

Abstract

Create, Play, Learn: Setting up a small maker space in a public library

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Introduction

Call it what you will, Maker Space, Hacker Space, Creative Space the movement in public libraries to be more than just purveyors of books and literacy has grown considerably over the past few years with Creative Spaces in all shapes and forms opening across the country.

From high tech labs to knitting circles the desire to unlock creativity and to share this with other people is strong within our communities

Along with this world-wide movement the Victorian Public Libraries 2030 strategy posits two future scenarios for public libraries. The Creative Library and the Community Library within which the creation of these spaces fits well.

Results

At Bayside Library the role of designing technology programs for the community rests with the Community Technology Support Coordinator, from overseeing the IT training program to being eSmart this role has been responsible for all our programming.

In 2013 we began with a 3D printer and a small craft paper cutter in a small space in Sandringham library. This project was evaluated and the interest in technology from the community lead us to devising a bigger set-up in Beaumaris, a branch library

where there was enough room to create a reasonable area and space to store equipment. We had access to a very helpful Public Libraries Victoria Shared Leadership Program manual Creative Libraries. At the same time we were able to reconfigure a part-time vacant position in order to employ a person with multi-media skills.

Conclusion

It seems that creative spaces are here to stay, at least for the foreseeable future, and the set-up and ongoing staffing and management are all important considerations when reviewing the development of such as space in your Library. The conference paper will discuss the setting up of a creative space at Beaumaris Library and the outcomes of our *Create, Play, Learn* space.

Create Play Learn: Setting up a small maker space in a public library

Introduction

Creative spaces, makers spaces, hacker spaces, fab labs, or whatever you choose to call them are, in essence, creative spaces within the library where members of the community can come together to explore, innovate, tinker, create, play, engage socially and learn. As libraries evolve and change in the brave new digital world we are constantly looking for ways to engage with our communities while at the same time offering programs and services which will provide life-long learning and social engagement opportunities. The spaces can vary greatly between libraries with the first creative technology space in Victoria being set up at Mill Park library, equipped with 3D printer, video camera, creative software; to a simple space for the community to meet and knit together such as the Click, Clack and Yak sessions which are run at Camden Library in NSW.¹ At Bayside, building on the strategic direction of our Library Arts and Culture Strategy 2012-2017 *Theme1 Technology in Future* we developed a number of responses, one of which was the creation of *Create Play Learn*. This paper discusses the strategic background, how the space was set up, programming, staffing and results.

Background

Bayside Library Service is situated about fifteen kilometres south-east of Melbourne on Port Phillip Bay.

¹ [Creative spaces in public libraries: a toolkit by Emily Boyle et al. Shared Leadership Program 2014](https://goo.gl/yt3lei)
<https://goo.gl/yt3lei>

Branches	Population	Members	Visits	Loans	Hours per week open
4	100,000	48,000	650,000	980,000	209

We have 36 EFT of staff with the three branch librarians having portfolio responsibilities; Marketing, Rostering and Community Technology Support, along with staff from each branch participating in delivery of programs and services and working in cross organisational teams.

We run a busy program of events such as storytimes, author talks, writing workshops, IT training, bookclubs, book chats, bibliotherapy home delivery and outreach. The community is generally highly literate with a high percentage having computer access at home but it is an ageing community and digital literacy is an important component of our programming to ensure that older people are not left behind. IT training has been a part of our programming since the internet was introduced into Victorian public libraries 2005 and expanding into other technologies seemed a natural fit.

Strategic Drivers

While the Library strategy has been the main driver in the development of *Create Play Learn* there are also a State and Federal imperatives that have contributed to the thinking and planning.

The Federal Government National Innovation and Science Agenda

“Advances in technology are transforming just about every part of our lives, from the way we work to the way we communicate and access services.

Innovation and science are critical for Australia to deliver new sources of growth, maintain high-wage jobs and seize the next wave of economic prosperity.

Innovation is about new and existing businesses creating new products, processes and business models.

It is also about creating a culture that backs good ideas and learns from taking risks and making mistakes.

Innovation is important to every sector of the economy – from ICT to healthcare, education to agriculture, and defence to transport.”²

Victorian Public Libraries 2030

Creative spaces fit well within the context of the Victorian Public Libraries 2030 strategic framework. The framework aims to guide Victorian public libraries in their future planning, in particular with regards to identifying and meeting social trends as they emerge in our communities. This strategy identifies two key potential scenarios for libraries in 2030: the ‘creative scenario’, and the ‘community scenario’. It is important to note that these scenarios need not exist in isolation, what is vital in both these scenarios is the ability for libraries to not only identify community needs and respond strategically, but also to remain flexible enough to adapt as those needs continue to develop. Creative spaces are a perfect fit for the creative scenario, with options in this scenario ranging from IT focused (such as multimedia editing and video-conferencing facilities), to very hands-on practical spaces (such as spaces for painting, knitting, or pottery) or teaching spaces for a range of workshops (such as poetry, literacy or music). The concept of the community scenario as a ‘learning village’ as outlined in Libraries 2030 translates well into a creative space within a

² [National Innovation and Science Agenda](http://www.innovation.gov.au/), <http://www.innovation.gov.au/>

library, particularly if the space has been developed with future flexibility in mind, allowing it to adapt to evolving social and community demands and trends.³

Library Arts and Culture Strategy 2012 – 2017

Endorsed by Council in 2012 the Library Arts and Culture Strategy focuses on five key themes, the first of which is Technology in Future.

“Australians are early adopters of new technology – home computers, the internet, and more recently social media and tablets. 10 million Australians already have a smartphone. The rise of technology has major implications for planning the future of Bayside’s libraries and the future of cultural programs. Technology is changing the way people everywhere live, learn, work, connect and create. Over the past 20 years, the rate of change has been rapid and seems unlikely to slow in the foreseeable future. No-one can say exactly what will come next but, in 20 years, the world will be very different. Bayside services must plan for a digital future without dispensing with what the community values today.”

Three strategies were identified from this theme:

1. Ensure that Bayside remains at the forefront of the latest advances in global technology through the provision of electronic content and digital devices;
2. Continue to support lifelong learning by facilitating community access to affordable education in the use of digital technology; and
3. Capitalise on new technology to attract different community segments through the provision of opportunities for recording, gaming and multimedia.⁴

³ [Victorian Public Libraries 2030: Strategic framework](https://goo.gl/LyB29d), <https://goo.gl/LyB29d>

As a response to these strategies the Community Technology Support Team (CTS) was created in late 2012 and has responsibility for delivering on these three goals. The Team is managed by one of our branch librarians and includes the two library IT support staff, the IT training program coordinator, representatives from the four branch libraries and the manager.

Over the past four years the CTS team have been responsible for;

- library staff skills audit and training
- council staff training and support, providing one-on-one advice on accessing the libraries digital collections
- customer training
 - Formal IT training programs such as iPads, tablets, accessing the internet, word, excel and other applications in response to interest,
 - Devise Advise, a volunteer based and sometimes cross-generational one-on-one advise program,
 - Book a librarian to help customers with downloading eContent,
- Achieved eSmart accreditation
- Trialled and recommended new gadgets and services such as the chargebars
- Participated in outside the library promotions, with the Digital Pop-Up eLibrary at festivals and events promoting the digital collections.
- Set up and run the Create Play Learn spaces at Beaumaris and Sandringham Libraries.

Create Play Learn

⁴ Bayside City Council Library, Arts and Culture Strategy 2012-2017
goo.gl/KICpra


Setting up

In 2014, in response to the strategies a small creative space was trialled at Sandringham library with a budget of around \$2000 a craft cutter and a 3D printer were purchased. Running programs for adults and children during a six month period and assessing attendance numbers and costs confirmed that there was interest from the community for these programs. Sandringham however didn't have the space to expand and so Beaumaris library was selected as the ideal with plenty of space within the library to set-up a dedicated area. Planning began in late 2014 with the objective to launch the space in mid 2015.

So how did we fund it? Each year the Victorian State Government provides grant funding for public libraries, which for Bayside constitutes about 17% of our annual budget. Five percent of this budget may be allocated to what is called 'Local Priorities', special projects which are of benefit to the local community. So, with a budget of \$30,000 available, a project plan was drawn up. The plan outlined the rationale for the project, objectives, responsibilities, cabinetry works, timelines, and the range of programs to be run along with the equipment and software requirements for those programs.

Equipment and software

Equipment	Budget	Programmin,g
<u>Slide Converter</u>	\$74.95 at Harvey Norman. (x3 = \$224.85) http://www.harveynorman.com.au/kaiser-baas-8101181-photo-maker.html Needs to run off PC that will be used for 3D printer	Use slide converter in Creative Space and then attend class on making a photo book / Ancestry.
<u>Record / Cassette Converter</u>	\$149 at Dick Smith (x 2 - \$298.00) http://www.dicksmith.com.au/turntables-cd-players-boomboses/dick-smith-usb-encoding-turtable-with-usb-sd-input-dsau-ae2836	Convert records / cassettes to MP3 then attend class on iTunes.
<u>Stop Motion animation</u>	Free. Stop Motion Studio app can be loaded. Trevor	Scheduled for Winter school

	to load onto branch iPads. Melanie running this session with Trevor	holiday program. Partnership between CTS & CYS.
<u>Wall-mounted large screens (x4)</u>	2 for curved wall 2 for wall in JNF for gaming \$325.82 at Dick Smith for 39.5" (x4 = \$1303.28)	
<u>iPads (x6)</u>	\$750 (x6 = \$4500.00) Wi-fi only – no need for 4G Use dish racks to store ipads in cupboard http://www.hsw.com.au/index.php?product&id_prod=4813&id_cat=106&id_dept=516#.VQfHOY6Ucy4 	These can have press reader and Zinio app loaded when not in use for creative space. Use iTunes card for purchasing any paid software
Paper Cutter	From Brighton Library	FREE
<u>"Dancing" water speakers</u>	Need to buy online - \$25.00 https://www.kogan.com/au/buy/dual-water-fountain-led-speakers/?gclid=CKfu_ezfxMQCFRUGvAodLSoAKQ Use free app https://itunes.apple.com/us/app/music-maker-jam/id880929886?mt=8	Customers can make their own music – runs off ipad
Augmented reality (incl. Google Cardboard)	Google Cardboard (x1). \$29.00 Prepaid phone has been purchased to run apps http://www.thegoodguys.com.au/motorola-moto-g-2nd-gen---unlocked-xt1068 \$229 at Good Guys FREE APPS <ul style="list-style-type: none"> • Dive City Coaster – Roller coaster simulator. • The Height – Simple VR demo/game. • Dive Zombie – Shoot zombies in virtual reality. • Moorente – Like Duck Hunt for VR 	Download apps onto ipads

	headsets. <ul style="list-style-type: none"> • Stereoscopic Tunnel Effect – A never-ending journey through a virtual tunnel. 		
Playstation and XBox	<u>Playstation 4 (PS4)</u> - \$548.00 at Dick Smith <u>Xbox One</u> - \$499.00 at Dick Smith Not initially allowing public use. Launching only with set programs. Possibly in the future we will lend consoles for use in library. Need to consider access conditions. Bookings to be taken via http://blswiki.pbworks.com/w/page/94296014/Creative%20Space%20Equipment%20Bookings	To be placed in custom built unit in JNF area – “Interactive Gaming Zone”.	
Console Games	Forza Motorsport NBA 2K14 Fifa 14 \$162		
<u>Leap Motion Controller</u>	\$79.95 (x2 = \$159.90). https://apps.leapmotion.com/apps/sculpting/windows https://apps.leapmotion.com/apps/form-and-function-3d/windows https://apps.leapmotion.com/apps/collider/windows https://apps.leapmotion.com/apps/q/windows https://apps.leapmotion.com/apps/how-does-that-move/windows https://apps.leapmotion.com/apps/geco-midi/windows		
Milsims Bently	\$200.00		
Minestorm Ev3	\$450		
Makey-Makey Kits	\$65.00 http://www.buyraspberrypi.com.au/shop/makey-makey/		
TOTAL FOR EQUIPMENT	TOTAL SPENT :	\$7,108 (ex GST)	
	TOTAL BUDGETED :	\$7,000 (ex GST)	

Equipment added since the initial purchase includes:

- Little Bits

- Electric greeting cards
- Cubase music mixing
- 3D photo printing
- A large 3D printer

Cabinetry and furniture

An architect was employed to design the cabinetry; provide advice on the associated equipment, such as iPad stands and wall mounts, along with a redesign of cupboards for a gaming area and the total costs were \$23,000.

We came in almost on budget at \$31,535.80 to set up our *Create Play Learn* space.

Programming

Programming consists of a range of activities for adults and children to explore new technologies, play games, socialise and learn. As well as the Create Play Learn sessions a range of programs are now incorporated onto the children's school program.

2015

2016

Create, Play, Learn



A dedicated creative space, Create, Play, Learn is available at Beaumaris Library. Come along to explore the technology you want, or look into one of our guided tutorial sessions, listed below. Technology that is available and FREE to use includes:

- Virtual reality headsets
- Vinyl records to digital converter
- Slide photographs to digital converter
- VR16 seen to digital converter
- LEAP motion
- Photo printer to print pictures directly off your smart phone (for a small charge)
- iPads

Minecraft Club

Create a unique world in each session with five other players in Minecraft. Build, destroy and survive!

Thursday 9 September
Thursday 16 September
Thursday 23 September
Thursday 30 September
Thursday 7 October
Thursday 14 October
Thursday 21 October
Thursday 28 October
Thursday 4 November

4pm-5pm
Beaumaris Library
[FREE] Bookings essential
trybooking.com/170956

Cubase Basics

Learn the basics of digital music production and start the soundtrack to your life!

Thursday 30 October
Thursday 10 November
Thursday 24 November
4pm-5pm
Beaumaris Library
[FREE] Bookings essential
trybooking.com/14277

Technology Information Session

Come along to these guided sessions to explore the technology available in the Create, Play, Learn space. These sessions will include the 3D printer, VR16 to digital converter, slide converter, Sculpture and Vinyl16.

Monday 8 September
Monday 15 September
Monday 22 September
Monday 29 September
Monday 6 October
Monday 13 October
Monday 20 October
Monday 27 October
Monday 3 November

3pm-5pm
Beaumaris Library
[FREE] Aest turn up

Junior Coding with Scratch Basics and LittleBits

Coding for kids is cool. Even if your kids aren't fans of computer games in their free time, they can learn to code with Scratch Basics and LittleBits.

Tuesday 8 September
Tuesday 20 September
Tuesday 11 October
Tuesday 25 October
Tuesday 8 November
Tuesday 22 November
4pm-5pm
Beaumaris Library
[FREE] Bookings essential
trybooking.com/170426

Create and 3D print a miniature Minecraft world!

Have you ever wished you could live in your Minecraft world? Come along to this session to create and 3D print your own world. Almost as good!

Wednesday 14 September
Wednesday 28 September
Thursday 6 October
Wednesday 19 October
Thursday 27 October
Wednesday 9 November
Wednesday 23 November

3.30pm-4.30pm
Beaumaris Library
[FREE] Bookings essential
trybooking.com/160233

Explore Virtual and Augmented Reality

Step into the future of real entertainment and learn how to stream your PC to your phone

Monday 26 September, 3pm-5pm
Wednesday 28 October, 4pm-6pm
Wednesday 20 November, 3pm-5pm
Beaumaris Library
[FREE] Bookings essential
trybooking.com/14255



We also offer a 3D printing service and have developed a set of guidelines with requirements and costs to manage the process. There has not been much uptake so far but it is easy to continue to offer the service so we'll continue to have it available.

Staffing

With the plans in place and the work commencing we needed to ensure that we had the right staff to run the programs at Beaumaris. When a position became available in late 2014 a review of the staffing requirements at Beaumaris was undertaken and the position of Multi-Media officer was created. We could only manage to allocate 15.75 hours a week for this position but it was a start. The officer was employed in February 2015 and was on board to help with the program design and the purchasing of equipment. More recently a full-time customer service officer position became available and we were able to employ a person with IT qualifications and library experience. Both these staff work as customer service in the library and run the programs, along with help from other members of the CTS team.

We have also explored partnership opportunities some of which have been successful and some not:

- working with the local U3A to run programs of interest to older adults

- partnering with a local secondary school to enlist students to run gaming sessions
- attempting to source volunteers from the local TAFE college which has proved frustrating as no one will answer emails or respond to phone messages
- advertising for anyone interested in volunteering through the Council Volunteer portal, three volunteers have signed up for device advice but none, so far, for CPL.

iPads are permanently set up with a range of educational games and can also be used for promoting the eMagazines.

Marketing

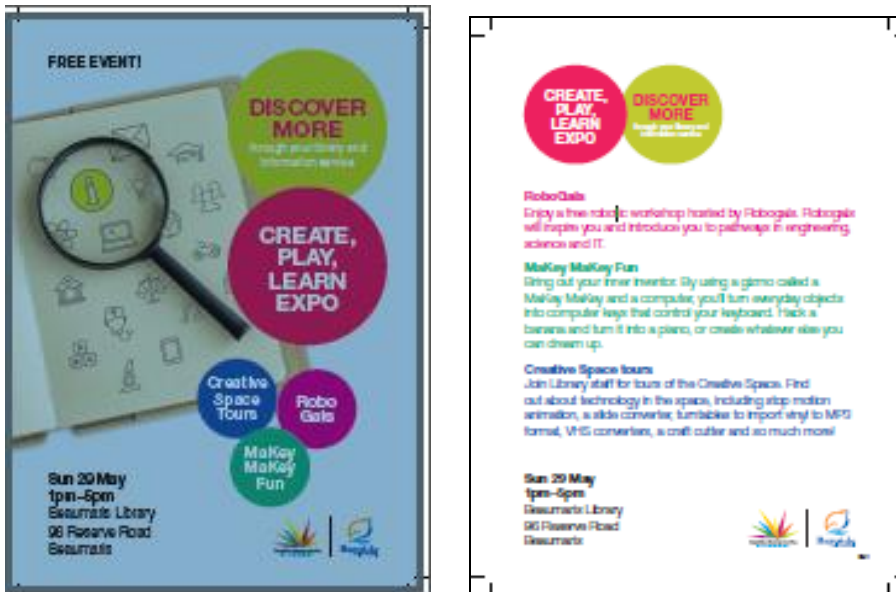
The branding of *Create Play Learn* encapsulated the project objective which was to create a place where the community could touch and play with the latest technologies.

Getting the staff on board with what we were doing was an important component of the marketing as they are the biggest advocates for telling people what we do and for selling the programs. Staff sessions were held for both library and Council staff to explore the space. In October 2016 at the bi-annual staff training day the afternoon was spent showcasing the *Create Play Learn* space and giving the staff some hands on experience with the technology.

A range of promotions was developed by the Promotions and Social Media librarian which incorporated a range of formats and avenues:

- Website
- Facebook
- Quarterly advertising in the local paper
- A feature page in the Council quarterly community newsletter

- Posters
- An “Expo” run during library week in 2016



- Permanent signage in the library
- Liaising with other council departments such as Youth and Family Services to promote the programs through their networks

Initial design work for a logo was taken on by a library staff member but more recently, using a crowd sourcing graphic design site Design Crowd, we commissioned a new logo. The cost to receive around a dozen design options from designers who are all over the world was \$270. The brief was to design a logo which encapsulated the fun and creativity of the program.



Results and Learnings

For the 2015-16 financial year there were 111 sessions run with 589 attendees which is an average of around five attendees per session. Important to note is that

five attendees per event seems quite low but when you consider that some of the programs can only run with two or three participants this changes the perspective on the uptake of program attendance. From 17/18 we will be reporting attendance in the coming year as a percentage of capacity, with a target of 80%.

	Month	Number of Attendees	Number of Sessions	Volunteer hours
1st Quarter	July	105	15	4.0
	Aug	89	20	4.0
	Sept	69	12	0.0
		263	47	8.0
	Oct	56	10	0.0
	Nov	43	9	0.0
	Dec	29	5	0.0
2nd Quarter		128	24	0.0
	Jan	43	6	0.0
	Feb	46	9	0.0
3rd Quarter	Mar	21	6	0.0
		110	21	0.0
	April	39	9	0.0
	May	10	2	0.0
4th Quarter	June	39	8	0.0
		88	19	0.0
	TOTAL	589	111	8.0

Technology comes with challenges, not the least being the product not being as good as it's hyped to be or not working properly. The first 3D printer came with a range of problems and is now being completely replaced, with the replacement we'll be relaunching the 3D printing service. So read up on the reviews and check the products before you buy.

Running sessions on the slide convertor, LP convertor and other technology aimed at adults wasn't very attractive and bookings were low. A much better idea is to have a walk up system where there are products available people can play with in their own time and at their own convenience. Keeping the area fresh is also important, when we update products or try out new ones the old ones can be rotated to the other branches to use in special events or with kids programs.

A happy customer comment

“I thought you might like to know that my 9yo stepson went to the event on 29 May and really enjoyed the robotics. We went past the Concourse on Sun and Mon morning this weekend and as we walked/rode past the library, both times he said “I love the Beaumaris library. It’s really fun”.”

And we’ve also had some unhappy customers, parents complaining that their children run straight to the iPads and won’t look at books. Polite letters explaining the modern public library and the strategy objectives are usually enough.

What next?

We will be receiving six laptops in the next round of computer roll outs and with those we can explore running a code club for kids and some coding sessions for adults. Utilising the free resources from Code Club Australia⁵ we’ll have everything we need.

With a budget of \$2000 the CTS team have developed their strategy for the next 12 months which includes the following activities for *Create Play Learn*

- Plan to rotate equipment between branches (initially Beaumaris and Sandringham)
- Develop partnership with Youth Services to explore developing coordinated publicity
- Develop a traffic light system for usage
 - Green – walk up and use
 - Amber – some staff interaction required
 - Red – staff facilitated only
- Explore allowing customers to purchase mat for paper cutter and use whenever they wish
- Explore loaning raspberry pis and other items for people to take home

⁵ [Code Club Australia](https://codeclubau.org) <https://codeclubau.org>

- Explore open source software on public PCs for additional creative options
- Re-launch public 3D printing requests in January 2017
- Develop partnerships
- Regularly review, test and implement where appropriate new technologies into the *Create Play Learn Space* that will enhance or simplify existing services or offer new ones.

Future Measurement

Statistics are a big thing for libraries, it's how we justify our funding from both state and local government and demonstrate our worth to the community. But, we need to be doing more than just count sessions and participants, we need to be looking at outcome measurements. Using the *ALIA Guidelines, Standards and Outcome Measures for Australian Public Libraries* we will be developing questions to ascertain outcomes for the library and the community.

The outcomes for the library being:

- Library is a creative place where people can collaborate and experiment
- People are aware that the library offers support in technology access and use

And the outcomes for the community:

- Increased confidence in using technology
- High levels of participation in library events
- Learned something new that is helpful

With the questions to be asked to include:

- Are you are motivated to continue and expand your learning?
- Are you are more aware of relevant resources and services provided by the library?

- Do you believe the library encourages and facilitates creativity and innovation?

Conclusion

The modern public library is so much more than books, it's a place for life-long learning and a place to create and play. Building on strategic imperatives from the Federal Government's Innovation and Science agenda, the Victorian Public Libraries' Creative and Community Library scenarios and our own Strategic theme of Technology in Future Bayside library has developed a program of events through *Create Play Learn* that supports learning and developing creative thinking as well as improving digital literacy and showcasing new and emerging technologies for older people.