

WHY LEARNING ABOUT EMERGING TECHNOLOGIES IS PART OF EVERY LIBRARIAN'S JOB

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Abstract:

In the last two years, several libraries have conducted formal learning programmes to familiarise staff with emerging technologies. Learning about new technologies should not begin and end with a formal learning programme, but should become part of every librarian's job.

As staff learn about disruptive new web tools, then it is likely that the workplace will change to become a more flexible and nimble environment – reflecting the rapid change and flexibility that is happening online. Managers should be prepared for this, and for resistance to this change.

There are several objections staff raise when asked to make time for learning about new technologies in their already overcrowded day. Anyone implementing a staff learning programme needs to listen to these objections with respect and try to address these concerns.

If library staff understand why they should learn about emerging technologies, then they are more likely to find time to do so. This paper outlines twenty one reasons why learning about emerging technologies is part of every librarian's job.

The paper concludes by offering some techniques for motivated staff to find time to learn about new technologies – either in a formal programme or as personal and professional development.

INTRODUCTION

With items to catalogue, instructional material to prepare, users to help, budgets to balance, outreach to plan and systems to troubleshoot, why is it good management for staff to be released from these tasks to spend some time learning about emerging technologies?

If library staff are going to trade a couple of hours a week to learn about emerging technologies that they can't even use yet in their jobs, then there better be some compelling reasons for it.

Below I give several reasons why learning about emerging technologies should be part of every librarian's job. This list is designed to provide context and motivation for library workers to find time in their day for their own learning – either as part of a formal workplace learning programme or as self-directed professional development.

First I will discuss common objections from staff about formal emerging technology learning programmes. I will offer some suggestions about how managers can handle these objections before they present staff with reasons to learn and techniques to find time.

LEARNING EMERGING TECHNOLOGIES IN THE LIBRARY WORKPLACE

Description of library workplace emerging technologies learning programmes

Murdoch University Library was one of the first libraries in the world to create an online programme for staff to learn about new technologies by using them. (Greenhill, 2006). MULTA (Murdoch University Library Thinking Aloud) ran from 16 June to 11 August 2006. It used the blogs, wiki, forums and RSS aggregation tools of a TikiWiki Content Management System. The idea was that staff would form a learning community by discovering the same tools at the same time, and learn practical application of the tools by seeing how their colleagues used them.

In August 2006, Helene Blowers of the Public Library of Charlotte and Mecklenberg County launched a programme that she called "Learning 2.0". Staff used commonly available online tools, such as blogger, Flickr, bloglines and Odeo, to learn about new technologies by using them. Staff wrote reflective posts in their own blogs as they completed their "23 Things". This programme ran until the end of September 2006. (Blowers, 2006). Blowers has stressed that the programme is about changing the workplace into a community of self directed lifelong learners – it is not a training programme. It is about valuing play and exploration. (Blowers & Reed, 2007)

This programme was released under Creative Commons License. As a result of the open license and the excellent design, the model has been replicated in over three hundred libraries worldwide – academic, public, school and specialist. The map below shows some of the locations where Learning 2.0 programmes have been run worldwide, as at 23 September 2008.



1. Learning 2.0 Throughout the world (s, 2008)

In Australia, the programme has been offered to staff in all Victorian public libraries by the State Library of Victoria. In 2007, Australian academic libraries that ran a programme based on Blowers' model included Edith Cowan University, Murdoch University, Deakin University, Swinburne University of Technology and Ultimo College Library.

Material covered in library workplace emerging technologies learning programmes

Material covered in library workplace varied slightly from workplace to workplace, but generally covered new web tools that were just beginning to gain mainstream acceptance. All these tools were means of communicating and organising information, although not all tools were being widely used by libraries. Appendix 1 lists the original 23 Things covered in the programme at the Public Library of Charlotte and Mecklenberg Counties.

Topics covered in Learning 2.0 programmes have included:

- Blogs
- Wikis
- RSS
- Podcasting
- Facebook
- Image Generators
- Flickr

OBJECTIONS

Changing an existing culture of control and resistance to change

Libraries have a long history of organising, preserving and archiving knowledge. In this role, a resistance to change is a positive attribute. We have traditionally been “gatekeepers” of knowledge and whenever anyone wanted to access anything from our collections, we knew what they were doing. We controlled access points and access methods and this ability to control and safeguard was a professional asset.

New access methods via online tools enable users to access our collections in ways beyond our control. When the tools of access – like web browsers, RSS aggregators and social networks – are no longer owned and controlled by us; when we often are only leasing large parts of our collections from large database conglomerates, then the traditional culture of control and resistance to change is challenged.

Although librarians were among the first professions to automate our practices, and staff have always been required to keep up with professional trends, our workplaces tend to have a “training” model for upskilling staff, rather than a self-directed learning model. An emerging technology workplace learning programme challenges existing library culture and is really an attempt to substantially change this. It should not be something that happens and then everything goes back to normal – these technologies are disruptive and transformative and once staff understand this, their work practices should change to better serve our users in their many online spaces.

The library workforce is typically older than in other workplaces. In 2007 in the average Australian workplace 37.2% of the workplace was over 45 (Australian Bureau of Statistics, 2007). According to the Australian Government “Jobsearch” site, in 2007 63.3% of Australian librarians were over 45. (Jobsearch, 2007) This does not automatically mean that being older, librarians are less able to learn or cope with change, but it does mean that for a substantial part of their careers, many librarians have worked within a workplace culture that valued control and resistance to change. They were possibly even hired for these attributes.

Typical objections

From discussions with other librarians who have run similar workplace learning programmes I have compiled a list of the most common objections to completing a workplace learning programme:

“I don’t have time”

“My service point is too busy for me to play”

“I don’t understand how I can use new technologies in my job right now”

“I would rather just read about new technologies”

“There is no peer reviewed study to prove that these are relevant”

“I want to be told which tools are relevant and just learn about those ones”

The first objection, “I don’t have time” is by far the most often raised objection. At the end of this paper I outline techniques that staff can use to find time for such a programme. My contention is that if staff understand the reasons why they should be learning, then many will be sufficiently motivated to make the time.

Role of management

Upon hearing staff objections, the first thing to do is to listen. It is very likely that they are voicing legitimate concerns. An emerging technology learning programme is often the first foray into changing a library organisation to a more nimble and responsive institution, one that reflects the open access, flexible and ever-changing web tools being used and created online. It is unlikely that the organisation is already flexible enough for this change – that is presumably one of the reasons why the programme is being run.

The objections of staff will clearly indicate where there are organisational problems. Are they so micro-managed that they cannot find time for learning? Is their ICT equipment insufficient to use online tools? Have they previously had a chance to learn how do things like download and install software or to change the CSS on a template? Are they rewarded for experimenting with new ways of doing things? Does the library have a culture of sharing information and knowledge between sections?

There is no point conducting this type of programme unless managers are committed to it and demonstrate this commitment by example. Managers need to be seen to be “hands on” in the programme. If they are competent with new tools, then they show how easy it is to learn. If they are incompetent, then they demonstrate that they are prepared to show when they don’t know something, in order to learn. The worst thing managers can be is indifferent and not involved. It sends a very clear message to staff that they are not committed to cultural change. It is essential to ensure that all managers have found time and reasons for their own learning before they ask the same of their staff.

At some point, managers are going to have to work out what they will swap for a culture that values learning and flexibility. It is not possible to continue to do what has always been done and still make time for learning about new technologies. Managers are the people who can facilitate this. It is very easy to say “we will give you time to do this programme”. It is another to say the same thing, and then work carefully with a subordinate to find out where they can fit the programme in their schedule and to OK them to stop doing something else.

If staff feel that managers are listening to their objections (even if they can’t fix the associated problems immediately), if they see that that managers are practically committed to the programme and managers have worked with them to identify what can be suspended during the programme, they are much more likely to listen to managers’ reasons for conducting the programme. With practical considerations identified, even if they are not solved, they will be more receptive when managers explain to them why learning about emerging technologies is part of their job.

Below are my reasons why learning about emerging technologies is important for librarians. Different workplaces will have different reasons.

REASONS WHY LIBRARIANS SHOULD LEARN ABOUT NEW TECHNOLOGIES

1. Performing core business better

Our core business is linking information and people. There are new and better ways to do this and we need to know how.

2. Increased productivity

All of the tasks listed in the introduction can be made easier using emerging technologies, but you need to know how to use them.

3. Gaining international perspective

Your network of professional contacts does not have to be restricted to your own country. New tools make “communities of interest” easier to form.

4. Finding out what other libraries are doing

Printed journals and conferences are no longer the best way to find out about the successes and failures in other libraries. With blogs, wikis, podcasts - all harnessed into your aggregator via a subject search, you can keep up and have an avenue to discuss these things with professional colleagues.

5. Understanding all formats of information

Users will ask us about these information sources. Are we serving them well if we say “sorry I only know about information in some formats?”

6. Trend watching

Tools are constantly evolving and changing. What starts as a seemingly pointless diversion can become a potent information source when it reaches critical mass or people discover a new use for it. (eg. twitter). We need to be there watching this and understanding it.

7. Repurposing our traditional skills

Tagging, metadata, data-mining, indexing - new technologies need our skills.

8. Understanding technical background when dealing with vendors

If we don't know what can be done, for free, using new tools, then library software vendors can continue to sell us “solutions” that are inflexible and costly.

9. Being prepared for when a tool moves out of early adoption phase

What a few early adopters are using now, others will use in 18 months time. If we learn about them in their early phase, we will have a good understanding how to use them when our users expect our services to incorporate these.

10. Understanding the redefinition of our core business

The definitions of some core concerns of librarianship are being re-negotiated - copyright, plagiarism, scholarship, authority, privacy and recreation. We need to be in among the conversations on sites where this is happening.

11. Managing our tech-savvy workers

We need young, tech-savvy, passionate, clever library staff to deal with the changes, and we need to know enough to manage these people and get the best out of their new skills.

12. No-one else knows your users as well as you do.

Many new web tools are very simple to use and learn. A thorough knowledge of your clients – their needs, preferences and ability tends is not easily learned. Nobody but you will be able to assess how these new tools can serve your clients – but you need to know what the tools can do and how they work to do this.

13. Fun

If staff are given permission to have fun and be creative as they learn in a supportive environment, it can lift workplace morale.

14. Providing better service to our clients

If we know how, we can offer better service to our users, where they are and using their preferred tools. (eg. SMS output of item location records to their mobile device via bluetooth)

15. So we can tell the IT department what we want

If we feel overwhelmed by web-based technologies that are now only available in beta, imagine how it feels if your job has been to set up software, protect a network and standardise operating environments. If we have a centralised IT department, then we may have to know more about the tools we want to use (eg. software we'd like for an internal blog).

16. Our professional users are required to keep up

In academic and special libraries, our users are required by our organization to keep up to date with technology in their fields. To support them, we need to know what that is.

17. Many user interfaces have become “pseudo-standards”

The tools we will use from now on aren't old standards like AACR2 and LCSH. The best tool for the job shifts and changes daily with our users' needs. We need to learn general flexibility and skills to adapt to this.

The same function is often performed the same way across many sites. To understand new web tools, we need to know how to do things like register at a social software site, understand how comment culture works on blogs, how to assess Open Source software and how to tweak templates and products to fit our library

18. Can't predict the future – so experimentation is insurance

Without crystal balls, we don't know for sure what will be widely used. We need to try and assess many services to find what works for our users.

19. Crowds are fickle

Good quality tools with easy user interfaces may not be favoured over early established tools with a critical mass of users...and the crowd may switch. This happened when a mass of people migrated from bloglines to Google reader as their preferred aggregator. Today's unused startup may be the Next Big Thing.

20. Collaborate better

Libraries have a culture of sharing resources and ideas with each other. Emerging technologies enhance this.

21. Experimenting increases skills

When Windows was first released, it came packaged with a game of Solitaire. People needed to learn how to use the mouse interface and to put in several hours of repetitive movements to get good at it. Solitaire turned out to be the fastest, most efficient way to educate the workforce. Some seemingly pointless sites teach us new interfaces.

TECHNIQUES FOR FINDING TIME

Libraries, like most large organisations, have typically had a “training” approach to increasing staff skills. It is possible that even if staff understand the reasons for learning emerging technologies, they will need help in the unfamiliar task of organising time for personal learning. Below are some ideas to suggest that they try.

a) Cheat club

Talk to people in your section about forming a “cheat club” to work through the tasks together.

b) Buddy up with a mentor

Find someone with skills with new technologies, or who is encouraging and ask them to mentor you with advice and encouragement during the programme.

c) A sign

Put a sign up on your PC saying “23 Thinging” when you are working on the programme, so other staff know not to interrupt you

d) Phone a teenager

Arrange a “phone a friend” agreement with a teenager so you can ring them if you get stuck.

e) Float your own boat

Work out what floats your boat - knitting, gardening, Ancient Egypt, trainspotting, photography, celebrity babies - and weave this theme into each activity.

f) 15 minutes per day

Set aside 15 minutes a day each afternoon, or before you open your email each day to work on the programme.

g) A week at a time

Commit to the programme a week at a time. Initially, just commit to the first week. If you find time for that, commit to just the second week. If you don't complete all you need to do, then commit to getting Week 2 done by the end of Week 3. This is not a race.

CONCLUSION

Emerging technologies bring changes in the way people retrieve and relate to information. To best use these tools to serve our users, librarians need to understand how to use them. Online tools change more rapidly than formal training programmes can keep up with. It is essential that librarians become lifelong learners and are constantly learning about these new tools.

Formal library workplace emerging technology programmes are a powerful way to start a necessary cultural change to a more flexible workplace better able to serve a new generation of users. I hope that the suggestions above about handling staff objections, finding time and understanding the reasons why library staff should learn about emerging technology have been useful.

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APPENDIX 1 – THE 23 THINGS COVERED IN THE FIRST LIBRARY LEARNING 2.0 PROGRAMME

Week 1: Introduction (official start of week August 7th)

1. Read [this blog & find out about the programme](#).
2. Discover a few [pointers from lifelong learners](#) and learn how to nurture your own learning process.

Week 2: Blogging

3. [Set up your own blog](#) & add your first post.
4. [Register your blog](#) on PLCMC Central and begin your Learning 2.0 journey.

Week 3: Photos & Images

5. [Explore Flickr](#) and learn about this popular image hosting site.
6. Have some Flickr fun and discover some [Flickr mashups & 3rd party sites](#).
7. Create a [blog post about anything technology related](#) that interests you this week.

Week 4: RSS & Newsreaders

8. Learn about [RSS feeds and setup your own Bloglines newsreader account](#).
9. Locate a [few useful library related blogs and/or news feeds](#).

Week 5: Play Week

10. Play around with an [online image generator](#).
11. Take a look at [LibraryThing and catalog some of your favorite books](#).
12. [Roll your own search tool](#) with Rollyo.

Week 6: Tagging, Folksonomies & Technorati

13. Learn about [tagging and discover a Del.icio.us](#) (a social bookmarking site)
14. Explore [Technorati and learn how tags](#) work with blog posts.
15. Read a few perspectives on [Web 2.0, Library 2.0 and the future of libraries](#) and blog your thoughts.

Week 7: Wikis

16. Learn [about wikis and discover some innovative ways](#) that libraries are using them.
17. Add an entry to the [Learning 2.0 SandBox wiki](#).

Week 8: Online Applications & Tools

18. Take a look at some [online productivity \(word processing, spreadsheet\) tools](#).
19. Explore [any site from the Web 2.0 awards list](#), play with it and write a blog post about your findings.

Week 9: Podcasts, Video & Downloadable audio

20. Discover [YouTube and a few sites](#) that allow users to upload and share videos.
21. Discover some [useful search tools for locating podcasts](#).

22. Take a look at the titles available on [NetLibrary and learn how to download audiobooks.](#)

23. [Summarize your thoughts about this programme](#) on your blog.

Source: Blowers, H. (2006). *Learning 2.0 23 Things* Retrieved 23 September 2008 from <http://plcmcl2-things.blogspot.com/>