring themes which were then compared to those that emerged from both the participant interviews and the electronic dialogues. There was strong agreement between the themes that emerged in the interviews and from the content analysis. Teo and Webster (2008) used content analysis of online discussion logs and used two coders to establish trustworthiness of the messages in the logs.

## Addressing Ethical issues in Internet research

Ethical issues abound for the virtual ethnographer and are not so different to those faced by a traditional ethnographer. Anonymity of participants and confidentiality of information, developing trust and protecting and securing data from misuse are important for the ethnographer to address. Moreover, prior informed consent and ethical clearance must be obtained before the study is undertaken. It is important for me as the researcher to declare my position and describe the purpose of the study so that participants can make their own choice whether or not to participate. As a curriculum officer observing teachers at secondary school, I would also need to be considerate of issues related to trust and imbalance of power if the teachers see me as a threat to them or their jobs.

## References

Carter.H, Foulger, T., Ewback, A. 2008. Have you googled your teacher lately? Teachers use of Social Networking Sites… Phi delta kappa. [online]. Vol. 89. Available from questia.com. [accessed 11/01/10]

Coburn, C. and Russell, J. 2006. "Exploring the Determinants of Teacher Social Networks" Paper presented at the annual meeting of the American Sociological Association, Montreal Convention Center, Montreal, Quebec, Canada Online <PDF>. Available from http://www.allacademic.com/meta/p103378\_index.html

Costantino, T. 2008. “Constructivism” The Sage Encyclopedia of Qualitative Research Methods. Sage Publications.

Figuerado, D. 2006. Educational Ethnography beyond Scholarly Ethnography: Transferring Meanings to Cyberspace. Forum: Qualitative Social [online]. vol. 7 no.2.available googlescholar.com [accessed 6/01/10].

Greenhow, C. 2007. What Teacher Education Needs to Know about Web 2.0: Preparing New Teachers in the 21st Century. In R. Carlsen et al. (Eds.), [online] Proceedings of Society for Information Technology & Teacher Education

Johnson, L., Smith, R., Levine, A., and Haywood, K. 2010. The 2010 Horizon Report: K-12 Edition. Austin, Texas: The New Media Consortium. [online] Available at <http://wp.nmc.org/horizon-k12-2010/>

McLoughlin, C. & Lee, M. J. W. 2007. Social software and participatory learning: Pedagogical choices with technology affordances in the Web 2.0 era. In ICT: Providing choices for learners and learning. [online] Proceedings ascilite Singapore 2007. Available at http://www.ascilite.org.au/conferences/singapore07/procs/mcloughlin.pdf

Ray,B. and Hocutt,M. 2006. Teacher-created, Teacher-centered Weblogs: Perceptions and Practices. Volume 23 / Number 1 Fall 2006 Journal of Computing in Teacher Education 11. ISTE (International Society for Technology in Education).

Teo,Y. and Webster,L. 2008. Acquiring Knowledge from Asynchronous Discussions. Journal of Technology and Teacher Education; 2008; [online] 16, 3; ProQuest Education Journals.

Wallace, AE. 2008. The Incoherence of the Inchoate-a comparison of children’s in-school and out-of-school use of the internet. [online]. Available at http://aewallace.wordpress.com/

Yuen,S. 2010. Teachers’ Use and Perceptions of Web 2.0 Technologies in Teaching and Learning. [online] Available at [http://scyuen.wordpress.com/2010/04/04/teachers’-use-and-perceptions-of-Web-2-0-technologies-in-teaching-and-learning/](http://scyuen.wordpress.com/2010/04/04/teachers%E2%80%99-use-and-perceptions-of-web-2-0-technologies-in-teaching-and-learning/)

Ziang, J. 2009. Towards a Creative Social Web for Learners and Teachers Educational Researcher, [online]. Vol. 38,