From library automation to Library 2.0: exploring Web 2.0 tools, while reflecting on our traditional values as we move towards Library 2.0 and beyond.

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Abstract:

This paper reflects on Christchurch City Libraries history of the use of technology including more recent use of Web 2.0 tools, and some of the learnings along the way. First there is a brief examination of Christchurch City Libraries' digital progress from library automation to the World Wide Web. This is followed by considering some key examples of using Web 2.0, including a library blog, podcasting, a staff learning program, using Flickr and community archiving. Finally I reflect on our progress and raise some questions about what libraries and the library community needs to do to move us further towards the participatory library world that the notion of Library 2.0 promises to deliver.

Introduction

Connecting and collecting is a key part of our business. Libraries have always been a social space. Libraries are not about books, and indeed they have never been. They are the storehouses of ideas, about collecting and curation of those ideas, and about organising and adding value to enable use. Moreover, these ideas are used to create new things, new thoughts and new ideas to return back to the library. If we view the library this way, it will be easier to embrace our digital future and prepare to be ready and eager to explore, adopt and exit when needed, while still retaining our physical collections and spaces.

However, for many people the brand "library" is associated with books and physical spaces. Our challenges therefore include how to put the library where our customer is, in social spaces, and create opportunities for discourse with our content and for the development of new ideas, and continue to promote brand "library".

The concept of Web 2.0 has been around for over 5 years now, and it has been used by many different people to mean many different things. First used by Tim O'Reilly (O'Reilly 2005), it has come to mean a mixture of tools, services and the notion of a user centred web world.

For me one of the clearest explorations of the role of Web 2.0 in education and libraries is by Paul Anderson (Anderson 2005) who outlines Web 2.0 as 6 key ideas.
- Individual production and User Generated Content
- Harness the power of the crowd
- Data on an epic scale
- Architecture of Participation
- Network Effects
- Openness

The phrase Library 2.0 was coined by Michael Casey (Casey 2006) in 2006, but has also been used by many different authors for different, often opposing ideas. Walt Crawford (Crawford 2006) wrote a thoughtful analysis of some of the ideas that fall under the phrase Library 2.0 early in the life of the phrase, highlighting dissension in meaning, and then more recently revisits the concept. (Crawford 2009). The idea of a participatory library (Lenkes 2007) is also a strong ingredient in the mixture of our future library.

Many organisations have attempted to understand how to exist in a Web 2.0 world. For libraries, the question has become whether using Web 2.0 technologies creates a Library 2.0, and what that Library 2.0 place may be. For me, Library 2.0 includes creating a library where customers can interact and participate with our collection, have conversations and reuse our material. The Library needs to be able to utilise emerging social media so we can put our collections and services where our customers are, in an attempt to make a participatory library.

The following is an examination of some of the activities that Christchurch City Libraries has done in what I see as the continuum of library automation towards the ideals of Library 2.0.

Background of library technology at Christchurch City Libraries

Christchurch City Libraries began as a Mechanics Institute in 1859. In 1863 it became the Canterbury Public Library with a purpose built library and was governed by the precursor to the University of Canterbury. In 1948, after several years of debate, the library was handed over to the Christchurch City Council. In 2000 the library was renamed to become Christchurch City Libraries. Over time the library has evolved to become the largest network of public libraries in New Zealand: 19 libraries, a mobile library and digital library, serving a population of over 372,000, with a collection of over 1.1 million items and circulation of over 6 million items per annum. In 2009, Christchurch City Libraries celebrated 150 years of library service, and this has given us opportunities to reflect on how we have grown and responded to our changing environments.

The originally named Canterbury Public Library has a distinguished history as an early adopter of technology. In 1958 it introduced an automated punch card based circulation system, and in 1975 launched an automated lending system. In 1989, the library introduced an online public access catalogue (OPAC) inside the library. In 1995, the Library made the OPAC available over the internet, and launched a Library website on the then very new World Wide Web. The year 1997 saw the introduction of a web-based interface to the catalogue, and in 2000 dedicated web catalogues were introduced into all of our libraries.

The first of our digitised collections was launched in 2000. The collection included a selection of 400 photographs, a chronology of Christchurch history and a scrapbook from the 1860s.

In 2001, the library rebranded with its then new name, Christchurch City Libraries, and a redesigned website with a unique URL. Organisationally we now had a dedicated staff resource looking after web content, including an online community information directory. We also launched authenticated remote access to 17 premium database products and developed an internet gateway to a managed collection of thousands of selected web sites in a subject hierarchy. All these new services were able to be accessed free of charge inside all of our libraries.

In 2004, we launched a site for teens, entitled Pulse, which had a dedicated staff resource, whose role included connecting with the audience in schools and elsewhere, as well as creating content. This site was decommissioned and absorbed back into the main library web site in 2006.

In 2004 due to a merger of our library vendor Data Research with Sirsi, we migrated our Integrated Library System (ILS). This saw a lot of energy diverted in trying to rework functionality from an old system to a new and different one, and to try to retain the functionality of our Web OPAC. We also added about 10,000 MARC records to our catalogue for the bulk of our journal aggregations.

In 2005, after a project with an external consultant Paul Reynolds (Reynolds 2004), we refreshed our websites with a new information architecture, and some new tools. Of particular interest was the development of The Fitch, a tool to allow quick capture

and recording of questions as they were asked, and provision of the pathways to the answers: a virtual quick reference card index.

Some key principles from Reynolds' report were adopted. One was a desire for a consolidated interface to our collections, federated searching, and a navigation structure based on the role and needs of the particular user. Another key recommendation was the endorsement of the concept of us providing ideas and content that people can interact and engage with, and build on. These ideas of building a participatory library form a key part of what we would now call Library 2.0. This also led to the appointment of an online content editor, to oversee the governance of our online presence with the intention of creating robust content, and an editorial plan with adequate staffing resources.

In 2006, we launched Ezproxy, which enabled us to create granular links to our premium resources, at both search and article level. In 2007, we released access to federated searching across our premium resources and catalogue, as well as an Open URL Resolver. These are powerful building blocks still waiting to be maximised to help customers discover our often hidden jewels of premium content.

In early 2008 we again undocked our teen site, Pulse, and gave it a new refreshed stronger brand, and unique URL (see http://thepulse.org.nz/), still connecting it with the library, but with a stronger attempt to make a digital young adult/teen zone. With content created for and by teens, it has more emphasis on local community and life issues and less on library. It is still linked to library resources, although much of the content is now generated by the audience.

Later in 2008, the main website was refreshed again with a new domain name of christchurchcitylibraries.com and a further focus on trying to unlock our rich content and provide further pathways to information in our collections, both the physical and the digital material, collected and curated.

2009 has seen the development of a Web publishing plan that puts some solid forward planning around creating content, and draws on the whole library network for involvement in building our digital library, along with a renewed commitment to reviewing and refreshing what we already have in a systematic and programmed way. We are now drawing on the whole library network to create content and are working to get more customer input, including usability testing. When we created the Pulse site we had a small focus group to inform our development, and we have used customer groups to help us evaluate electronic purchases such as audiobooks. The development of informal feedback mechanisms, such as page comments, along with creating focus groups, will be critical to help inform our future decision making. However, we must also be able to accept that as a community librarians have a lot of accumulated knowledge, and we need to focus more on how to build on that, both within our organisation and beyond.

Organisational structures to reflect changing worlds

As we have developed our online presence, the organisation has responded by creating a dedicated team, Digital Library Services (DLS). This team is responsible for all digital services, including the public network infrastructure, computers inside libraries, the libraries' web presence, the running of the Integrated Library System (ILS) and the Fingertip Library (phone and online reference service). Organisationally, DLS is equivalent to a physical branch library, as well as having overall strategic responsibility for digital service planning and delivery. However, although we have fairly mature mechanisms to produce and manage our online content and digital services, much of what we do is invisible, much like an iceberg, where the top is visible but the large mass under the water is not.

The invisibility of this work and infrastructure can mean backlogs occur. In the physical world of the library, our backlogs are clear: our physical collection is moved with plastic crates and couriers between our 20 locations, and the stack of plastic crates by the door is a clear indication of the work we have to do. In digital services, the crates are there, but not so visible to the world, nor to our colleagues. One of the key parts of our publishing plan has been to expose colleagues and contributors to some of the "hidden" processes of creating web content, from concepts such as writing to the web, through to how to make links into our digital collections, the library catalogue and dealing with how to annotate a website, or deal with what Nielsen (1998) refers to as "linkrot".

One of our approaches has been to build into various staff position descriptions the idea of creating and managing digital content. We are starting to put explicit measurable tasks into individuals' yearly plans, ranging from an occasional blog post to designing, managing or implementing a large suite of content such as our guide to health information (see http://christchurchcitylibraries.com/Health/).

In addition to managing the day-to-day workload, a library's digital service needs to be responsive to the rapid changes in the web world. Public libraries operate within a larger complex parent organisation, and there is tension between the requirements of a local government framework versus the desire to be able to continue to make small changes and improvements alongside larger long-term plans.

So how do we continue to include the wider network of skills and experience into the digital service? How do we bring the skills and knowledge of those in the physical library into digital services? How are those physical customer interactions, and the questions and answers they trigger, absorbed into our digital world? And how does a library respond in a post Google world? What are the tools, and where is the time?

Some examples of the exploration of Web 2.0 tools at Christchurch City Libraries

Over the last few years Christchurch City Libraries has explored the use of various tools from the world of Web 2.0 technologies and other processes that help us move towards enabling a Library 2.0 environment. Following is an examination of some of those explorations.

Blogging and conversations, or, we are a library so we do readers advisory

Late in 2006, the DLS webteam decided we needed a blog. So like all good library projects at that time, we set up a small group (the people who currently worked on our websites) and got together in a room and talked about what we could do and how we might do it. Of course, we were unable to decide or agree. One of the group, who was already personally blogging, set up a Blogger site for us to try out, created accounts for the group, and gave us all noble pseudonyms to use because we had not decided if we would use personas or just be ourselves, as individuals.

We had no common view of what we were trying to do: some wanted people to look at other libraries and discuss what may work for us and what may not and work out a complex plan, others just wanted to get on and do it. Both these approaches had their merit and indeed the middle path of doing them both at once became the approach that we adopted.

We were all in agreement that although we had no online library calendar product we did not want our blog to just be a "what's on"/news listing. We all were interested in connecting with collections and customers; after all, that is our business.

The experiment failed. Few posts were actually published or got close to being finished. The blog was definitely not ready for customer consumption, and had no sense of focus. The main reasons were that there was no motivator, we had no real audience and we were in a vacuum with an unclear idea of why we were doing this. Although we had looked at a number of other library blogs (see http://liswiki.org/wiki/Weblogs_-_Public_Libraries) and had some sense of things we felt that worked and things we felt did not, we had still not seen how to translate this into what needed to be our own distinctive voice for a Christchurch City Libraries Blog.

What happened that changed our path?

Towards the beginning of 2007, Christchurch City Libraries decided that we would send a team of librarians to the annual Auckland Writers and Readers festival, not just as a professional development opportunity, but also to write and share the activities, interview the writers and create online content and connect readers back to our collections. This would be our entry into the blogosphere, using of course our new Blog (see http://cclblog.wordpress.com/). It also gave us a degree of finiteness; if it did not work, it would have just been for that occasion and we could exit gracefully.

As some people spent some time thinking about what to say, and how to say it, others spent some time considering how it should look. We examined two major platforms, WordPress and Blogger, and their themes, features and customisation. We chose WordPress because it seemed more elegant, although it seemed to us to have fewer features and less extensibility than the Blogger platform.

Our first post read (Christchurch City Libraries 2007)

> "Kia ora and welcome to our blog, as Christchurch City Libraries enters the Blogsphere. OK, we know – what took us so long?!"

Looking back at the early posts, they immediately capture what we were trying to do: connect our readers with library material: books, authors and ideas. One of the strong notions that we developed was the idea of voice. We could all have an individual voice, but had to carry the organisational voice. With this came the realisation that this is really not that different from transactions we already have with our customers, in libraries, on the phone or in emails. A blog is an informal communication; we can have strong opinions, but we still need to be polite and remember that we represent our organisation.

We have variety in our collection and we need to have variety of opinions when talking to customers about our collections. We want to connect our customers with our collections. At Christchurch City Libraries, we believe a library blog is a conversation. It is also another way to connect our collection with our customers. We have a wide readership and are receiving increasing amounts of comments from readers which help reinforce the idea of blog as a conversation.

After this initial foray, it seemed like we had the right approach and needed to expand on the range of contributors, so we put out a call for bloggers to join the small initial team. This was indeed a learning experience as we ran introductory workshops. A lot of our colleagues were lost for what they might do, but when offered the idea of the notion of a conversation (talking, book talking, reviewing) or just saying "hey this is great"; they became interested and were able to write a post.

The other issue that surfaced was the lack of some skills in some of our colleagues. Copy and paste, and right clicking were alien tasks to some, and the idea of why links into our catalogue do not persist was difficult for others. Using the interface of WordPress, and having multiple windows open, or tabbed browsing, seemed complex to some staff. So our Blogging 101 sessions became a surrogate up-skill session for many people, and the idea of blogging was lost for some. However, some of those people found that it was not so scary a year later.

At the beginning of September 2009, we reached post number 1000 on our blog. It could be said it has reached a certain maturity, but this now poses new questions about how we manage the older posts. There are broken links to external sites and broken images. Because the blog sat outside of what we considered our formal website, we initially overlooked some of those housekeeping issues that we do with our website.

Currently we have two main blogs:

- Christchurch City Libraries Blog (for customers/staff recommending library resources/events) (see http://cclblog.wordpress.com/)

- Christchurch City Libraries Bibliofile (professional development / conferences etc) (see http://cclbibliofile.wordpress.com/)

Our ground rules as they stand now are:

- Book titles should always be linked to their catalogue record.

- Our main blog is primarily for the purpose of letting our customers know about interesting resources that we have or sometimes events that happen at our libraries. All blog posts should in some way link to library resources or services.

- Write about what you are interested in - books that you love (or loathe), things that you are enthusiastic about. If you are only moderately interested in something perhaps leave it for someone else to discuss or compare it to something that excites you more. Genuine and informed opinions count for a lot in the blogosphere.

- Be descriptive. Let your personality shine.

- Write informally. Write how you talk. Imagine you are having a conversation with a customer (because this is actually what you're doing). What do you want to tell them about this thing?

- Ask questions. Ask for follow up opinions. Ask for suggestions. Ask for someone else to join the conversation.

- Be topical. What's going on around the place that might tie in with our resources or services?

At Christchurch City Libraries, blogging has become a key part of our online communication; however, we still have a lot to explore. We have started to learn about how to use a Web 2.0 tool to communicate with our customers and promote conversations with our content, yet we still have a lot to explore at getting the voice and audience right and about how to make this conversational activity easier for library staff to do.

Flickr and thinking about embedding our content into the Web 2.0 world.

Digital Library Services had been thinking about how to explore using a digital space like Flickr. An opportunity arose in August 2007, when it was announced that New Zealand fashion guru Paula Ryan would be attending the 2007 annual LIANZA annual conference to discuss librarians and fashion. This created a bit of a lively discussion on the library email list nz-libs (Nz-libs 2007), around whether this was an assault against the stereotypes of the profession, or something else. The idea of what librarians may wear, and what it would mean for this to be commented on by a stylist, proved to be a heated discussion on the email list.

Christchurch City Libraries in the 1950s had a fine tradition of providing smocks for its then mainly female staff, to protect against the book dust and other things encountered in running a modern circulating library. As we are collectors, we still had a fine collection of these smocks, used for dusty work and the occasional "retro" party, made of Sanderson fabric of various William Morris prints. This offered an opportunity to have a fun entry into Flickr, so we mustered a small group to don

these smocks and share them with the library community – and so, with Shush 2.0 (CCLStaff 2007), the Christchurch City Libraries presence on Flickr was born. At the same time, a conscious decision was made to make this fun foray a non-official presence, so the library registered the profile CCLStaff (see http://www.flickr.com/people/cclstaff).

This became a highly visible way of sharing with other colleagues in other libraries, who also took the opportunity to show off their various styles of library fashion. There was a small online conversation by librarians around the images on Flickr, and other libraries also posted images in a similar vein. This was to be the start of our understanding that the Flickr space was also a conversation space, not just a place for sharing photos.

Our next step was to run a photo competition in conjunction with our teen site, the Pulse, so we set up another Flickr site. This time we immediately made the decision to have a pro account, which gave us the ability to upload many more photos than a free account, as well as to review statistics and to create unlimited sets and collections. We seeded this with some photos that had been taken for an earlier youth event, and then added the competition entries as they were emailed to us. Over 250 photos were entered in the competition. The Pulse Flickr (see http://www.flickr.com/photos/thepulseteauaha) continues to publish photographs to support various articles on the Pulse, such as a drama troupe publishing their online travel diary, or the documentation of events that have been reported on or engaged with on the Pulse website.

At this stage DLS was also considering how to use the social aspect of Flickr and how it could relate to our formal collection activities with digital images allowing users to comment and tag material.

In mid 2008, we considered what the library would do for our annual Heritage Week event, and the idea of a photo competition was planned. The Christchurch City Council runs an annual event with the aim of raising consciousness of heritage values in our city. In 2008, the theme was "Retrospective: Christchurch life, architecture and design 1940s - 1970s". We used that time period, with the key themes of Fashion, Transport, Buildings & Streets, Sport and Recreation, Occupations, Events and Everyday Life, and planned that these could also become key themes for our future Flickr presence. The competition asked people to lend us their photograph and it would be scanned and returned to them. We also received a number of digital entries.

To seed the competition we uploaded some images from our current digital collection, including some things that were not available in our public collection yet. This was now our official Flickr presence (Christchurch City Libraries Flickr 2008).

On Flickr we received information from our community, helping us to date some photographs for which we only had vague sense of when they had been taken; in one example, the commenter was aware of when a building's roof had been burnt, enabling him to pinpoint the date of the image. We also received corrections of details, such as names and exact dates for when events had happened. This is an

illustration of the collaboration and conversation spaces that libraries can use to engage with their community (which is a hallmark of Web 2.0).

To help us seed the initial Flickr collection, we also asked library staff to contribute photos, to help us test the processes, and also to internally raise awareness of the collection idea. The Heritage Week competition was a success, with the promotion of the idea that seemingly ordinary photos are important in telling our stories.

At the end of the competition, we contacted the entrants again asking for permission to add their images into our formal digital collection. The entry forms had asked for consent for the images to be published under the newly released New Zealand Creative Commons (CCNZ 2010), Attribution-Non-commercial-No Derivative Works license. We chose to use this license as a way to promote the idea of reuse of material and to help us explore the ideal of this license. Rethinking use, reuse and the ability to remix is an important feature of how cultural institutions must consider how our material is shared and used in the Web 2.0 world, as well as helping our staff's and customers' understanding of copyright licensing and other rights concepts. There is work for libraries to do as well, around helping our donors and lenders better understand copyright and licensing and what we may wish to do with their donated material, and helping to enable others to use it in a fair way in the Web 2.0 ecology, as well as making our frameworks more robust.

Towards the end of 2008, the library started planning to celebrate 150 years of library service in Christchurch. We started to explore the library's archive of our own stories and images, and we discovered that although we had been good at looking after other people's archives, manuscripts and stories, we had been a bit poor at looking after our own.

So, as we started to better organise our organisation's archives and photographic records, we scanned many items and started to put some of the images up on Flickr. Because we were going to add these to our formal collection at a later date, we scanned at a high resolution and then downsized for uploading to Flickr. This also gave us insight into required workflows, naming conventions and storage issues.

A lot of this material was poorly identified as to location, people and even dates, and Flickr became a good collaborative space to help identify the missing information, with current and former staff contributing, commenting and tagging.

There was also an opportunity to reflect on how informal photographs of people socialising over time become part of the formal record, but when fresh are quite casual or even personal or private. At this stage, the difference between public and private started to become more obvious, and the difference between our two main Flickr presences is now clearer to us. As we describe in the CCLStaff profile (CCLStaff 2009), "This is a place for Christchurch City Libraries staff to share photos of themselves, in social and informal situations. E.g. team photos, celebrations and team events. More formal aspects of Christchurch City Libraries can be found at our other Flickr site."

What are we trying to do in Flickr?

- Increase access to our collections, and embed our material into a social space.

- To gather more and different information about them, maybe even a new context, and draw on the community that Flickr is.

- And to further share and build on what we discover.

What we need to do next is to continue to explore the community that is Flickr: join and form groups, get our material used by the community, and start to curate material that we can pull back into our formal collection. At some stage we also will need to explore the use of the Flickr API to pull back into our formal collection the additional information we are gathering there. Of course, Flickr is not the only platform to share images, but we have chosen for now to focus on Flickr.

We are watching how large institutions like the Powerhouse Museum (see http://www.powerhousemuseum.com/flickr/), the National Library of New Zealand (see http://www.natlib.govt.nz/collections/digital-collections/flickr) and of course the Library of Congress (see http://www.loc.gov/rr/print/flickr_pilot.html) are proceeding with the Flickr Commons project (see http://www.flickr.com/commons/), but also observing how aggregators such as Picture Australia (see http://www.pictureaustralia.org/contribute/participants/Flickr.html) and Digital New Zealand (see http://makeit.digitalnz.org.nz/blog/news/article-calling-nz-flickr-groups) are gathering from Flickr. The report *For the Common Good* (Springer, 2008) outlines some of the processes and outcomes of the use of Flickr by the Library of Congress. Although our activity has been on a much smaller scale, many of the findings are similar. We have had an increased awareness of our existing image collections, and an increase in contributions of objects, both physical and to loan, along with the enrichment of information supplied by the community and the conversations that occur around the images in such a social space. They also illustrate that it is important to respond to users' questions and conversations, and to update your formal descriptions when new detail is uncovered.

Podcasting, audio and community radio

Another way that we started to use Web 2.0 ideas was in the area of podcasting and community radio. In the late 1990s, the library engaged with the local access radio station, PlainsFM, and put a number of staff through a course on creating community radio. During 1998 and 1999, we ran two half-hour radio shows, "Canterbury Public Library news and reviews" on both Plains FM and the local Student radio station, RDU. These programmes were a combination of music and reviews. They were two different programmes with different characters, on stations which each had a very different personality and audience. On reflection, this was an early experiment in trying to understand how to have an organisational voice while retaining the individual's voice, while at the same time fitting in with the personality of the station.

With the rise of podcasting in the last few years, we had many staff who were keen to explore this technology. Ideas ranged from recording visiting authors, interviews,

recording story telling and baby rhymes through to producing radio-like programmes. We found there were many issues to work through and consider: copyright and quality of recordings were two key areas that were hard for many to understand, and we had little current technical experience with audio recording.

So we went back to our community radio station and contracted them to run some more courses around using audio equipment, recording and post-production, planning and storyboarding. We also worked with the award-winning Museum Detective, Joanna Cobley (see http://www.museumblogs.org/detail/32-the-museum-detective). Joanna had created a fortnightly podcast and radio show and interviewed scientists, curators, and historians to highlight museum collections and learn about the people, places, and stories behind them. With Joanna, we created a documentary-style series of six unique radio programmes (or podcasts) about how a library operates and the behind-the-scenes world of our treasured local libraries. This series is known as the Library Detective
(see http://christchurchcitylibraries.com/LibraryDetective/).

We purchased a good digital recorder (Marantz PMD620) and editing software (Adobe Audition), as these were the tools used by our access radio station. We have continued to create audio content, and interviewing authors at book events is becoming a key part of our coverage of events. These tools allow us to create unique content with only a handful of staff having skills to record and edit audio. Collecting community stories is a key part of our future and building the capacity to capture these is important, and we will continue to explore our partnerships with our access radio provider. Our focus is on creating content and not committing to something that is difficult to sustain like a regular podcast, although having a regular show on community radio is still an appealing avenue to help us produce regular content. We also need to explore the various Web 2.0 sites that allow users to share and promote audio and podcasts beyond our websites.

CCLearn: building our human capital

CCLearn is an attempt by our organisation to up-skill and enrich our staff perceptions and use of the Web 2.0 ecology. CCLearn was launched in pilot mode in May 2009. It aims to give staff time to explore and learn about the Web 2.0 world and to reflect on how it may be applied in our library environment.

The CCLearn programme is informed by, and owes a huge debt to, the original "Learning 2.0 - 23 Things" programme (see http://plcmcl2-things.blogspot.com/) developed by Helene Blowers (http://librarybytes.com/about.html) and the Public Library of Charlotte & Mecklenburg County, and the further work done by Christine Mackenzie (see http://yarraplentylibrary.blogspot.com/) and the Yarra Plenty Regional Library. 23 Things was an online learning program to encourage library staff to learn more about Web 2.0 technologies by using the tools and doing tasks. The programme has been adapted and used by many different libraries around the globe. These frameworks were adapted by us and we added New Zealand and Christchurch City Libraries' content, thinking about the New Zealand Digital Strategy. We also added some broader learning and local contexts.

From August 2009, CCLearn entered a state of permanent beta (i.e. in use but subject to change at any time) and we will continue to send staff through the programme in small groups which we call waves.

The learning modules use the LAMS (Learning Activity Management System) software package (see http://www.lamsinternational.com/). This allows registration, flexible lesson plans and monitoring to be undertaken. This builds on the innovative work that Christchurch City Libraries Learning Centres have done with the LAMS environment.
Participants volunteer to engage with the programme. They operate in groups, not to work on the same things necessarily, but to collaborate and offer support. Each group is facilitated and meets once a week for six weeks. Some meetings are not physical. Participants do not need to do all modules. There are some modules that everyone does, but the balance is selected by participants according to interest. We hope most staff will have participated in this programme over the next few years. As at December 2009, 56 staff have completed the programme.

Organisationally we have adopted some key concepts to help us move forward in the digital environment. These concepts are built on many varied ideas such as the idea of the learning organisation and the concepts espoused by the Library 2.0 "gurus" to help us develop a framework for staff to learn and understand the changing environment.

In the future, we will use elements of this framework for customers, and to further develop LAMS-based learning programmes to help customers with self-paced learning and exploration of the tools and resources we offer.

Kete: a space for community content

Kete has been described as "Open Source Digital Library and Archiving software developed by Katipo Communications and the Horowhenua Library Trust" (Katipo 2009). It is a both a software platform and a framework that allows an organisation to create an online space to enable communities to record community memory, tell stories and reflect on history. It can be used to allow an organisation to formally publish and control archival collections or to act as a community tool with little moderation or involvement from the host organisation. It can also be thought of as a social networking tool for social historians.

The Kete platform was further developed with funding from the Community Partnership Fund (see http://www.digitalstrategy.govt.nz/Funding/The-Community-Partnership-Fund/) of the New Zealand Digital Strategy (see http://www.digitalstrategy.govt.nz/). Kete was chosen as the community memory tool to be used by libraries that joined the Aotearoa People's Network Kaharoa (APNK) (see http://www.aotearoapeoplesnetwork.org/).

In addition to other organisations using Kete (see http://kete.net.nz/en/site/kete_sites?view_as=list) , there are now 15 APNK libraries who are using Kete (see http://www.aotearoapeoplesnetwork.org/content/kete) and each library has chosen to implement it with a slightly different model of participation.

Christchurch City Libraries is a development partner with the Aotearoa People's Network Kaharoa (APNK). We aim to explore and promote the Kete concept in our community, share the learning with our colleagues, and learn from other communities' attempts, and aims to be a key player in the online community of practice that is being developed around the Kete project (see http://cop.aotearoapeoplesnetwork.org/group/apnkketegroup).

We are now undertaking a project to pilot and explore just how we will make this product work and make it sustainable for us and our community. We wish to use it as a tool into which to embed our digital material, for community enrichment and conversation, as well as providing a space for the community to upload their own material to the Kete and tell their own stories. We hope we will create a self-managing and self-moderating space, where our community can create, build and share their stories.

As well as engaging with our community, Kete also provides an opportunity to promote digital literacy, and to help our community to learn how to use related tools, such as scanners and other digital storytelling tools, such as video and audio recorders and editors.

Christchurch City Libraries does not yet have a "Digital Library" product that would enable us to record and describe our archive collections and express complex relationships between objects, both physical and digital, using a schema such as Encoded Archival Description (EAD) (see http://www.loc.gov/ead/). We do not see Kete Christchurch as being the solution for this need, yet like our explorations with Flickr, it is a further opportunity for us to embed material from our collection into a social space, which is where we hope our local historians will be. So Kete becomes our social companion to our non-existent Digital Library Tool. We will also explore how to draw back selected community-created content into our formal collection. As this is facilitation, we will not try to dictate our formal processes into the local Kete community that we will attempt to create, but will try to lead and help govern the communities we hope to foster. In doing so we will need to explore and understand the models of participation that we wish to use and explore the emerging concept of Community Relations 2.0 (Kane 2009). Our main challenge will be how to create a self-managing community and how we can participate in that community in a sustainable way.

The landscape ahead requires us to continue to ask questions.

Over the last few years, we have seen the rapid rise of the Web, and the Web 2.0 phenomena moving into the mainstream. Depending on how you view it, one of the most important aspects of the social web is the conversations that people are able to have with "stuff": the read write aspect. What we want to be able to do is to enable users to have those conversations with materials in our collections and be able to recognise their library in a world of the library without walls.

We need to continue facilitating access, and collect and curate in these new spaces. Then we need to continue to consider how we can make our collections available so they can be embedded and reused.

As the examples above illustrate, Christchurch City Libraries, like many others, has managed to react to some changes in the landscape, sometimes quickly and sometimes more slowly. We have learnt a lot along the way, but we need to be able to react better to a faster changing environment and have ways to learn from our experience and better understand the value of our efforts. Indeed, we need to build a framework that gives us a way to react to new and changed things, while having a clear understanding of the what, why and how we are doing it.

Learning from others

Libraries are both good and bad at learning from others. We all observe each other's activities and have a certain sense of competition. We have centralised systems we feed into by uploading our catalogue records, yet we have no real process to see that the various enrichments that occur locally roll out to all users of our systems. How do we work out how to share things better between libraries?

Peer to peer

We have consortia, which are primarily based around resource sharing of aggregations and traditional library processes, but sometimes we are not very good at doing what might be called peer-to-peer content sharing. How do we aggregate and share our locally created content (our recommendations and enrichments make them local), but also syndicate ourselves? We need to get our applications to recognise our users' location and context and deliver appropriate, local and authenticated links when they are visiting a library, be it their local one or not. This has to be a part of our embedding, ensuring that the library materials that we purchase, enrich and create are surfaced through the open web and not relegated to the deep web. In doing so, our materials are discovered and valued and the brand of the library is emphasised.

Changing frameworks, changing thinking

We need to be aware of changes in frameworks around us. The rise of the Creative Commons movement gives us an indication of what a publicly-funded organisation could be doing with its unique content: my belief is that we need to promote the idea of libraries share and invite reuse, request attribution, but don't make money from us. What is happening with the Open Data movement (see http://www.opendatacommons.org/), and the idea of Government 2.0 (see http://gov2.net.au/), and how can libraries participate and leverage off such activities?

Government frameworks

Newly developing government frameworks give us opportunities to align our activities to changes in thinking and policy. In 2005, the New Zealand Digital Strategy (see http://www.digitalstrategy.govt.nz) was launched. This gave a new model that allows the library sector to rearticulate some of our core activities and values into a new framework. Libraries act to help enable creativity, innovation and

collaboration, and can help build a digitally skilled population, and provide support for, and access to, New Zealand content.

Christchurch City Libraries formulated a Digital Plan, which articulates some high level principles that we will be following in our digital activities, and which has an alignment with the Digital Strategy in the key areas of connection, capability, content, and collaboration.

In addition, the Digital Strategy enabled the development of the New Zealand Digital Content Strategy, which is designed to facilitate the unlocking of the nation's wealth of knowledge. Libraries must work with other sectors in doing this; the rise of the GLAMS (Galleries, Libraries, Archives and Museums) concept has shown a desire and a need for organisations to work across traditional boundaries to create new collaborations. My view is that the idea of local and our local collections and community is what makes us unique, and while enabling our community to be put on a global stage is a challenge to us, this is what we need to do to make libraries critical in the future.

Embedding the library

How do we embed library resources and tools into the Web 2.0 world to create a library 2.0 world, and how do we ensure we are in that mobile world?

It is crucial to put the library where the customer is, along with understanding what our local community is, and whether we are in the places they inhabit. Trying to frame the new digital world in traditional library values is also important to enable us to understand our future.

Developing a strategy to exist in the Web 2.0 / Social Media world

As librarians we need to ask whether our libraries are operating successfully in any social media spaces, are we operating in enough, or in too many and do we have a clear enough plan?

We see many examples of libraries attempting to exist in social spaces, some succeeding, others not succeeding or only succeeding to a lesser extent. We need to observe and articulate what works and what does not, so we can understand what we need to do. What are examples of best practice in these spaces, and things that do not work, and why? What will work for us?

When we have answered these questions, we can then devise a simple Social Media Strategy for our institution. In this context, simple means some overarching principles and vision, so you can create tactics to operate in each new social space, responding rapidly and being prepared to evaluate and change or exit as needed.

We need to ensure we have people existing as individuals in these spaces before they try to work out what to do there organisationally, for at least 3 months and probably for 6 months, in my view. In addition, we need to be comfortable with exploring new tools and ideas and visioning within our framework.

Our strategy for existing in this Web 2.0 world should be a high level document that helps us understand:

- Where are our customers and where may they expect to find us?

- How to identify the personality of the spaces?

- Who is the demographic and what are their behaviours?

- How can we engage within this space without looking stupid, or annoying and alienating?

- What is our personality in this space, and how do we develop and establish an appropriate voice?

- What are our success factors and measurements?

- How do we understand what people are saying about us and how far our reach goes?

- How do we do this in a sustainable fashion?

- How much time do we commit, and how much other content or activity can we reuse?

- How do we provide ways for colleagues to understand how to operate in these spaces as a staff member and as an individual (the public/private world)?

- What is our exit strategy?

After asking these questions, we need to decide on where we want to explore initially, and define an approach and tactics for each of the spaces we choose, with a clear understanding of why we need to do this, and just what we do need.

Moving from library automation to Library 2.0

In summary, over the last 15 years of our online digital presence, like many other libraries, Christchurch City Libraries has worked hard to make our collections more accessible and available to our customers in the web environment. We have continued our past work of creating pathfinders, reading lists and bibliographies but put them into a public digital space, with the goal of enhancing and unlocking access to our collections. We have developed systems to help guide customers to quality material that lives elsewhere on the web, and purchased unique content that is not available on the free web. We have also created unique content, around local history and digitised material that is unique to our community. Our next steps were to ensure our material could be used and consumed by Web 2.0 tools, such as blogs, podcasts, online photosharing and community archiving, so that our customers can reuse, comment and add to our collections, thus creating what we may call a social library, a participatory library, or Library 2.0.

References

Anderson, P. (2005), *What is Web 2.0? Ideas, technologies and implications for education.* Available from: JISC, JISC Technology and Standards Watch, Web site: http://www.jisc.ac.uk/media/documents/techwatch/tsw0701b.pdf [Accessed: January 12, 2010].

Casey, M. (2005), *Librarians Without Borders.* Available from: http://www.librarycrunch.com/2005/09/librarians_without_borders.html [Accessed: January 12, 2010].

CCLStaff (2007), *Shush 2.0.* Available from: http://www.flickr.com/photos/cclstaff/sets/72157622463320666/ [Accessed: January 12, 2010].

Christchurch City Libraries (2007), *Christchurch City Libraries enters the Blogsphere.* Available from: http://cclblog.wordpress.com/2007/05/22/hello-world/ [Accessed: January 12, 2010].

Christchurch City Libraries (2008), *Flickr: Christchurch City Libraries.* Available from: http://www.flickr.com/people/christchurchcitylibraries/ [Accessed: January 12, 2010].

Crawford, W. (2006), Library 2.0 and "Library 2.0". *Cites & Insights, 6*(2). Available from: Web site: http://citesandinsights.info/v6i2a.htm [Accessed: January 12, 2010].

Crawford, W. (2009), Library 2.0 Revisited. *Cites & Insights, 9*(9). Available from: Web site: http://citesandinsights.info/v9i9c.htm [Accessed: January 12, 2010].

CCNZ (2010), *Creative Commons New Zealand.* Available from: http://www.creativecommons.org.nz/ [Accessed: January 12, 2010]

Kane, G., Fichman, R., Gallaugher, J., & Glaser, J. (2009). Community Relations 2.0. *Harvard Business Review, 87*(11), 45-50.

Katipo (2009), *Kete Open Source Digital Archive Software.* Available from: Web site: http://katipo.co.nz/solutions/kete/ [Accessed: January 12, 2010].

Lenkes, D. (2007), Participatory Networks: The Library as Conversation. *Cites & Insights, 9*(9). Available from: Web site: http://quartz.syr.edu/rdlankes/Publications/Journals/COLISFinal-v7.pdf [Accessed: January 12, 2010].

Nielsen, J. (1998), Fighting Linkrot. *Alertbox.* Available from: http://www.useit.com/alertbox/980614.html [Accessed: January 12, 2010].

Nz-libs (2007), *The NZ-Libs August 2007 Archive by thread.* Available from: http://lists.vuw.ac.nz/pipermail/nz-libs/2007-August/thread.html#2368 [Accessed: January 12, 2010].

O'Reilly, T. (2005), *What Is Web 2.0*. Available from: http://oreilly.com/web2/archive/what-is-web-20.html [Accessed: January 12, 2010].

Reynolds, P. (2004), *CCL On-line Services Review,* McGovern & Associates, Auckland.

Springer, M., Dulabahn, B. & Michel, P. (2008), *For the Common Good: The Library of Congress Flickr Pilot Project*. Available from: The Library of Congress, Web site: http://www.loc.gov/rr/print/flickr_report_final.pdf [Accessed: January 12, 2010].