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Mulatiningsih, Beki, Partridge, Helen L., & Davis, Kate (2013) Exploring the role of Twitter in the professional practice of LIS professionals : a pilot study. *Australian Library Journal*, 62(3), pp. 204-217.

This file was downloaded from: <http://eprints.qut.edu.au/61000/>

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<http://dx.doi.org/10.1080/00049670.2013.806998>

This article was downloaded by: [Bekti Mulatiningsih]

On: 27 June 2013, At: 06:53

Publisher: Routledge

Informa Ltd Registered in England and Wales Registered Number: 1072954 Registered office: Mortimer House, 37-41 Mortimer Street, London W1T 3JH, UK



## The Australian Library Journal

Publication details, including instructions for authors and subscription information:

<http://www.tandfonline.com/loi/uajl20>

### Exploring the role of Twitter in the professional practice of LIS professionals: a pilot study

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Published online: 27 Jun 2013.

To cite this article: Bekti Mulatiningsih , Helen Partridge & Kate Davis (2013): Exploring the role of Twitter in the professional practice of LIS professionals: a pilot study, The Australian Library Journal, DOI:10.1080/00049670.2013.806998

To link to this article: <http://dx.doi.org/10.1080/00049670.2013.806998>

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## RESEARCH ARTICLE

# Exploring the role of Twitter in the professional practice of LIS professionals: a pilot study<sup>1</sup>

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This paper presents the findings of a pilot study that explores LIS professionals' experiences of using Twitter as part of their professional practice. The researchers used a qualitative research methodology to undertake the study. Semi-structured interviews and observation were used for data collection. The researchers conducted two in-depth, semi-structured interviews per participant (one pre-observation and one post-observation). The observations were conducted for a period of one week after the first interview. In total, six interviews and three observations were conducted. The researchers used descriptive coding and in vivo coding to analyse the data and found that three themes emerged from this study: being connected; building networks; and staying informed. This study was undertaken as a part of Master of Information Technology study at QUT. As such, the findings of this research are preliminary in nature. It is expected that the preliminary data of this study can be used to design a much larger and more complex future research project in this area.

**Keywords:** Twitter; user experience; professional practice; LIS professionals

### Implications for best practice

- The findings from this study have the potential to help broaden LIS professionals' use and awareness of Twitter for professional practice. For LIS professionals who are not using Twitter, this project's findings provide a better understanding about the role or use of Twitter in professional practice. For LIS professionals who are already using Twitter for their professional practice, the findings provide insight into the different ways in which other professionals are using Twitter and may therefore help individuals to improve their practice.
- The results from the study have the potential to inform the curriculum of LIS education in Australia to support the education of future LIS professionals.

### Introduction

Library and information science (LIS) work is constantly changing. As such, it is critical for LIS professionals to keep learning and to remain up to date with the latest trends and advances in the LIS sector. This is especially true in the current age of ever-evolving information technology. This idea was recently noted by Partridge, Lee and Munro (2010) in a study exploring the skills, knowledge and attributes required by LIS professionals in a Web 2.0 era. 'Learning and education' was one of the eight themes to emerge from the

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study, which noted ‘the need for librarian 2.0 to be interested in and willing to engage in lifelong learning’ (Partridge, Lee and Munro 2010, 326).

Social media provide spaces for users to collaborate and develop as lifelong learners. Micro-blogs are one of the most popular social media tools currently available. Micro-blogs ‘allow users to exchange small elements of content such as short sentences, individual images, or video links’ (Kaplan and Haenlein 2011). Twitter is one of the most popular micro-blogging tools that allows people to share information either publicly or within a social network (Kaplan and Haenlein 2011; Java et al. 2007). There are many professionals and experts who share information on Twitter or ‘tweet’ on a particular topic. Twitter provides an opportunity for users to learn something from collaborative networks of professionals in many areas, including LIS.

There has been much discussion in the blogosphere about the use of Twitter for professionals in various industries. The education sector, in particular, has embraced the use of Twitter in professional practice (Whitby 2013; Galagan 2009; Davis cited in Boss 2008). The fact that these discussions have occurred primarily in the blogosphere means that they have been fairly informal, and few empirically based LIS studies have taken place. This study aims to act as a catalyst for future research through the provision of preliminary data that can be used to inform the design of a much larger and more complex future research project in this area. This study only analysed LIS professionals’ individual experiences using Twitter and was not expanded to a larger population. A discussion around Twitter experiences in the participants’ personal lives and a comprehensive study of other social media experiences beyond Twitter is outside the scope of this study.

The findings of this research project provide a better understanding of LIS professionals’ use and awareness of social media as a part of their professional practice. The project sought to explore the following research question:

*How do LIS professionals experience Twitter in their professional practice?*

This paper begins with a brief review of the literature relevant to this study, focusing on LIS professionals and social media, before providing a detailed discussion of the study and the research approach. The paper concludes by outlining the research findings and discussing the limitations of and future directions for this study.

### **A brief review of the literature**

This section explores published research related to LIS professionals’ use of Twitter. This brief review of the literature notes the idea of informal learning for LIS professionals and its relationship to social media.

#### ***Informal learning for LIS professionals***

The pace of technological change means that LIS professionals continually face new challenges. For this reason, it is crucial that LIS professionals are aware of the latest trends and issues in their sector and continue developing new skills and gaining new knowledge.

A study by Partridge et al. (2010) found that to be a successful LIS professional in a world of emerging technologies is more about personality traits and changing attitudes than about the technology itself. The willingness to keep up to date, develop skills, continue to learn and share information with peers are essential personality traits for successful LIS professionals in the contemporary workplace.

The acquisition of new knowledge can occur through informal learning, such as through sharing information among LIS professionals. Livingstone (2001, 4) defines

informal learning as ‘any activity involving the pursuit of understanding, knowledge or skill which occurs without the presence of externally imposed curricular criteria’. Similarly, Ala-Mutka (2010, 65) states that informal socialising and interacting with others can lead to ‘informal learning incidents’.

Informal learning can occur in online environments. A study by Selwyn and Gorard (2004) shows how ICT is used by adults in facilitating and supporting informal learning opportunities. For example, people can create and participate in learning opportunities that are of interest to them through social media. Klamma et al. (2007, 72) note that ‘emergent Web 2.0 concepts and technologies are opening new doors for more effective learning and have the potential to support life-long competence development’. Likewise, Hart (cited in Galagan 2009, 28) notes that social media like Twitter can be used to enhance ‘personal and informal learning’ through collaborative activities with like-minded people. Social media provide spaces to facilitate and enhance informal learning through collaboration and information-sharing, and thereby assist users to develop as lifelong learners.

### *Social media and LIS professionals*

In Australia, groups of LIS professionals have collaborated in the use of online spaces to connect and communicate with their peers from around Australia, with a view to increasing opportunities for informal learning. For example, in July 2006, a group of Australian librarians began the group blog [librariesinteract.info](http://librariesinteract.info) (LINT) which aimed to provide a forum for LIS professionals to communicate and discuss changes in the Australian library sector (Bradley, Greenhill and Wiebrands 2008). This blog was well maintained until recently.

After Twitter was founded in 2006, it became an alternative channel for LIS professionals to communicate and learn with other LIS professionals. Twitter is claimed to be one of the most popular micro-blogging tools (Kaplan and Haenlein 2011; Java et al. 2007). According to Kaplan and Haenlein (2010, 67), Twitter is ‘a micro-blogging application that allows sending out short, text-based posts of 140 characters or less’, either publicly, or to a user’s social networks. Micro-blogs are one kind of social media tool that ‘allow users to exchange small elements of content such as short sentences, individual images, or video links’ (Kaplan and Haenlein 2011, 106).

Twitter users create a network by following other users, and they typically develop and refine this network over time. By following particular accounts, users can create a personalised Twitter stream so that, by default, they see only the tweets of people they follow. This helps manage information overload and allows users to see a filtered view of tweets. However, people do not need to log in to Twitter or ‘follow’ users who have public accounts to see their timelines, which means that users also have access to the public timelines of people they do not follow, should they wish to see them.

Direct communication with other followers can be conducted through ‘mentions’ (@), while private messages for particular people can be sent using ‘direct messages’ (DM). RT, which stands for ‘re-tweet’, is a convention used to ‘forward’ tweets that were sent by other Twitter users. Another Twitter convention is the hashtag (#), which is ‘the convention of tagging for providing folksonomic metadata’ (Doessel and Freedman 2011, 7).

Many professionals are using Twitter to support their work and development. For example, in the education sector, educators use Twitter to communicate with other educators and students (Whitby 2013; Dunn 2012; Rhode 2012). To communicate with other educators outside their network, educators can follow and participate in particular

hashtags such as #edchat, which is a popular hashtag in the Twittersphere followed by many educators around the world (Whitby 2013).

In the LIS context, a study by Cook and Wiebrands (2010, 19) suggests that Twitter is the most popular social media used by LIS professionals because ‘it has the features that promote information sharing and discussion’. Twitter provides a high level of immediate access to a community where a professional can ask questions, learn of new ideas, interact and make connections with other professionals and experts from around the world in real time (Elliott, Craft and Feldon 2010).

### **Research approach**

A qualitative research methodology was used for this study because it ‘allows researchers to get at the inner experience of participants, to determine how meanings are formed through and in culture, and to discover rather than test variables’ (Corbin and Strauss 2008, 12). This study was conducted using semi-structured interviews and observation for data collection.

### **Data collection**

Data-collection activities for this research project were conducted in May–June 2012. Semi-structured interviews were the main data-collection technique in this study. Personal interviews are generally believed to be better at revealing information that is complex and emotionally laden, and are therefore appropriate for studying perceptions, attitudes and experiences (Connaway and Powell 2010). The researchers conducted two in-depth, semi-structured interviews per participant (one pre-observation and one post-observation). Semi-structured interviews ‘have a standard list of questions, but allow the interviewer to follow up on leads provided by participants for each of the questions involved’ (Williamson and Bow 2000, 225).

There was only one main question in the first interview. The main question was: *How do you as an LIS professional experience Twitter as a part of your professional practice?* This quite general question was used as a prompt to start a discussion about the individual’s use of Twitter. The researchers used prompt questions to allow participants to elaborate and clarify their answers. Some of the prompt questions used in the interview were (but were not limited to):

- When did you join Twitter?
- How did you find about it?
- What was the reason you joined Twitter?
- What do you share on Twitter to your followers?
- How do you decide who to follow on Twitter for your professional practice?

In some instances, interview techniques have an impact on the validity of research results. For example, sometimes people cannot or prefer not to talk openly about their experiences (Becker and Geer 2004). Moreover, Becker and Geer (2004, 249) note that observation provides a ‘rich experiential context’ opportunity to make the researchers become ‘aware of the incongruous or unexplained data’ from the interview. Acknowledging this fact, the researchers also used observation techniques that were intended to complement data collection from interviews.

The observation was conducted after the first interview with each participant. In this project, the observation was a secondary data-collection technique, designed to guide the

conduct of the second interview, and to provide example tweets for the researcher to explore with the participant in the second interview. In this way, participants were able to reflect on and discuss their experiences during the follow-up interview. The observation was conducted online by observing or 'following participants' Twitter accounts for one week, looking for tweets that related to the research topic and the particular themes that had emerged from the first interviews. Due to ethics requirements, the participants were aware that they were being observed. As such, they may have changed their behaviours accordingly. The length of observation activity was based on the timeframe that the project had available.

Of the three participants, two participants had public Twitter accounts, while one participant had a private account. The observation process was different for Twitter accounts set as public and private. The researchers used a Google Docs spreadsheet as an RSS feed-reader to aggregate the participants' tweets using the Twitter API (application programming interface) for Twitter accounts set as public. It was not possible to automate the extraction of tweets for the participant with a private Twitter account. As such, the observation was conducted manually by looking at the participant's Twitter page and finding particular tweets to follow up on in the second interview. The observation findings were used to develop interview questions for the follow-up interviews.

The follow-up interviews were designed to gain a better understanding of the themes or topics arising from participants' answers in the first interview and one week of observation. The questions in the follow-up interview for each participant were tailored depending on participants' answers in the previous interviews and the results of the observation.

### ***Participants***

A convenience sample drawn from the research team's professional networks in the LIS profession was used. A convenience sample 'involves selecting sample units that are readily accessible to the researchers' (Phua 2004, 198). The decision to use a convenience sample was based on the time constraints of the project.

All three participants in this study were female. Participants are referred to in this article as P1, P2 and P3. P1 and P2 joined Twitter in 2008, while P3 joined in 2010. P1 is an academic with multi-disciplinary research experience who teaches in an LIS program. This participant has a large network across many communities. P2 works in a public library where social-media access is prohibited on staff computers. P3 works in the archive sector, though most of her Twitter followers work in library sector.

### ***Data analysis***

The researchers used descriptive coding and in-vivo coding methods for the first-cycle coding because the methods are appropriate for all qualitative studies, particularly for 'beginning qualitative researchers learning how to code data' (Saldaña 2009, 70). Wolcott (as cited in Saldaña 2009, 71) argues that descriptive coding is 'the foundation for qualitative inquiry and its primary goal is to assist the reader to see what you saw and to hear what you heard'. In vivo coding is appropriate for studies that 'prioritise and honour the participant's voice' (Saldaña 2009, 74). In descriptive coding, the researchers summarise the data into word or short-phrase categories for further analysis (Saldaña 2009), while when using in vivo coding, 'if the data appears to stand out, then it is applied as a code' (Saldaña 2009, 76). The research goal is to explore users' experiences. Therefore descriptive coding and in vivo coding are the appropriate methods to prioritise

the participants' voices by using their actual words. The researchers did not conduct second-cycle coding because of the small sample size.

After the coding process, the researchers conducted data analysis using the constant comparative technique. The aim of this comparison is to explore the different coding properties and dimensions in order to reveal 'different aspects of the same phenomenon' (Corbin and Strauss 2008, 74). The data-analysis process informed the construction of three themes.

## Results

Three main themes were identified as the result of data analysis:

- Being connected;
- Building networks;
- Staying informed.

Each theme is discussed in detail in the following sections.

### *Theme 1: Being connected*

In this theme, participants indicated that they used Twitter to connect and communicate with like-minded people to support their professional practice. The following quotations provide an illustration of how participants experience Twitter as an effective tool to communicate with different groups of people that they are interested in, both within the LIS profession as well in other sectors:

'I use Twitter as an alternative communication tool with my students besides Blackboard, Skype and e-mail. Because I am an active Twitter user, my students know that the fastest way for them to communicate with me is through Twitter.'

P1

'Twitter is a quick and easy communication tool to connect with other LIS professionals and also other groups that I am interested in. It's like a communication tool of eclectic mix groups of people.'

P2

Participants also mentioned that they used Twitter as a connector to 'follow' conference hashtags and gain the benefit from it even though they are not attending the conference in person, as demonstrated by the following quotation:

'One of the other reasons I love Twitter is following conference hashtag[s]. So, if you cannot afford to go there or your work does not send you but you still want to be a part of it, you can just follow the [conference] hashtag and be actually a part of that conversation.'

P2

### *Theme 2: Building networks*

In this theme, participants described how they experience Twitter as providing online space for building networks. The following quotations are illustrative of how the participants experience Twitter as providing an online space for like-minded, trusted, supportive and encouraging peers to connect in a network where knowledge and ideas are shared without fear of negative comments:

'I feel like Twitter is reasonably a safe place for me. The community that I am involved in [within] Twitter is a trusted community of friends and professionals.'

P1

'Twitter is a safe space for me to be able to start talking about what I thought of what libraries should be like and it is a safe environment where people just did not go "No, you are wrong".'

P2

'I think it is like having supportive network around, not one saying "No, you are wrong". It is encouraging, it is supportive.'

P3

Twitter also helps LIS professionals who are the sole LIS professionals in their workplace to share with and gain knowledge from other LIS professionals, regardless of geographical location, as demonstrated by the following quotation:

'At the time I started to use Twitter, I was the only LIS professional in the place of my work. So I used Twitter to have conversation[s] with more like-minded people and to avoid the feeling of isolation.'

P3

### ***Theme 3: Staying informed***

In this theme, participants experience Twitter as a means of staying informed about the latest trends in the LIS sector. Real-time information-delivery is the key feature of Twitter that makes it an excellent awareness tool to learn about new trends in the sector. The following quotations illustrate how participants use Twitter to learn and keep current with new trends or knowledge:

'I definitely rely on Twitter in terms of keeping me up to date with good-quality news and current development of the areas that I am interested in.'

P1

'I remember sitting in a meeting, and somebody was talking about something that she just found out brand new, and I had read it on Twitter probably four months beforehand.'

P2

Related to the 'staying informed' theme, Twitter users also have the opportunity to contribute and share their knowledge and ideas. The quality of information that users receive in their Twitter streams relies heavily on the people they follow. Participants note that their network is a vital element as an information filter in Twitter, as showed by the following quotations:

'Twitter is like a personal filter for the information that I get. Generally, I feel like I will get good quality of information from my peers on Twitter rather than having to scout the Web and search the information myself, or even setting email RSS feed which can be time consuming.'

P1

'Twitter is like a filter that [deals with the] sorting of the information that I want. The streams that come to me are sectors that I am interested in and from the selected people whom I follow.'

P2

'I trust my network to spot important pieces of information. It is like having so many pairs of eyes to skim things in term of information and pick out what may be relevant to the profession.'

P3

Participants mentioned that they not only benefited from information being filtered through their network, but they also acted as filters themselves, through selectively re-tweeting or sharing information with their followers. This is illustrated in the following quotations:

‘When people share things to me, and if I think it is interesting, I go to the link and read the information first before I re-tweet it. So, it seems like when I re-tweet something, I put my stamp of quality of it.’

P1

‘Normally, I go through Twitter and read them to find out which ones that are definitely relevant to my work then re-tweet them.’

P2

Participants were inspired by information received through their Twitter networks to innovate or take action in their own practice:

‘Somebody sent a link on [the] Lego literacy program and I was quite interested by it and wanted to know more about it. So, I followed that up and then found a couple of literature review, read it, and then developed my own Lego literacy program that we decided [on], rolling it out this week in our library.’

P2

Developing as a professional is an important product of participants’ Twitter use:

‘It is more [to do with] building the professional me as opposed to feeding into my work and my professional practice at work.’

P3

**Discussion**

Based on the findings, the researchers found that sometimes the three main themes were interwoven with each other. Figure 1 below illustrates the relationship between the themes:

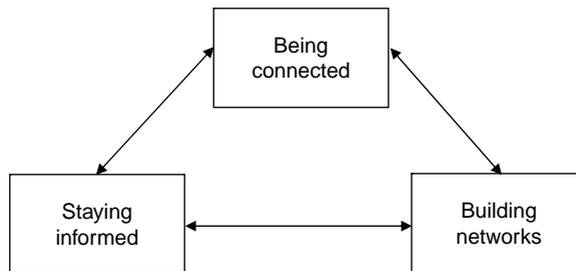


Figure 1. Relationship between themes.

As can be seen in Figure 1 above, the themes are linked in the same way because all the themes are related to the same phenomenon. This means that sometimes one theme emerges because it relates to other themes and they cannot be separated.

***Being connected***

Theme 1 emerged based on participants’ experiences using Twitter to connect and communicate with other LIS professionals and other communities to support their

professional practice. Analysis of the data revealed that participants use Twitter as a quick way to connect with people who share similar interests. Elliot, Craft and Feldon (2010, 488) argue that the value of Twitter is not only about the information shared, but also the 'interpersonal connections' amongst its users. For a person who is involved or interested in many communities, Twitter is an effective communication tool because it provides quick access in one place to many different communities based on a user's interests.

This finding confirms previous research that suggests Twitter provides immediate access for professionals to connect to their communities (Lalonde 2011; Ala-mutka 2010; Elliot, Craft and Feldon 2010; Forrestal 2010). Furthermore, Bennett (2011, 6) argues the importance of Twitter for communication and as a connection tool cannot be underestimated, as 'there will be professionals online who are willing to share information and help other professionals with current issues'. Through Twitter, LIS professionals are able to connect to, communicate with and help their peers to support their work.

Analysis of the data also found that following conference hashtags in Twitter is very useful to enhance participants' professional development, especially for LIS professionals who do not have the budget to go to conferences. Through following the conference hashtags in Twitter, LIS professionals are able to gain knowledge from any LIS conference around the world for free.

### ***Building networks***

The second theme emerged based on participants' experiences of using Twitter as a tool to enhance the development of their networks or communities. This phenomenon raises the question of whether a group of people with a common purpose, who interact in an online space, can be considered a community. Ala-Mutka (2010, 59) defines community as a group of people with 'joint purpose, policies and interaction [...] which provide participants with important emotional support for exploring and developing their identities and ideas'. However, in many cases due to geographical location between members, these communities could not occur in physical spaces (Gunton and Davis 2012). Information and communication technology (ICT) provides opportunities 'to connect with others, to get engaged in almost any topic and find and mobilise others with similar interests' (Ala-mutka 2010, 62). So, if these interactions happen in online space, they are referred to as 'online communities' or 'virtual communities' (Ala-mutka 2010, 59; Gunton and Davis 2012, 2).

Using online spaces, online communities 'connect and link people from different settings, around a joint topic, production or for socialising' (Ala-mutka 2010, 65). This trusted community empowers members to share and discuss profession-related knowledge and new ideas without the fear of negative comments from others. Instead, through these discussions they learn together to support their professional interests. Gunton and Davis (2012, 2) specifically point out that the community of LIS professionals who interacts through Twitter is a good example of 'a virtual, long-term, and relatively stable community'.

The connectivity with other like-minded people in Twitter enhances the development of a learning network. Lalonde (2011, 119) notes that 'the open nature of Twitter means these learning networks are now no longer confined to closed and private spaces, but are able to be open and public, which increases the opportunities for collaboration, connections and learning opportunities'. Similarly, Gunton and Davis (2012, 3) argue that Twitter for LIS professionals 'provide[s] opportunities to connect, communicate, collaborate, create and consume, activities that we see as core functions of learning

communities'. So, online spaces like Twitter provide opportunities to form communities and to interact with peers, which can enhance the learning network.

In Twitter, the learning network is cultivated by each individual and is therefore personal in nature. A personal learning network (PLN) is a community of people who are connected for a particular learning purpose (Ferguson 2010; Tobin 1998). From the definition, it can be concluded that making connections to support learning activities is the main element of a PLN.

Besides formal learning opportunities such as conferences and workshops, LIS professionals of any level use their PLN to support informal learning. Livingstone (2001, 4) defines informal learning as 'any activity involving the pursuit of understanding, knowledge or skill which occurs without the presence of externally imposed curricular criteria'. A PLN is an informal way to learn where a professional can seek support and learn together with other professionals who have similar interests (Howlett 2011; Ferguson 2010). Through a PLN, professionals are able to 'bounce ideas, seek and give support and advice, and simply being part of one big cheerleading squad' (Howlett 2011).

Using LIS professionals as a research context, a study by Bennett and Wiebrands (2010) describes the use of a PLN as vital component for continuing professional development. A PLN 'can empower learners by enabling them to identify and focus on areas of need, and take control of their own learning' (Bennett and Wiebrands 2010, 1). Through the PLN, LIS professionals are able to:

- Learn at own pace;
- Determine what skills or information are needed;
- Learn by doing;
- Learn with others (Bennett and Wiebrands 2010, 3).

Some professionals use their PLNs as their main channel for professional development. Bennett and Wiebrands argue that a PLN can:

... help towards alleviating costs of training and the isolation of staff working at a distance from colleagues, fill the gaps between institutional training and day to day expressed needs and enhance and encourage lifelong learning in the profession. In some cases a PLN could also help library professionals gain skills in areas where formal training is not yet available.

Bennett and Wiebrands 2010, 6

Analysis of the data also found that connectivity with other LIS professionals on Twitter helps participants to avoid feelings of isolation. For geographically isolated LIS professionals, Twitter is very useful because it provides ready access to other LIS professionals irrespective of geographical boundaries. Elliot, Craft and Feldon (2010, 448) argue that the value of Twitter is not only about the information shared, but also the connections amongst its users, which 'serve as a source of encouragement, idea generation and feedback, brainstorming and support'. Likewise, Bennett (2011, 6) states that in setting up 'a PLN both online and face-to-face, develop[ing] skills in accessing and asking for help with issues, the feeling of isolation will hopefully be reduced'.

There is considerable number of publications that posit Twitter as an excellent tool to develop and maintain a PLN (Lalonde 2011; Bennett and Wiebrands 2010; Delp 2010; Ferguson 2010; Forrestal 2010; Ray 2010; Galagan 2009; Trinkle 2009). LIS professionals can gain many advantages from Twitter, such as the ability to ask profession-related questions and obtain objective perspectives from other LIS professionals to support their works. For example, Bennett (2011), shares her experience of asking a work-related question to her Twitter network and is able to get answers within a few minutes. Moreover,

Ferguson (2010, 13) argues that a PLN 'can guide your learning, point you to learning opportunities, answer your questions, and give you the benefit of their own knowledge and experience'.

### *Staying informed*

Staying informed (Theme 3) emerged as an element of participants' experiences of using Twitter to stay informed with the latest trends in the LIS field. Analysis of the data also found that participants use Twitter as their awareness tool to keep up to date with the latest trends and issues in the LIS sector. Cook and Wiebrands (2010, 1) argue that a professional current-awareness tool must 'be able to deliver current, relevant information without a huge burden in time and effort for the client or adding to their information overload'. Twitter certainly fits these criteria. Likewise, studies by Cummings (2011) and Weaver (2010) found that LIS professionals use Twitter as an awareness tool to gain the latest information in the library sector and inspiration from other LIS professionals to support their work.

The staying-informed theme has a strong relationship with the previous theme of building networks. This occurs because the network in Twitter acts as a filter for information shared in participants' Twitter stream. Cook and Wiebrands (2010, 3) note that in social-media spaces, 'when you choose who to "friend" or "follow" you are choosing your information sources and your information filters (and your information bias)'. Furthermore, Cook and Wiebrands (2010, 1) argue that 'the value of a SNS [social networking site] for the purpose of information consumption is not determined by how many "friends" or "followers" that you have following you, but in the numbers and quality of the people that *you* follow'.

In the Twittersphere, it is critical to choose the right people to follow because they will be the user's personal information filter who will pre-screen information for them. Besides acting as a consumer for filtered information, users also become a filter for information that they share with their community. Delp (2010, para. 2) notes that the personal-information-filter aspect in Twitter 'enhances individual efficiency' because it allows those that read through the links or information to filter it before they pass it on to their followers. This repetitive information-filtering process amongst members enhances the sharing of good-quality information.

Analysis of the data also found that participants experienced Twitter to learn and get inspiration to support their work. Weaver (2010) identifies that there is a need for people to have their own professional learning systems. Online communities in social media have become a vital part of life for many people and can be 'a key tool for a life-long learning continuum, enabling people to learn throughout the course of their lives in order to develop relevant skills for their jobs and lives' (Ala-mutka 2010, 62). Twitter provides opportunities for professionals to learn from experts in a particular sector for free. Trinkle (2009, 22) argues that 'by choosing whom you follow, you choose the best practices for your personal interests'. Through Twitter, users are able to personalise their learning tool by carefully selecting people to follow based on their interests.

There is evidence in the literature that many professionals use Twitter as their personal learning tool (Hart 2010; Weaver 2010; Trinkle 2009). Professionals often use information that they encounter through Twitter to help with their work. For example, Fischler (2010) and Hart (2010) use Twitter as a part of their professional practice and development to help perform their jobs more effectively. Another example, a study by Cummings (2011), found that LIS professionals have learned innovative thinking and management-level thinking through using Twitter. This shows the nature of Twitter as a learning tool.

### Limitations and future directions

This study provides preliminary findings of the LIS professionals' experiences of using Twitter as part of their professional practice. The researchers found that the research themes were interwoven with each other. It is predicted that through further research (with more data), the researchers would be able to more deeply examine the overlapped themes. Future insight could also be gained from conducting similar projects that specifically explore the LIS professionals' experience of Twitter in each finding theme.

### Conclusion

Twitter encourages the concept of lifelong learning by providing real-time information via a collaborative network of professionals in many sectors, including LIS. Many LIS professionals use Twitter to support their personal and professional lives. This study explores LIS professionals' experiences of using Twitter as a part of their professional practice. Preliminary findings have identified three themes: being connected, building networks and staying informed. These findings were interwoven with each other. Further research employing a larger sample and more varied data would be needed to examine the overlapping themes. It is hoped that through this study a better understanding of LIS professionals' experience of Twitter in their professional practice will emerge.

### Acknowledgements

This research was conducted as part of Master of IT study at QUT. Full ethical clearance of the research-tool and data-collection process was obtained from the QUT Ethics Committee (QUT Ethics Approval Number 1200000212).

### Note

1. This paper has been double-blind peer-reviewed to meet the Department of Innovation, Industry, Science and Research (DIISR) HERDC requirements.

### References

- Ala-mutka, Kirsti. 2010. *Learning in Informal Online Networks and Communities*. Seville: Joint Research Centre. doi:10.2791/36566.
- Becker, Howard S., and Blanche Geer. 2004. "Participant Observation and Interviewing: A Comparison." In *Social Research Methods: A Reader*, edited by Clive Seale, 246–251. London: Routledge.
- Bennett, T. A. 2011. "Is there Anyone Else out there?: Working as a New Professional in an Isolated Library." Paper presented at ALIA 5th New Librarians Symposium: Metamorphosis: What will you become today?, 16–18 September, Perth, Australia, 1–7. [http://conferences.alia.org.au/nls5/papers/Teresa\\_Bennett.pdf](http://conferences.alia.org.au/nls5/papers/Teresa_Bennett.pdf).
- Bennett, T., and C. Wiebrands. 2010. "Out on the Edge: Using a Personal Learning Network for Continuing Professional Development." Paper presented at ALIA Access. 1–3 September, Brisbane, Australia. [http://conferences.alia.org.au/access2010/pdf/Paper\\_Thu\\_1410\\_Teresa\\_Bennett.pdf](http://conferences.alia.org.au/access2010/pdf/Paper_Thu_1410_Teresa_Bennett.pdf).
- Boss, Suzie. 2008. "Twittering, not Frittering: Professional Development in 140 Characters." Edutopia.org. <http://www.edutopia.org/twitter-professional-development-technology-microblogging>.
- Bradley, Fiona, Kathryn Greenhill, and Constance Wiebrands. 2008. "Librariesinteract.info: Collaboration and Community in the Australian Library Blogosphere." Paper presented at the Vala 14th Biennial Conference and Exhibition, Melbourne Convention Centre, 5–7 February, Melbourne, Australia. <http://www.vala.org.au/vala2008-proceedings/vala2008-session-10-bradley>.

- Connaway, Lynn Silipigni, and Ronald R. Powell. 2010. *Basic Research Methods for Librarians*. 5th ed. Santa Barbara: Libraries Unlimited.
- Cook, Sue, and Constance Wiebrands. 2010. "Keeping Up: Strategic Use of Online Social Networks for Librarian Current Awareness." Paper presented at the VALA 15th Biennial Conference and Exhibition, Melbourne Convention and Exhibition Centre, 9–11 February, Melbourne, Australia. [http://www.vala.org.au/vala2010/papers2010/VALA2010\\_78\\_Cook\\_Final.pdf](http://www.vala.org.au/vala2010/papers2010/VALA2010_78_Cook_Final.pdf).
- Corbin, Juliet M., and Anselm L. Strauss. 2008. *Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory*. 3rd ed. Los Angeles: SAGE Publications.
- Cummings, Sally. 2011. "Twitter for Professional Development and Career Progression." Paper presented at the 7th ALIA Top End Symposium, Charles Darwin University, 7–8 October. Darwin, NT, Australia. <http://www.slideshare.net/sallysetforth/twitter-for-professional-development-and-career-progression>.
- Delp, Jeff. 2010. "5 Reasons I Use Twitter – (and you should Too)." <http://www.jeffdelp.com/2010/11/27/5-reasons-i-use-twitter-and-you-should-too/>.
- Doessel, Naomi, and Kate Freedman. 2011. "How to Write a Paper in 140 Characters or Less: Social Media for Professional Development." Paper presented at ALIA 15th Information Online Conference and Exhibition, Convention and Exhibition Centre, 1–3 February, Sydney, Australia, 1–7. [http://conferences.alia.org.au/online2011/papers/paper\\_2011\\_B6.pdf](http://conferences.alia.org.au/online2011/papers/paper_2011_B6.pdf).
- Dunn, Jeff. 2012. "100 Ways to Use Twitter in Education, by Degree of Difficulty." Edudemic.com. <http://edudemic.com/2012/04/100-ways-to-use-twitter-in-education-by-degree-of-difficulty/>.
- Elliott, Jennifer B., Chris Craft, and David Feldon. 2010. "Is Informational Material Shared Between K-12 Professionals on Twitter Supported by Research?" In *Proceedings of the Society for Information Technology & Teacher Education International Conference 2010*, edited by David Gibson, and Bernie Dodge, 444–448. Chesapeake, VA: AACE. <http://www.editlib.org/p/33377>.
- Ferguson, Hadley. 2010. "Join the Flock!" *Learning & Leading with Technology* 37 (8): 12–15. <http://www.iste.org/learn/publications/learning-leading/issues/june-july-2010/join-the-flock!>.
- Fischler, Sarah. 2010. "Using Twitter as a Professional Development Tool." <http://aroundcolorado.blogspot.com.au/2010/03/using-twitter-as-professional.html>.
- Forrestal, Valerie. 2010. "Making Twitter Work: A Guide for the Uninitiated, the Skeptical, and the Pragmatic." *The Reference Librarian* 52 (1–2): 146–151. doi:10.1080/02763877.2011.527607.
- Galagan, Pat. 2009. "Twitter as a Learning Tool. Really." *T+D* 63 (3): 28–31.
- Gunton, Lyndelle, and Kate Davis. 2012. "Beyond Broadcasting: Customer Service, Community and Information Experience in the Twittersphere." *Reference Services Review* 40 (2): 224–227. doi:10.1108/00907321211228282.
- Hart, Jane. 2010. "Twitter as a Professional Development Tool." <http://janeknight.typepad.com/socialmedia/2010/11/twitter-as-.html>.
- Howlett, Alisa. 2011. "Connecting to the LIS Online Community: A New Information Professional Developing a Personal Learning Network." Paper presented at the ALIA 5th New Librarians Symposium: Metamorphosis: What Will You Become Today?, 16–18 September, Perth, Australia. [http://conferences.alia.org.au/nls5/papers/Alisa\\_Howlett.pdf](http://conferences.alia.org.au/nls5/papers/Alisa_Howlett.pdf).
- Java, Akshay, Xiaodan Song, Tim Finin, and Belle Tseng. 2007. "Why we Twitter: Understanding Microblogging Usage and Communities." Proceedings of the 9th WebKDD and 1st SNA-KDD 2007 Workshop on Web Mining and Social Network Analysis (WebKDD/SNA-KDD '07), 56–65. New York: ACM Press. doi:10.1145/1348549.1348556.
- Kaplan, Andreas M., and Michael Haenlein. 2010. "Users of the World, Unite! The Challenges and Opportunities of Social Media." *Business Horizons* 53 (1): 59–68. doi:10.1016/j.bushor.2009.09.003.
- Kaplan, Andreas M., and Michael Haenlein. 2011. "The Early Bird Catches the News: Nine Things you should know about Micro-Blogging." *Business Horizons* 54 (2): 105–113.
- Klamma, Ralf, Mohamed Amine Chatti, Erik Duval, Hans Hummel, Ebba Thora, Milos Kravcik, Effie Law, Ambjörn Naeve, and Peter Scott. 2007. "Social Software for Life-Long Learning." *Educational Technology & Society* 10 (3): 72–83.
- Lalonde, Clint. 2011. "The Twitter Experience: The Role of Twitter in the Formation and Maintenance of Personal Learning Networks." MA thesis, Royal Roads University. <http://hdl.handle.net/10170/451>.
- Livingstone, David W. 2001. "Adults' Informal Learning: Definitions, Findings, Gaps and Future Research." Working paper. Toronto: Centre for the Study of Education and Work, OISE/UT. <http://hdl.handle.net/1807/2735>

- Partridge, Helen, Julie Lee, and Carrie Munro. 2010. "Becoming 'Librarian 2.0': The skills, Knowledge, and Attributes Required by Library and Information Science Professionals in a Web 2.0 World (and Beyond)." *Library Trends* 59 (1/2): 315–335. <http://eprints.qut.edu.au/39553/>
- Partridge, Helen, Victoria Menzies, Julie Lee, and Carrie Munro. 2010. "The Contemporary Librarian: Skills, Knowledge and Attributes Required in a World of Emerging Technologies." *Library & Information Science Research* 32 (4): 265–271. doi:10.1016/j.lisr.2010.07.001.
- Phua, Voon Chin. 2004. "Convenience Sample." In *Encyclopedia of Social Science Research Methods*, edited by Michael S. Lewis-Beck, Alan Bryman, and Tim Futing Liao. Thousand Oaks: SAGE Publications, Inc. doi:10.4135/9781412950589.
- Ray, Betty. 2010. "How to Use Twitter to Grow your PLN." Edutopia.org, June 7. <http://www.edutopia.org/blog/twitter-expanding-pln>.
- Rhode, Jason. 2012. "Using Twitter for Teaching, Learning, and Professional Development." Northern Illinois University, Social Media Series. <http://www.slideshare.net/jrhode/using-twitter-for-teaching-learning-and-professional-development>.
- Saldaña, Johnny. 2009. *The Coding Manual for Qualitative Researchers*. London: SAGE Publications.
- Selwyn, Neil, and Stephen Gorard. 2004. "Exploring the Role of ICT in Facilitating Adult Informal Learning." *Education, Communication & Information* 4 (2–3): 293–310. doi:10.1080/14636310412331304726.
- Tobin, Daniel R. 1998. "Building Your Personal Learning Network." <http://www.tobincls.com/learningnetwork.htm>.
- Trinkle, Catherine. 2009. "Twitter as a Professional Learning Community." *School Library Monthly* XXVI (4): 22–23.
- Weaver, Anne. 2010. "Twitter for Teachers, Librarians and Teacher Librarians." *Access* 24 (2): 16–20.
- Whitby, Tom. 2013. "Building a Professional Learning Network on Twitter." Smartblog on Education, January 11. <http://smartblogs.com/education/2013/01/11/twitter-strategy-101/>.
- Williamson, Kirsty, and Amanda Bow. 2000. *Research Methods for Students and Professionals: Information Management and Systems*. Wagga Wagga: Centre for Information Studies, Charles Sturt University.