23 Things Revisited: Participant Perceptions of a Staff Development Program over a Year Later

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Abstract

23 Things programs have been used around the world to help educate library workers about web 2.0 applications. This paper describes the results of two feedback surveys for a 23 Things program that was offered to library employees at the University of Saskatchewan: the first survey, conducted at the time of program completion, and a follow-up survey, conducted a year and a half later to assess whether participants were applying what they learned in the program, and, if so, how. Generally speaking, respondents indicated that the program was beneficial, and all but three of the respondents from the second survey had applied some of what they learned through the program, either personally or professionally. Despite being an independent learning activity, social aspects that arose organically as participants worked their way through the program seemed to be valued by program participants as much as the newly acquired knowledge from the lessons. In addition to the flexibility of completing the lessons at a convenient time and place, the semi-facilitated format was key to the program's success. Organizations that wish to transition long-time employees from the print-based working world to the digital world should consider making 23 Things-style learning opportunities a regular part of their staff development activities.

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Introduction

23 Things programs have been used around the world to help educate library workers about web 2.0 applications. While much of the literature describes these programs immediately following the program completion, consideration of the program's impact over time is less common. This paper discusses the results of two feedback surveys for a 23 Things program offered to library employees at the University of Saskatchewan: the first survey, conducted immediately following program completion to evaluate the program's immediate impact, and the second survey, conducted a year and a half later, to assess whether participants are currently using what they learned in the program, and, if so, how. This study was designated "exempt" by the University of Saskatchewan Behavioural Research Ethics Board.

Background

The University of Saskatchewan University Library values and encourages various types of learning in order to adapt and remain relevant in the digital age. Although not specifically articulated in the library's staff development documentation, the library's emphasis on staff learning and development speaks, in part, to the need for the library workforce to develop its level of transliteracy.

Transliteracy has only recently been articulated as a concept. In the same way there are multiple intelligences, there are many different kinds of literacy: information literacy, computer literacy, numeracy, reading literacy, media literacy, and cultural literacy, to name only a few (Abram, 2012). According to Thomas (2008), transliteracy brings all forms of literacy together, such that all are given equal importance. Many literacies require engagement of the individual, reflecting the new, ever-changing reality of "content that has escaped its container" by blending the consumption of information with the creation of it through interactive media. Recognizing that all literacies are valuable does not mean that an individual must be an expert in each. Individuals must, however, build networks to facilitate knowledge exchange with groups or individuals that are proficient in different literacies so that knowledge can be accessible when needed (Thomas, 2008). Perhaps the key to transliteracy, then, is being open to various literacies, choosing wisely based on the context one is immersed in, and being willing to embrace different literacies as that context evolves. This moving target of continuous learning and adjustment to function successfully in a variety of contexts can be frightening or

invigorating, depending on one's perspective on learning and professional development.

According to Hager (2004), learning has traditionally been thought of in terms of formal education and the "learning as product" paradigm, that is, seeing the mind as a container that is filled by collecting knowledge or skills outside of the context where they might be used. This paradigm operates under two assumptions. The first assumption is that the skill or knowledge is well defined and stable over time. This makes it possible to learn the skill or knowledge at school, outside of the context of the work environment, then adapt and apply it on the job when needed. The second assumption used by this paradigm is that, since knowledge/skills are well defined and a learner's own context does not play a role in the learning process, everyone gets the same thing out of a given learning experience. There is no room for an individual to reach understanding in their own way (Hager, 2004).

The dramatic change in technology over the past 10 years and its continuing evolution highlight the significant shortcomings of the 'learning as product' paradigm. As Hager (2004) points out, the paradigm has built-in obstacles to ongoing workplace learning and professional development. It implies that an individual's initial job training was sufficient and, therefore, displaying a need or desire for more training reflects poorly on one's abilities. It can also imply an "endless accumulation of discrete pieces of learning [… where] the individual learner is in danger of being condemned to learn all subjects/disciplines" (Hager, 2004). A shift away from this paradigm has begun. Learning is now recognized as a continuous process where knowledge is first acquired and then deepens over time as both the learner and his or her context evolve (Hager, 2004).

Discussion about adult learning, more specifically, is often based on a number of assumptions: adult learners are not interested in theory or general information but want their learning to be immediately applicable; adult learners want control over all aspects of their learning experience; feedback is required throughout the learning endeavor in order to gauge their progress; and learning must be incremental so as not to venture out of the adult learner's comfort zone (Fogarty & Pete, 2004). As with any diverse community, these statements may be true for some adult learners but not for others. Some adult learners like theory. Some people want to stretch themselves by approaching the boundaries of their comfort zone while other learners of any age might not be comfortable doing so. There is no one-size-fits-all approach to learning. What is critical and is at the core of learning is a personal connection to the subject matter (Fogarty & Pete, 2004; Roberson & Merriam, 2005). The learning process starts with some kind of "incentive" based on the individual's personal context; if the individual finds the subject matter to be interesting, or a person or event encourages them to continue, the learner

will make the effort to do so. In the case of self-directed learning in particular, learning is driven by the learner and is often adjusted as the learner reflects on his or her own interests and personal context. Some avenues of learning will naturally come to an end while others become a long-term pursuit or feed into other interests (Roberson & Merriam, 2005).

In the workplace, effective professional development takes place over time as part of daily work and in turn shapes the work that is carried out (Fogarty & Pete, 2004; Roberson & Merriam, 2005). In addition to formal learning opportunities, there is also a social aspect to learning as employees informally engage with one another to collaborate and share their knowledge and experience (Fogarty & Pete, 2004; Solomon, Boud, & Rooney, 2006). Boud, Rooney, and Solomon's work emphasizes the importance of learning that takes place through naturally occurring "chat" in spaces that are neither true work spaces nor true social spaces, such as lunch rooms (Solomon, Boud, & Rooney, 2006; Boud, Rooney, & Solomon, 2009). The unstructured nature of these interactions, taking place without "surveillance" from authority figures, is key to informal learning in the workplace (Solomon, Boud, & Rooney, 2006; Boud, Rooney, & Solomon, 2009).

Professional Development through 23 Things

One way that libraries have attempted to help staff learn and adjust to changing technology is through 23 Things programs–also known as Library 2.0 programs–based on a staff development program developed by Helene Blowers of the Public Library of Charlotte & Mecklenburg County in 2006 (Blowers, 2007). These semi-self-directed learning programs aim to educate library workers about new technologies and social networking programs, typically through a series of lessons posted to a blog though other platforms have also been used to facilitate the programs (Kingsley & Jensen, 2009). Participants are free to complete the lessons at a time and place that is convenient to them, and they journal their progress through a blog of their own. Over 750 public, school, and academic libraries around the world have offered 23 Things programs (Blowers, 2007), each one modified and adjusted to suit the hosting institution. Many provide a broad overview of freely available web 2.0 technologies, while some program organizers have focused on relating the program content directly to employees' day-to-day work (Titangos & Mason, 2009; Kingsley & Jensen, 2009; Gross & Leslie, 2008, 2010). For example, the 23 Things program at Santa Cruz Public Library incorporated tasks such as downloading e-books and audio files from the library's collection into their program (Titangos & Mason, 2009). Supplemental in-person help sessions have also been incorporated into many

programs to support participants as they make their way through the program content (Titangos & Mason, 2009; McCaffrey, Reilly, & Feighan, 2010; Wilkinson & Cragg, 2010).

In most cases participation in the program has been voluntary with a focus on fun to engage employees. The negative impact of mandating participation was clearly demonstrated when Santa Cruz Public Library incorporated web 2.0 competencies from their 23 Things program into annual performance reviews. This action generated such fear among the staff that, mid-way through the program, library administration and program organizers began to place an emphasis on the program's "fun" aspects (Titangos & Mason, 2009). Many programs have found that offering incentives, ranging from giving participants a certificate of completion and a party to giving participants MP3 players or gift certificates, worked well to motivate staff participation (Titangos & Mason, 2009; Gross & Leslie, 2008; Kingsley & Jensen, 2009; Wilkinson & Cragg, 2010). Organizers who offered no incentive for participation found that relatively few participants completed the program (McCaffrey, Reilly, & Feighan, 2010; Gross & Leslie, 2010). Other factors that can impede program uptake and participant completion, particularly among library workers who are not "early adopters" of technology, include lack of time to participate, competing priorities, and the perception that these technologies are not relevant to the individual or their job (Gross & Leslie, 2010).

According to the literature, program characteristics that have been popular with participants include the use of incentives (Kingsley & Jensen, 2009); working through the program while on work time (Kingsley & Jensen, 2009; Gross & Leslie, 2008); participants being able to complete the program at their work stations rather than leaving their post to attend a workshop (Wilkinson & Cragg, 2010); and interacting with other program participants and learning from each other (Gross & Leslie, 2008, 2010). 23 Things programs have been so popular that many organizations have built upon their program with additional workshops (Wilkinson & Cragg, 2010; Gross & Leslie, 2010) or by continuing to share information using the technology itself–for example, through a Facebook group (Titangos & Mason, 2009)–or by updating and re-offering the program multiple times (McCaffrey, Reilly, & Feighan, 2010).

The largest benefits from 23 Things programs seem to be a shift in mindset about learning new technologies and increased confidence in participants' readiness to help library clients who are using these technologies (Stephens & Cheetham, 2011; Titangos & Mason, 2009). An evaluation of 23 Things programs across Australia by Stephens and Cheetham found that most participants continued to explore new online technologies after the program was complete, although academic library staff did not believe the program to be as beneficial as staff from other library sectors. Approximately 32% of respondents from academic libraries made use

of the technologies in their work after completing the program compared to 52% of respondents from other types of libraries (Stephens & Cheetham, 2011). Other evaluations have found that some participants believed that they might use what they learned in their personal lives but not in the course of their work (Kingsley & Jensen, 2009). For some libraries an unexpected benefit of offering a 23 Things program was gaining a reputation for the library as forward-thinking and tech-savvy (Gross & Leslie, 2008; McCaffrey, Reilly, & Feighan, 2010). In the case of the University of Limerick, their program was extended beyond the library to university employees at large (McCaffrey, Reilly, & Feighan, 2010).

The University Library 23 Things Program at the University of Saskatchewan

In 2011 a 23 Things program inspired by similar programs at other organizations was offered to University Library employees at the University of Saskatchewan. The program was organized by a 23 Things team of seven employees. These employees–four library assistants, two librarians, and one systems analyst–worked in different units across the library system but were all members of the University Library's Learning and Development Committee, an internal committee that coordinates learning opportunities for library employees.
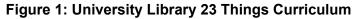
The University Library 23 Things Program introduced various web 2.0 technologies in order to help enhance library employees' life-long learning in an online environment; help employees become familiar with technologies that are used by many of the library's clients; and encourage learning through exploration, experimentation, and collaborating with peers. Beginning in the fall before the program was scheduled to run, the program was well promoted among library employees. The 13 week program (January–April 2011) was self-paced and could be completed during work hours. The asynchronous nature of the lessons allowed for participation without the need for participants to leave service points at the library's seven branch libraries. Out of 146 library employees, 76 initially signed up for the program and 53 continued to completion.

Participants followed weekly blog posts at http://uofslibrary23things.blogspot.ca (see Figure 1 for a list of topics covered). Each lesson consisted of required reading and activities and, in some cases, included videos and optional activities or information about related technologies. For example, Thing 17 ("Social Bookmarking") focused on Diigo, but participants were also encouraged to explore Delicious, Digg, Reddit, or Newsvine. As might be expected, participants had various levels of knowledge of web 2.0 applications as they entered the program, and creating lessons that would be suitable for most was a challenge. The team hoped that the

instructions in each blog post would be enough to get participants started with the applications and act as a springboard for further exploration. The 23 Things team created a 23 Things e-mail account, monitored by the team, as a contact point for program participants to ask questions or request in-person help from a 23 Things team member. Participants were also encouraged to work together and help each other with program content.

Like other 23 Things programs, participants were expected to blog their way through the program. Rather than monitor the participant blogs to ensure complete participation, individuals self-reported their progress through the lessons via a shared Google spreadsheet, introduced in Week 4, to determine who had completed the program. Participants who worked through all of the lessons received a certificate of completion and a 23 Things USB key; in addition, drawings were held for an Apple iPad and an iPod at an end-of-program celebration. The University Library 23 Things blog remained available for participants to revisit at a later date and for other employees to work through the lessons on their own if they wished to do so. Following numerous requests from employees for a repeat of the program, a

Week	Topic
Week 1	Thing 1 - iGoogle
Week 2	Thing 2 - Blogs and Blogger
	Thing 3 - Registering Your Blog
Week 3	Thing 4 - RSS Feeds
	Thing 5 - Google Reader
Week 4	Thing 6 - Google Docs
	Thing 7 - Google Spreadsheets/Forms
Week 5	Thing 8 - Prezi
Week 6	Thing 9 - YouTube
	Thing 10 - Podcasting
Week 7	Thing 11 - Wikis and Wikipedia
	Thing 12 - U of S Wiki Tool
Week 8	Thing 13 - Catch-up
Week 9	Thing 14 - Photosharing
Week 10	Thing 15 - Social Networking
	Thing 16 - Twitter
Week 11	Thing 17 - Social Bookmarking
	Thing 18 - Widgets
Week 12	Thing 19 - Online Mapping
	Thing 20 - GIS
Week 13	Thing 21 - Wordle
	Thing 22 - LibraryThing
	Thing 23 - Wrap-up

Figure 1: University Library 23 Things Curriculum

reduced program was offered in the fall of 2011. The original blog posts were edited to remove instructions pertaining to registering participant blogs and checking off progress in the program spreadsheet, and an introductory group session was offered to interested staff. There were no incentives for completing the program. The Learning and Development Committee also offered

"23 Things Expanded" workshops where particular technologies were featured in a hands-on lab environment.

Methods

Immediately following the close of the original program in May 2011, an online survey was conducted to gather feedback from the 53 participants who completed the program (see Appendix 1 for the survey questions). A link to the survey was sent directly to the participants via e-mail. No incentive was offered for filling out the survey.

In November 2012, a follow-up online survey was conducted to determine whether program participants had applied what they had learned in the program and, if so, how (see Appendix 2 for the survey questions). The link to the survey was distributed via email to those who completed the original program with the exception of staff no longer employed at the library. Program participants were asked to complete the follow-up survey regardless of whether or not they completed the 2011 survey. To encourage participation, everyone who completed the survey was offered a $10 gift card to a coffee shop; to maintain participant anonymity, the follow-up survey was linked to a separate online survey consisting of one optional question, "Thank you for filling out our online survey. Please enter your name to receive your $10 Gift Card for Tim Horton's."

The counts of closed-ended questions were tabulated for each survey by the survey software. Responses to the open-ended survey questions for both surveys were examined for general themes.

Results

The response rate for the 2011 survey was 62%, while the response rate for the 2012 survey was 72%. Generally speaking, the respondents from both surveys indicated that the program met their expectations, they enjoyed the program, they believed that the program was beneficial, and they believed it would be beneficial for other employees as well (see Tables 1 and 2). All but three respondents from the 2012 follow-up survey were able to apply some of what they learned during the program, either personally or professionally (see Table 2). YouTube, blogs/blogging, and Google Docs were the most commonly cited "things" that were used, while

podcasting, Delicious, and GIS were least used (see Table 3). The 2012 group was almost evenly split regarding whether participating in the program motivated them to explore other web 2.0 technologies. Four respondents indicated in the comments that they were already motivated to do so, but three indicated that they would not have explored these technologies on their own if not for 23 Things. Examples of technologies that participants went on to explore were Meebo, the Doodle.com scheduling tool, Camtasia screencasting software, iMovie, photo sharing technologies, Dropbox, and mobile devices and apps for the Android phone and iPhone.

Table 1: Summary of Closed Survey Questions, 2012

	Question	Yes	No
Q1	Since the completion of the University Library 23 Things Program, have you been able to apply any of the technologies from the program?	25 89.29%	3 10.71%
Q2	Did participating in the program then motivate you to try using other Web 2.0 Technologies?	16 57.14%	12 42.86%
Q3	Do you think the program would be beneficial to other University library faculty and staff?	28 100%	0 -
Q4	The program met my expectation.	27 100%	0 -
Q5	Would you change anything about the program?	7 25%	21 75%

Table 2: Summary of Closed Survey Questions, 2011

	Question	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Q1	This program met my expectations.	18 54.55%	14 42.42%	1 3.03%	0 -	0 -
Q2	I benefited from this program.	17 51.52%	14 42.42%	2 6.06%	0 -	0 -
Q3	I will be able to apply some of these "23 Things" to my work at the Library.	12 36.36%	15 45.45%	6 18.18%	0 -	0 -

The themes that emerged from the open ended responses fell into four categories: personal aspects, professional aspects, program organization and content, and comments

about individual "things." The tone of the comments submitted was consistent from survey to survey. See Appendix 3 for selected comments from each survey.

Personal Aspects

Several respondents in both surveys indicated that they value being introduced to new ideas and learning new things in general. For some, the program helped to demystify newer technologies and gave participants the confidence to use them. For example, one respondent wrote,

> *For me, the University Library 23 Things Program was an introduction to all Web 2.0 technologies because I was completely ignorant of them and resisted them, in most cases. I realized that for me to meet the needs of my library users, I needed to learn about Web 2.0! And, I'm so happy and fortunate that I participated in the program. It opened my eyes, and I realized what I had been missing out on. I was a sponge and soaked everything up.*

Those who used the "things" outside of work after the program ended did so for the purposes of communication (for example, via Facebook, Twitter, or blogging); current awareness and information management (via iGoogle, Twitter, RSS feeds, or for accessing documents from multiple computers); for audiovisual activities such as photo sharing, downloading podcasts, and YouTube; and for their academic course work.

Table 3: "Things" Applied by Program Participants *(more than one answer possible)*

Thing	Count	Response %
YouTube	17	9.44%
Blogs and Blogging	16	8.89%
Google Docs	16	8.89%
iGoogle	14	7.78%
RSS Feeds	13	7.22%
Wikipedia	12	6.67%
Social Networking	12	6.67%
Google Reader	10	5.56%
Wikis	10	5.56%
Twitter	10	5.56%
Wordle	10	5.56%
Prezi	9	5.00%
Photosharing	9	5.00%
Online Mapping	6	3.33%
Widgets	5	2.78%
Google Spreadsheets	4	2.22%
LibraryThing	3	1.67%
Podcasting	2	1.11%
Delicious	1	0.56%
GIS	1	0.56%

Professional Aspects

Ten of the open-ended responses indicated that the most worthwhile part of the program was connecting with colleagues, by either working through the weekly lessons together or by reading other participants' blog posts. The most common work-related uses of the "things" after the program ended were for communication through library and employee blogs, Prezi for presentations, and Wordle for displays, and for facilitating team projects and committee work by sharing documents with wikis and Google Docs. It was also used to stay on top of "industry trends," to obtain product reviews and library association communications, and for providing reference assistance. Three of the 2012 respondents indicated that they do not use any of the technologies from the program in their work.

Program Organization & Content

Comments related to the organization of the program were consistent between the 2011 and 2012 responses. Respondents appreciated that the program was flexible, that help was available throughout the duration of the program, and that exploring the lessons on work time was permitted, either alone or with others. Some participants felt that the program was overwhelming, with too much content covered in too short a time period.

Opinions varied on the topics covered: some felt they did not apply to the work setting or that the technologies presented were too specific while others appreciated the variety. Some concern was also expressed about employees "wasting alot of time with their new facebook/ twitter . . . accounts." Some respondents were positive about the information and instructions provided, while others did not feel that the instructions included enough detail. One person indicated that they would have appreciated being told how to cancel the various accounts created during the program.

Respondents from both surveys expressed a desire for the program to keep going with new lessons discussing such "things" as apps and music technologies, or updated lessons as the technologies evolve. One respondent suggested that including a statement outlining how each "thing" relates to library work would be a good addition to any future lessons while another indicated that supervisors should encourage employees to learn about web 2.0 technologies as part of their work.

The "Things"

Respondents of both surveys commented about individual "things" covered in the program that they deemed to be most and least worthwhile (see Table 4). Immediately following the completion of the program, Google Docs/Spreadsheets was the most popular "thing" while Twitter was least popular.

Table 4: Indication of the Most and Least Worthwhile "Things"

Topic	2011 Survey (n=34) # indicated most worthwhile	# indicated least worthwhile	2012 Survey (n=29) # indicated most worthwhile	# indicated least worthwhile
iGoogle	4	1	-	-
Blogs/Blogger	5	-	-	-
RSS Feeds/Google Reader	2	-	-	-
Google Docs/Spreadsheets	9	-	1	-
Prezi	4	-	1	2
YouTube	-	-	-	-
Podcasts	-	3	-	-
Wikis	4	-	1	-
Photosharing/Flickr	2	2	-	-
Social Networking	1	2	-	-
Twitter	1	5	1	1
Social Bookmarking (Diigo)	2	-	-	-
Widgets	-	-	1	-
Online Mapping & GIS (Community Walk/ Google Maps)	2	3	1	-
Wordle	2	-	2	1
LibraryThing	-	1	-	-

Discussion

The 23 Things team developed the 23 Things program to increase employee awareness

of the technologies library clients are using so that they will be better prepared to work in the digital age. A variety of applications were introduced in order to give participants a broad overview of the web 2.0 landscape, help them become familiar with technologies used by many of the library's clients, and, with any luck, spark an interest in some of these technologies that would lead participants to continue exploring the technologies on their own. The 2012 survey did not ask participants to specify to what extent they applied the technology at work versus at home. For the purposes of this program, the application of a "thing," regardless of the context in which it is applied, demonstrates an increased familiarity with web 2.0 tools and is considered a success.

Based on the feedback received from program participants immediately following the close of the program as well as almost two years later, the program was valuable for many and was generally considered worthwhile. The two surveys asked slightly different questions about what aspects of the program participants found to be most and least worthwhile. In 2011 participants were specifically asked "What "things" did you find most/least worthwhile?," while in 2012 the question was broader: "What parts of the program did you find most/least worthwhile?". This change in wording came about because in 2011 participants included in their survey responses aspects of the program the 23 Things team had not anticipated when designing the feedback survey, for example, the social aspect of the program. This change in wording is a likely reason for fewer comments about individual "things" in the 2012 survey. It is also possible that time passing and memory of the "things" fading contributed to fewer comments in 2012.

We have wondered, in retrospect, whether program planning might have benefitted from an initial survey or focus group to take stock of which web 2.0 technologies library staff were already using and which they wanted to learn about. Lessons designed based on staff preferences might have helped achieve a higher completion rate for the program; but since the point of the program was to introduce staff with a variety of personal and work contexts to technology with which they may not be familiar, it is unclear whether attempting to tailor the program would have been feasible. While Google Docs was the most popular selection for "most worthwhile" on the 2011 survey, no one "thing" was a clear winner. This is not surprising in light of the diversity of learning styles and approaches of adult learners and when considered along with the concept of transliteracy. For example, being Twitter-literate is just as valuable as being Prezi-literate, but an individual's personal context drives which technologies he or she finds interesting and chooses to adopt. Interestingly, there were significant differences between what "things" participants saw as being the most worthwhile and what they actually

incorporated into their work or personal life. For example, Google Docs, the "thing" identified as most worthwhile in 2011, ranked third when participants were asked what they applied in 2012, while YouTube, the "thing" that was applied by the most participants, was not mentioned by anyone as the most worthwhile "thing." In addition, some participants found that their preconceived notions about web 2.0 applications were challenged through the 23 Things program; one participant indicated "I like Twitter even though I thought I would hate it." This, along with the repeated sentiment that participants appreciated an introduction to all of the applications discussed for the sake of expanding their general knowledge, reinforces the concept that including a variety of topics was a good approach.

The feedback received on aspects of the program aside from lesson content was consistent with responses to other 23 Things programs in terms of program flexibility, working through the program while on work time, and the use of incentives (Kingsley & Jensen, 2009; Wilkinson & Cragg, 2010; Gross & Leslie, 2008; Titangos & Mason, 2009; McCaffrey, Reilly, & Feighan, 2010). In addition, despite the independent nature of this learning activity, the social aspects of the program that occurred spontaneously as participants worked together and connected through following each other's blog posts was valued by program participants almost as much as the newly acquired knowledge from working through the lessons. For example, one respondent said, "I found helping others when they got stuck really helped me cement what I myself knew, and having access to others really helped me get out of my own stuck problems." Another indicated, "It was nice to know that a group of coworkers were also trying these things, and we could chat about them together, and provide informal support."

The format of the program was a departure from the training typically offered to library employees through the Learning and Development Committee. One goal of the 23 Things Team was to expose staff to learning through exploration and experimentation rather than solely through structured workshops. Some participants indicated they did not receive enough instruction, which suggests that some may not have been ready for–or not well suited to–this mode of learning. Some participants, however, appreciated the flexibility offered by this format, and it is of clear benefit to employees who are tied to a service point in branch locations and are consistently unable to participate in in-person workshops due to staffing concerns. Perhaps if asynchronous learning opportunities allowing exploration and experimentation were regularly offered–potentially with supplemental interventions part way through to keep participant engagement and motivation high–staff might become accustomed to this style of learning, leading to a shift in the way that these staff members approach learning and professional development.

Maintaining momentum is the most important part of staff professional development (Fogarty & Pete, 2004), and the library literature suggests that 23 Things program organizers in other organizations have met with demand from participants to keep the program going in various ways. The University of Saskatchewan experience was no different; many comments indicated that participants would participate in the program again and would like to see new and updated lessons. As indicated above, some technologies from the original program were featured in hands-on workshops, and the 23 Things Team left the blog live so that anyone could revisit lessons or work through the program on their own. Anecdotal information and one participant comment from the 2012 survey indicates that the unmediated approach was not nearly as successful as the organized event surrounding the original program. One participant suggested that the program be continued with library employees contributing to the blog to share what they learn with each other. This is similar to how the Santa Cruz Public Library (Titangos & Mason, 2009) continued its program via Facebook. While good content is important, it might be that the semi-facilitated format, in addition to the flexibility of completing the lessons at a convenient time and place, was the key to our program's success.

Conclusion

The experience of implementing the 23 Things program at the University of Saskatchewan University Library reflects that of other libraries as described by the library literature. The survey results presented here can also help to inform similar learning initiatives in the future. We recommend:

- *Think of long-term learning initiatives rather than short-term one-off events.*

  The 23 Things program at the University of Saskatchewan was approached as a one-time learning event. What quickly became apparent, however, was the ongoing interest in learning more "things" in a similarly structured and supported manner. Participants were largely not ready or willing to do it themselves.

- *Respect that everyone is in a different place in their learning.*

  Different people will be interested in different things, so ensure variety in the topics

and technology that are included. Also, be ready to provide instructional support (i.e., extra help), whether through one-on-one support or through periodic, supplemental classroom time.

- *Make participation optional and as fun and interesting as possible.*

  Encourage the social aspect and, again, have some variety in the content. Providing an incentive for program completion is also a useful motivator as there will always be people who initially decide to participate for the chance of winning a prize.

- *Incorporate practice into the experience where possible.*

  While each lesson included an assignment related to its respective "thing," incorporating the "things" into the structure of the program–for example, getting participants to log lesson completion in a Google spreadsheet which was a technology covered by one of the lessons–helped reinforce lesson content.

- *Get management on board.*

  Program participants appreciated and enjoyed working through the program during work hours. It is likely that few staff would have participated if they were required to do it on their own time. As a result, support from senior management is an important factor in the success of a program such as 23 Things.

It is not possible to create a learning and development program that is all things to all people. Everyone has different needs, interests, and preferred modes of learning. However, a program in a format such as that used by 23 Things offers a useful addition to an organization's employee learning and development toolbox. The program format allows for flexibility in terms of where, when, and to what depth participants learn about a given topic and allows participants to offer peer support on their own terms. In organizations that are looking to transition long-time employees from the print-based working world to the digital world, making 23 Things-style learning opportunities a regular part of staff learning opportunities could be one way to help employees become comfortable with the digital world.

Author Contributions

Christine J Neilson: Primary author of the manuscript, primary responsibility for data analysis, contributions to the 2011 and 2012 Survey, and member of the original University Library 23 Things Team

Jamie Sofoifa: Primary designer of the 2012 survey, contributions to the 2011 survey, contributions to the manuscript, and member of the original University Library 23 Things Team

Rachel Sarjeant-Jenkins: Contributions to the manuscript, Chair of the University Library's Learning and Development Committee.

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Appendix 1: 2011 Survey Questions

1. I will be able to apply some of these "23 things" to my work at the Library. (strongly agree; agree; neutral; disagree; strongly disagree)

2. I benefited from this program. (strongly agree; agree; neutral; disagree; strongly disagree)

3. This program met my expectations. (strongly agree; agree; neutral; disagree; strongly disagree)

4. What "things" did you find most/least worthwhile? (open-ended)

5. Do you have any additional comments or feedback about the program? (open-ended)

Appendix 2: 2012 Survey Questions

1. Since the completion of the University Library 23 Things Program, have you been able to apply any of the technologies from the program? (Yes/No)

2. If yes, which ones? ***If no, skip down to question 5   (choice)

iGoogle	Wikipedia
Blogs and Blogging	Photosharing
RSS Feeds	Social Networking
Google Reader	Twitter
Google Docs	Delicious
Google Spreadsheets	Widgets
Prezi	Online Mapping
YouTube	GIS
Podcasting	Wordle
Wikis	LibraryThing

3. Please give specific examples of how you have used these technologies at work? (open-ended)

4. Please give specific examples of how you have used these technologies outside of work? (open-ended)

5. Did participating in the program then motivate you to try using other Web 2.0 technologies? (Yes/No)

6. If yes, what were they? (open-ended)

7. Do you think the program would be beneficial to other University library faculty and staff? (Yes/No)

8. The program met my expectation? (Yes/No)

9. What parts of the program did you find most/least worthwhile? (open-ended)

10. Would you change anything about the program? (Yes/No)

11. If yes, what thing(s) would you change? (open-ended)

12. Do you have any further comments about the University Library 23 Things Program? (open-ended)

Appendix 3: Selected Quotes from Open-Ended Questions

2011 Survey

All of the "things" were worthwhile from my perspective that learning anything new is valuable. The "thing" that I think I'm least likely to use, however, is probably Twitter. But it was interesting to learn about and I appreciate understanding what Twitter is when I hear someone referring to it.

The most valuable thing for me was the overall increase in comfort, and understanding, I now have with the interconnected of [sic] *aspects of the internet.*

I probably won't use most of the things in my personal life. However, I can see how google docs, spreadsheets & Wiki would be useful at work.

I really, really liked learning about RSS feeds and Google Reader. I now use Google Reader all the time at home and at work. There were a few things that I felt we could have explored a bit deeper, such as Wikipedia or GIS. We just read about them and didn't do anything about them.

It was finally an excuse for me to check out twitter! Maybe too many apps had minimal library application-Flickr, the community mapping tool, and some others that I can't remember (though that may just be the way I'm looking at them).

I found all the things worthwhile, though I may not use all of them again, I think it was good to learn about them. If I had to say the most worthwhile to me personally that I have used since taking the program (that I hadn't heard about or used before) would be the igoogle. The least worthwhile was Twitter.

Even if I don't think I can use some of these tools at work, it still gave me the knowledge to know what they do and what they can be used for. I would have to say that makes them all worthwhile.

Most: Google Docs, Diigo, Wordle, RSS Feeds, Blogging. I love my RSS feeds from the Centered Librarian and Stephen's Lighthouse. That is something that I would not have done without this program. I also enjoy blogging and am hoping to keep up with mine! Least: Community Walk,

Twitter, and Library Thing Although I can see the revelancy and applicability of these concepts within the library world, I do not feel that I would be likely to use the tools again.

Even though I may not use Twitter, I found it was important to learn how to access it and what it is used for by anyone. The most worthwhile was learning about Flickr and Prezi and possibly Google Docs. These I will be able to use in my work and home life. Actually having to do blogging was also worthwhile. It served two purposes-showing you how to put items into a blog and helped you look for other blogs and comment on them (networking).

It was fun and challenging. A great way to learn about the new technologies. I'd like to see 23 Things or something similar become an annual event. People in my unit who normally wouldn't be working together were collaborating and helping each other out. That was nice to see.

I also question if it is now okay to do "facebook & blogging" at work now that the program is over??!! I did enjoy working through the various applications....and it often created a common problem in the work area with staff having co-operation to solve issues. It helped create team work.

Few of the 23 Things were new to me, but I know they were to many others. The benefits, as I see it, are to get staff outside of LS&IT thinking about, and using, additional technologies outside of their norm. Perhaps that will spill over into their work, or into services we provide our patrons. Seems like it was a huge success. Perhaps a follow up should be done in 6 months or a year. "Another 10 Things" or some such.

I learned a lot about my colleagues' interests through the blogs. It was useful they were all together for browsing. I hope some blogs will remain active and available on the intranet.

It was an excellent program, we should consider offering it again. the [sic]*amount of the things in the weeks available plus I was away on holidays, then conference, then LLDP left me too far behind to finish. I did find it a little overwhelmeing, the newness of it all, and the number of new things, towards the end. Not sure if other baby boomers had the same difficulty. But Wow, we need to figure out a way to do it again. More encurgaging this time from supervisors that it is part of their jobs to learn these new things.*

I sometimes felt like I was rushing to keep up and maybe not playing with the application and testing

it out as much as I should have. I wonder if we had done it over 23 weeks and just looked at one thing at a time-no probably not. We all suffer from a limited attention span-especially when it comes to technology. ;-)

I think interest flagged at the mid-way point and wonder if an in-person get-together would have helped kick-start participants again...Since it was an independent learning program this might have helped some feel less isolated. Just a thought.

Thought that is was very good, frustrating at times but also rewarding when completed said frustrating task.

I think the challenge is always figuring out how each of the 'things' [sic] can be used in the workplace--if that is the point. The goal of increasing understanding of social software, how they can be used, and how people choose to use them, was definitely achieved. Congratulations to the team!

There are a lot of tools out there that I've always been interested in checking out but just never seemed to make the time to do it. 23 Things provided me the opportunity to do just that. Thank you for all your effort you put into setting up 23 Things for us. It was a great learning opportunity.

I found this program to be of great benefit. I was not familiar with many of the "things" and it's great to be aware, informed and a bit more up-to-date with technology. It changes rapidly and I am not equipped to keep up with it on my own. I found this program had a lot of valuable information and was of great value to me as an employee.

I loved the program. I would like to see it repeated with further tools to discover. I enjoyed having something else new to learn each week. My only suggestion, include a brief statement on how the application might be used in a library setting. Not everyone might realize how RSS feeds are being used in databases for example, and why it is important for them to learn about this new technology.

2012 Survey

My most common use for these applications is at the reference desk. I may assist with these specific applications or use the knowlege [sic] gained with these to assist with other similar applications.

I post to the Health Sciences Library blog with related news and updates; I'm in the process of setting up an RSS Feed on the blog; I have access to the Learning Commons Operations Team wiki to post Meeting Minutes; I try to use as many of the other technologies listed here when relevant and applicable to my work and to my continued personal and professional development: Social Networking; Google Reader, LibraryThing; Online Mapping; Photosharing, etc.I hope to get more opportunities in the future to utilize the various Web 2.0 technologies in my work!

Incorporated several of these technologies into LibGuides. Also used a few for collaborative team project-work.

Some of these technologies I knew a bit about before 23 Things, but the program inspired me to use them more often and/or more efficiently. I use Prezi quite a bit for presentations. I also am an active blogger. I blogged about my experience in 23 Things, and continue to discuss other training that I have received.

Although I don't necessarily use all of these technologies at work-I need to be aware of the fact that they exist and of how they work as the students use them.

Haven't directly used them for work, but I do have an understanding of specific things that might come up at work. Eg. [sic] *RSS feeds when looking doing a search.*

We use blogs or wikis for some of the committees I serve on. I have found google docs and spreadsheets really useful for checking documents from home (where I use a mac that is not always using the most up to date MS office software. [sic] *It's nice to check the weather widget before I head off to a meeting to decide how warmly to dress before ventureing* [sic] *out. Wordle has been useful for some displays Library thing* [sic] *is what we used for our popular reading collection in my branch* [sic] *You tube* [sic] *is actually a useful reference tool when trying to find old songs or performances.*

I haven't had to use any of these technologies at work.

I have done some work with Prezis and plan to develop some instruction sessions with them. I have used Wordle for signs and some presentations and I use Prezi for editing photos that I used for presentation purposes as well as for other staff needs. I have explored the use of YouTube for library purposes but have not created or uploaded any items. I have used a Wiki for a team project and

althought [sic] *I have not used all the technologies for work I have a greater idea of what is "out there" and am more cognizant of changes in social media, technologies etc. I did have RSS feeds but find that it is not really applicable to my particular job and removed them.*

I use these at home not at work. I have set up a photosharing account with my family that would not have happened before I participated in the program. I also have a blog (that has followers :-)!!!

I have followed people on twitter, which I didn't know how to do before the 23 things. The online mapping has come in very handy especially when travelling, I was able make maps for other cities. I can now put a youtube video on facebook. The google docs is great at home since I have more than one computer and can access files from different computers.

I would love to try using other Web 2.0 technologies that are not listed here, especially when Web 3.0 emerges. For now, continuing to try out and learn more about the technologies listed here is so important to my personal and professional development.

Already had the motivation before 23 things.

I don't think I could give you a specific example, but the program gave me more confidence to try and use new things. It was nice to know that a group of coworkers were also trying these things, and we could chat about them together, and provide informal support. I probably woudn't [sic] *have taken the time to explore them on my own, if the program hadn't been introduced.*

Yes I like to explore web 2.0 technologies…but usually they are not applicable to my work. I use them more so on a personal basis. Currently I am more focused on the apps for my iphone than any other application.

I found the variety of technologies and the ability to work with others the most worthwhile aspects of the program. I know coworkers unfamiliar with these technologies found it very helpful to be able to ask questions of others in the program. I found some of the technologies less worthwhile than others but understand that my preferences will be different than others. I can't think of anything I could call "least worthwhile".

For me, the University Library 23 Things Program was an introduction to all Web 2.0 technologies

because I was completely ignorant of them and resisted them, in most cases. I realized that for me to meet the needs of my library users, I needed to learn about Web 2.0! And, I'm so happy and fortunate that I participated in the program. It opened my eyes, and I realized what I had been missing out on. I was a sponge and soaked everything up. I would like to take this opportunity to commend everyone who organized such an initiative for LDC!!!

Most worthwhile: taking the mystery out of trying a new technology Least: not enough in-depth instruction provided

I think that because the way the world is taht [sic] *it is important for everyone to at least be aware of social media/networking even if they don't choose to use it themselves, it is becoming more and more how people communicate. Also, Wikis (having a central place to post information for a group) is very beneficial when working on a common project or team.*

I found all of the different technologies had their good and bad points. Many of the technologies were too specific and not really relevant to my work at the Library- ex. podcasting, online mapping. Some were fun such as the blogs and rss feeds but I haven't kept up with them. I loved Wordle and enjoyed playing with it but it is probably the least applicable of the technologies.

It encouraged people to try things out and find out that these technologies aren't so scary after all. I don't think a particular "thing" was more or less worthwhile. I thought the information provided for each thing was very good-videos and examples, etc. Also, it was great to be able to find everyone else's blogs.

I liked communityWalk since I'm directionally challenged, I like Twitter even though I thought I would hate it. I found helping others when they got stuck really helped me cement what I myself knew, and having access to others really helped me get out of my own stuck problems.

It was most fun following other participant's blogs-I really enjoyed the creativity most people exhibited [sic]

I REALLY liked that the program was self-paced. I could do it whenever I wanted to, and that removed most of the pressure to complete the program. I also liked the fact that the implementation team was so supportive, and approachable. I did have a few difficulties with some of the elements, but

it was a "safe" learning environment, so I was comfortable approaching team members for assistance.

I know the second run of 23 things didn't take off as well because the people running it weren't free to put in as much time on it. I think it might be a good idea to bring in graduate mentors.

I would add music. Music is really important to students and to me, and I think that it would be helpful to look at how music is shared in today's world (especially legally). Now that I work at the Ed library I would find that especially beneficial.

I don't know if it is possible....but creating accounts for every applications [sic] *was painful and I still get all these update emails from all kinds of stuff that I am not interested in. I guess it may be helpful for at the end of the program, to show folks how to cancel all of the accounts they no longer want to use. Also if you present this program again, the different technologies need to be updated....I think there may be other and more up to date stuff out there now....and I would drop things like facebook...doesn't everyone in the whole world already have an account? and if not it is because they are boycotting!!*

The continued relevance of academic libraries is so important as we move into the future, and our top priority is to meet the needs of our library users. The University Library 23 Things Program is necessary to introduce and educate library staff to these Web 2.0 technologies so that they are providing users with the best service possible by meeting their needs.

I would like to see another offering of 23 Things that encourages individuals to explore additional technologies and then share them with the library audience-so that it expands the program beyond the LDC.

I really enjoyed the program. I have recently discovered that the 23 Things website is still accessible. This survey has made me think about going back and looking at some of the technologies again!

I thought it was a good initiative, especially for people who did not grow up with computers in school. It allowed me to glimpse into the future, and deal more comfortably with the now.

It was fun, challenging, a good learning experience and a great way to explore new ways to do things that I would never have done on my own. Congrats again on a job well done!

I enjoyed it. If the program happened again with new "Things" I would gladly join again. I felt it really helped level the playing field between older and younger co-workers.

It helped me realize that I don't have to know EVERYthing. That there is too much technology out there that a person doesn't really ~need~ [sic] to use, like blogging and twitter. I remember alot [sic] of the responses were like mine---okay to know about, probably won't really use, just don't want to sit in front of a computer that much. Taking 23 things improved confidence because at least I know what an "RRS" feed is etc.

It was interesting, but thus far in my work & personal life--I have had no need to apply what I learned from participating in it.

I would like to see refresher session opportunities for those who would like to review technologies especially if there are updates that they liked but didn't have capacity to work on with all the new things they learned.

I think it's an excellent example of using technology to teach about technology. It's based on adult education principles, and its success was due to a well organized, hard working implementation team. I've spoken to several library colleagues and friends outside the library about this program, and they have expressed interest in introducing the program at their workplace. I do think that the prizes offered were a big incentive...that's certainly what kept me going! Overall, it was a very well conceptualized program.

Some of it was useful....but I found that in my job situation, there just really were no applications for the stuff we learned but it was a good exposure to the different technologies out there even though some of them I was already using before the program. Now I don't use most of them so I have lost the knowledge I did have. I also noticed on a general basis, that some employees really tended to waste alot of time with their new facebook/twitter etc accounts!!

This was a great learning opportunity. Now I know a little about alot [sic] of different types of technologies. I can now recognize what alot [sic] of our students use and know what they are talking about.