# **The Things We Know Now**

By Anne Whisken

Learning Landscapes articles by this author have shared a journey followed by school library staff across the world, as we transform our thinking and practices in school libraries to meet changing demands of school communities, while still holding firm to well established understandings about the role played by the school library to develop a love of reading and expert information literacy practices. The articles have covered both digital and hard copy resourcing, with a particular focus on one school's evolution of practices and spaces as a case study representative of that broader community.

At Carey Baptist Grammar School, the Principal and School Board determined to build a new Centre for Learning and Innovation, with a new library at its core, and the author has documented her research to inform the design process. This final article provides opportunity for reflection a year after moving in, about what was asked for and why, how the spaces are being used, what is best and what might be changed. It follows the practice advised by Hilary Hughes's participatory library design, (2015), where we ever ask, 'What now?'.

#### **DESIGN BRIEF**

We based our design descriptions on five years of focused international and national research and continuous in-house action research about the physical space, furniture, shelving and lighting arrangements which produced the best experiences and outcomes of learning with information and learning with fiction.

We explained these physical learning design needs in terms of *Campfires in Cyberspace* (2004): *watering holes* (easily accessed crossing points providing essential information), *campfires* (discrete places for small and large groups to gather for shared learning and knowledge construction), *caves* (small, silent places for reflection and innovative transformative thinking), and *mountain tops* (large areas for celebration of new learning).

Our school principal ensured that we were closely involved in the design process with the architects, and all our design requests were met along with others we had not asked for but which are delivered surprising and productive results.

## **DESIGN RESULTS**

These are the spaces we asked for and this is how we are using them.

# **Ground Floor - Entry Level**

#### **Information Commons**





The Information Commons Librrary entrance and program promotions (left) and the ICT sandpit and entrance.

#### Learning intention

Crucial to modern learning is the expert assistance and guidance of highly trained information, information technology and eLearning/Innovations specialists and a one-stop facility brings these together, with specialists able to cross-reference to each other.

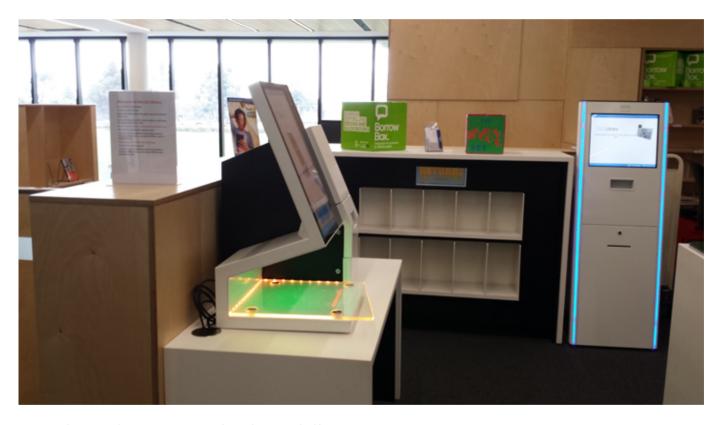
#### **Physical requirements**

Help zones for ICT, Library and eLearning/Innovations and display spaces for boards and screens.

#### How we use them

This fulfils the design brief's 'watering hole' concept. The large concourse at the base of the new building is a central corridor for students in all year levels traversing between the middle school and senior school campuses. It sits adjacent to the senior school 'Quad', a huge covered, light-filled eating and meeting area with the café/canteen on one side and the new buildings wrapped around another two sides.

Three ICT staff members are situated at separate benches in the Information Commons to assist with the constant flow of students and staff needing help with a vast variety of software and hardware problems, as well as supporting the everbusy printing being sent by students. Laptops and calculators can be charged there, and eLearning/Innovations staff are at hand to help with using the school's Learning Management System to create courses, integrate new technologies and manage the constant feedback for learning between teachers, students and parents.



Carey Library Helpzone Loans Kiosk and Smartshelf Returns.

On the other side of the concourse are the Library and eLearning/Innovations makerspace. The makerspace, called the ICT Sandpit, has windows on two sides, providing full visibility to its robotics, Lego, 3D printing and other VERY cool stuff. Constant innovative learning takes place throughout the day with staff and student teams introducing teachers and students from P-12 to new ideas and technologies, and outcomes clearly on view to interested and envious passers-by. This sits at one corner of the library, which itself has two entry doors on either side of the lift that runs the full four floors of the new building as well as down into the lower levels of the library.

The Library Helpzone, just inside one set of entry doors, consists of an island bench accessible from all sides by staff and students, and a Bibliotheca self-loans kiosk and a set of 'smart shelves' – which read the RFID tags of outgoing or returned books placed there by users and link into the Civica library management system to add to or remove them from the borrower's ID. Another two kiosks in the large collection hall also provide for self-loans. Returned items are placed on nearby trolleys ready for taking to the appropriate level for reshelving, and recessed wall shelves hold reserved items. Another purpose of this area is to display all space bookings and library staff rosters for each day. Senior students who

have booked the wildly popular seminar rooms call in to this area to officially 'borrow' the room. One person's ID barcode is matched with the item barcode on a small sign, which they take with them to the room to show all passers-by that someone in the group has taken on responsibility for the room and the activities which take place therein.

### What is best about the Library Helpzone?

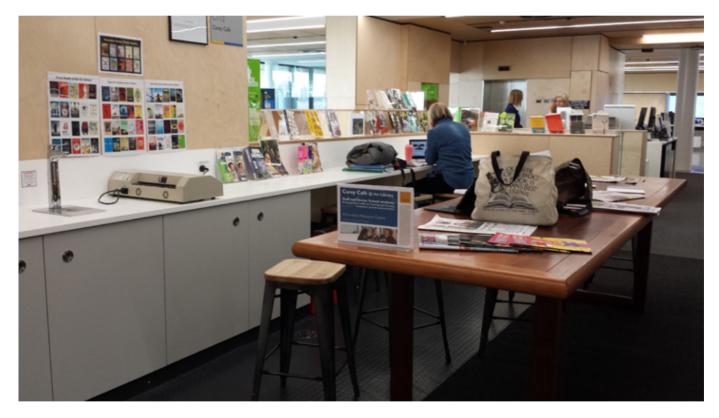
By having loans and printing management removed from the Helpzone, library staff members are no longer 'tied' to a desk, and can engage more meaningfully with users. The 'barrier' concept of older style library desk, where staff members stood on one side and users on the other is removed, and side-by-side conferencing becomes the norm. It is a more 'meet and greet' process, directing and guiding people to the spaces and resources they need for successful learning with information and literature.

### What would you change about the Library Helpzone?

The popularity of the spaces requires a more finely honed booking system, so booking software is being developed and display screens put in place near the Helpzone and outside in the Information Commons to enable better online-booking and to display to all who is booked in where, so that users can move independently to the spaces into which they are booked.

The student population is still to fully embrace the idea of carrying student ID cards to enable self-check loans, so there is still often a queue at the desk asking for help with finding and entering ID numbers for loans. It is a process of education, and is slowly resolving itself – especially once the concept takes hold of just taking a photo of the ID barcode and carrying it on the always-present mobile phone!

## Carey Café



Library Café and Helpzone.

### **Learning intention**

Melbourne is particularly identified by its inner-city pavement café culture and we sought to replicate that with high benches and stools where staff and senior students could enjoy drinks and snacks while they browsed daily papers and current journals and new senior fiction. This also meets the 'watering hole' intention sought.

#### **Physical requirements**

High stools lining long benches along the sides overlooking the Reading Hall and two storey windows to the oval and city views as well as a long central bench.

#### How we use it

It is a vibrant and very important meeting and display space, close to the entry so that eLearning/Innovations staff or library staff can conduct individual or small group training and conferencing; staff members can easily pop in with their lattes from the Café/Canteen to catch up on the latest news; and everyone calls in to check out the latest senior fiction, especially in the lead up to the holidays. Year 12 students sit side by side with staff members to enjoy lunch over spreadout newspapers. Occasionally, special focus displays of library collections and events or student artworks are featured. It is often used as an additional class group break-out space or for senior student group study.

#### What is best?

Its busy-ness tells us how successful it is in calling people into the library spaces and in meeting a variety of different social, teaching and learning needs. The long central bench is made from beautifully crafted repurposed rich-red floor boards from the original drama building which stood on the site, and in addition to looking great, it has the great advantage of not being constantly marked by the newsprint of papers spread across its surface – as any other light surface would be.

The cold/boiling water taps at a side sink enable students and staff members to top up drink bottles or make a quick cuppa.

It is a great food set up area for meetings and conferences after hours – easy access for caterers, boiling and cold water available, and avoids bringing messy food further into the library space.

## What would we change?

Its location in a busy walkway, although tucked to one side, means the area can become congested, but that is all part of the pavement café appeal.

## Research Rooms x 2 with adjacent break-out spaces.





Carey Library Balcony breakout benches and displays (left) and the Research Room – teachers love it for meetings too!

#### **Learning Intention**

Core to our information literacy program are spaces where students have the experience of expert guidance to and use of the books and digital resources specific to each research task. These fit into the design idea of 'Campfires' for group learning.

### **Physical Requirements**

Must have doors, sound-proofing, screens, large tables with chairs, and wall shelving so students are surrounded by non-fiction books. Balcony break-out spaces to provide a combination of high benches with ten stools, and two-person tables and chairs.

#### How we use them

These two rooms on the ground floor entry level of the library have adjacent 'break out' spaces on balconies overlooking the larger double height library collection hall. They are keenly booked by classes at all levels for research and often because the teachers just like the spaces as providing an atmosphere different to their other classrooms. When not used for classes they are taken over by senior students on study periods, at lunchtime and in the evenings, as they like the larger tables and chairs for group work, and the fact that they can close the doors and be sound-proofed – especially

when the middle school chess fanatics take over the break-out spaces at lunchtime. History teachers enjoy having the modern history collection shelved around the walls.

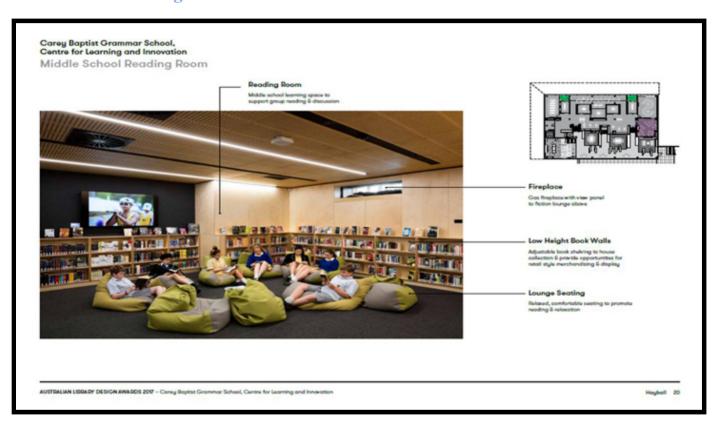
#### What is best?

A huge factor for all teachers and students is being able to close off the rooms from the rest of the library for discrete noise zones – often teachers want to play video and sound clips as part of the learning, or there might be some loud discussion at a breakout bench which should not intrude on the learning of those in the research rooms, or vice versa. We in the library have limited opportunities to present about research techniques and sources, so any limitation imposed by adjacent noise is an information learning experience lost.

#### What would we change?

Whiteboards were not part of our brief, and that is now being rectified as both teachers and students see them as essential for joint construction of knowledge.

## **Middle School Lounge**



The Middle School Reading room.

#### Learning intention

With the Middle School physically located some distance from the library, we wanted a space immediately at the front door where they might feel a sense of ownership and engagement and thus make the extra effort to walk the distance. We wanted the students to socialise with purpose – games, reading and laptop games.

#### **Physical requirements**

Comfortable seating immediately inside the library doors – but not the low backless divans favoured in many places, as our research indicated it produced behaviours and postures counterproductive to our intentions. We knew we needed tables and seating with backs for games and laptops – postural ergonomics for young growing bodies.

#### How we use it

Round tables and pale-green upholstered tub chairs were installed. Our use of this area is entirely different to our intentions! The space was immediately taken over to become like a hotel lobby – a meeting place where it was easy to see someone waiting, and an ideal space for language tutors to meet their students. The Middle School students weren't attracted – the group spaces were too small and too visible, and whereas in our old library we did have a significant

Middle School presence, it was not the case in the new library until we provided the low bench seats in the Reading Hall with long tables, as described below.

#### What is best?

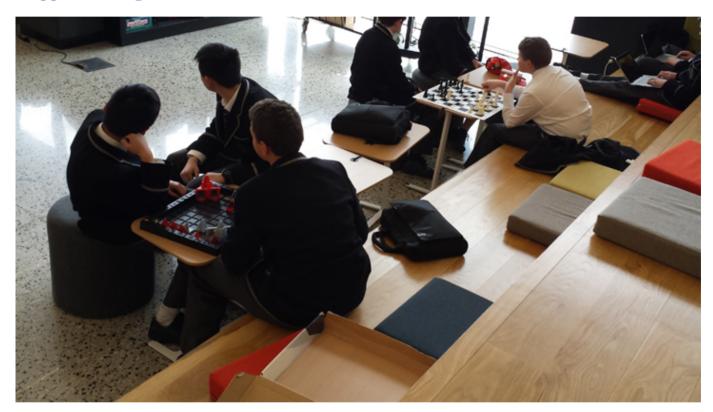
It provides well for purposes for which we had not really planned – focused, small meetings of two or three people who largely do not use the library collections, but need supervised heated/cooled reasonably quiet spaces with tables and comfortable chairs close to the major traffic route of the school. The idea of 'Watering Hole' found expression in this space also.

#### What would we change?

The changes required were made soon after we occupied the space – that is, creating other spaces to provide for the needs of Middle School students.

## **Lower Ground Floor**

## **Stepped Seating**



Carey Library stepped seaing at lunchtime.

#### Learning intention

The idea of a 'Mountain Top' space for larger group sharing and celebration of learning.

### **Physical requirements**

An open easily accessible space to accommodate more than one class if needed, with a large digital display screen.

#### How we use it

A set of large light coloured wooden steps was built to lead down to the Reading Hall from the Lounge Lobby area, with scatter cushions, and a large mobile screen at the base. It is used as intended for whole class instruction followed by individual and group research around the library with results brought back for sharing. House meetings take place there, as well as conferences after hours or at weekends.

#### What is best?

It takes up little space for what it provides, and is a visually attractive entry to the lower Reading Hall with its two storey windows overlooking the oval and treed eastern city suburbs.

#### What would we change?

We cannot change the fact that any audio played through the digital screen impacts on teaching and learning throughout the library, so we must restrict use of the area to being visual display only when the screen is used. Classes which had been timetabled into the space particularly to use it for AV learning prompts at the start of an activity needed to be timetabled elsewhere. But interestingly, there has lately been a significant increase in usage by senior classes, who have requested their teachers book in there because they like the variety of stepped seating and low backed benches with long tables along the side of the huge windows. They like both the natural light and the more spread-out nature of the seating and tables.

## **Reading Hall and Fireside Lounge**



The Reading Hall and OPAC (left), the Reading Hall Loans Kiosk (centre) and the Reading Hall long tables needed for group work with drinks, laptops, calculators, note, phones etc!

#### Learning intention

Teaching and learning surrounded by books for experiences of using information and literature to learn. These are the 'Campfires' of our design ideation.

#### **Physical requirements**

Reading and study 'rooms' created within a large hall by arranging book collections on shelved walls partially enclosing groups of tables and chairs

#### How we use it

The area consists of a large hall two storeys high with full length windows facing an oval and overlooking the leafy eastern suburbs. It combines various groupings of tables and chairs, low backed benches facing each other, and two lounges in an area where a double-sided fireplace opens to the reading hall, with glass backing facing the lower wide reading room.

In the first six months of use, several changes were made. Slim tables were placed between the low-backed benches resulting in an instant increase in Middle School students who started using the board games, playing chess, and sharing their enjoyment of a variety of games on their laptops. They pile in, 12 or more to a group, and have a lot of fun at break times. At other times, the senior students on study periods work either individually or in groups – they like being able to

spread things out across the long tables. Some spend periods of time gazing at the scenery outside: is it because it enables a particular type of thinking or are they ensuring their eyes are getting focal length variety? Another change was to bring in more long tables for groups of up to eight, in response to requests from senior students, as they like the natural light settings. Increasingly, these areas are also being booked by teachers after requests from their students who like the work environment and different conformations of furniture. Being in spaces surrounded mostly by book walls is also another factor mentioned by some in their reasons for choosing that as a work space.





Reading Hall bench shelf book promotion (left) and book walls.

The fireside lounges are constantly occupied, often by study or friendship groups. Sometimes it is to just sit quietly and read or study, other times it is to work as a group. At lunchtimes, like all other areas across the Reading Hall, it is quite raucous with high spirited banter and games.

'Genrefying' the fiction and 'collectionising' the non-fiction was done for very particular, well-researched reasons, chiefly associated with the way we wanted this new space to work. We wanted to fit in with our school's intention for students to become independent, motivated learners. The collection re-arrangement has the intention of enabling students to browse independently across categories which we determined best support and reflect the learning taking place at our school. Consequently, the genres chosen for fiction are those which are most read and sought by our users. Any non-fiction re-arrangement follows the way the curriculum is designed and taught. So, for example, material related to the Middle Ages is collected together, bringing weapons, medicine, architecture, dress, etc., from other DDC numbers together with the classifications for Middle Ages in Europe, and including in that collection those related to Middle Ages in other areas of the world. All items retain their DDC numbers – but they sit together in that order, with a yellow stripe on their spines for ease of shelving. There are several other collections, mostly in the history area, while for the most part the rest of the non-fiction retains its traditional order.

The catalogue brings all the titles together into their collections or genres. This is especially useful for those titles which might easily sit in several fiction genres. We accommodate that by putting one title in each of the genres where they might sit and of course all locations are listed under the title in the catalogue, so if you can't find it in one place, check the catalogue for other possible locations.

The collections are distributed across all three levels of the library, in those locations where we think they are best accessed. For this reason, the non-fiction does not follow a strictly DDC line: the 000 – 199 sit on the lower level, along with 700 – 899, and the 400's. Why? We find they are used least, and when they are, it is by single users, so the more remote location is best for them. 900's sit across the top level near the research rooms to accommodate best the heavy class usage by history subjects. Our three sets of World Book encyclopedias are also located near the research rooms, as they are still constantly used. We use trolleys to bring the 200's or 600's into the research rooms when those classes book in, or else reserve the Reading Hall for them so they can access them immediately on the shelves.

The fiction genre collections are spread across two levels – in the Wide Reading Rooms and in the Reading Hall. There have been several re-arrangements to try to come up with the best ones for the readers to access and browse, and that will likely continue. However, it is a very successful teaching and learning arrangement. We expect our students to read across genres to taste and try different styles which they might otherwise ignore, and our arrangements enable them to easily browse and select. As a Wide Reading teacher, I can easily take groups to different areas, do a quick book talk then leave them to browse while I move on to another group and another genre.

### What is best?

The sheer variety of activities which exist easily alongside each other during study and class periods and at break times is amazing. No attempt is made to control noise during break times, if everyone is seated and being respectful of

surroundings and each other. During class and study periods, there is little need for noise control as the groups are gainfully focused on the learning purposes, and such noise as there is consists mostly of group conversations.

The natural southerly light streaming in is magnificent, and the fireside lounge on a cold winter's morning gives a sense of cosiness far beyond the heat it throws out.

Despite initial misgivings, the fixed bench seating saves a huge amount of time in the tidying process at the end of each period, and the low shelf backs of each provide good book display.

The three-metre-high book walls give the space the feeling of a glorious bookstore, and the upper levels are proving wonderful for storage of duplicates and poster displays.

What would we change?

We have already made the changes we wanted: chiefly to enable more people to use the space by providing tables between each set of facing benches, and more long tables with chairs.

## **Base Level**

It is worth noting that mobile phones networks do not reach into this deeper level of the library, a fact much appreciated by senior students, many of whom choose this lower level to study for that very reason: no interruptions.

## Quiet two-person study zone

### Learning intention

Previous research had shown that many students like to study at tables on their own or with another, in an area which while quiet, is not restricted by being in a line of carrels and is free of distractions. This fits into the 'caves' idea of our design.

#### **Physical requirements**

Six or more square tables, each with two chairs, in a quiet zone

#### How we use it

It is a popular choice by students on study periods, and they are happy to follow the one or two-person rule.

#### What is best?

Provision of the variety of spaces to enable self-selection by students of the physical spaces and furniture which best suit their learning need

#### What would we change?

Nothing, except perhaps more such spaces.

#### **Seminar Rooms**

### Learning intention

Our research in the previous library found constant requests from senior students for sound-proofed group work spaces so they could work together to learn the subject content required by their courses. These are the 'Campfires' of our design ideation.

#### **Physical requirements**

Five or more sound-proofed seminar rooms with a large table and six or eight chairs

#### How we use it

We have five rooms, and require a rigorous system of bookings and loans, such is the demand, as described above.

#### What is best?

Excellent sound-proofing means little to no noise escapes, glass on two sides means observation is easy, and our loans system means that one person takes responsibility for proper use of the room. Students understand what is expected and little direct supervision is required.

### What would we change?

The changes required have already been made: a booking and loans system to ensure fairness and responsibility of use; and installation of large digital wall screens and whiteboards to enable the group to build mind maps and share and discuss resources and notes.

For preference, such rooms in future would have self-locking and swipe card access, with remote systems to enable unmediated booking, loans and access.

## **Silent Study Hall**

### **Learning intention**

Core to our intention is provision of 'caves' for the individual, reflective learning which drives transformation and innovation.

#### **Physical requirements**

About 25 or 30 study carrels in a space that is as silent as possible, with little to no interruption.

#### How we use it

27 high-sided carrels were installed in a long thin study hall with natural light provided from north-facing windows two storeys above. These operate entirely independently, with the understanding that use must be silent.

These spaces cannot be booked, and they are at least half-full most sessions, often entirely so. Students will often study in sessions several hours long.

#### What is best?

Its usage clearly meets a significant need of students: discrete, quiet and silent study spaces with minimal interruptions. Despite initial fears about how difficult it would be to supervise, in fact it requires least supervision.

#### What would we change?

The only thing to change would be to have more power points.

## Wide Reading Rooms x 2.



Wide Reading Room.

#### **Learning Intention**

Core to our Wide Reading program are spaces to provide for experiences of sustained silent immersion in reading across a broad range of genres They fit into both the 'caves' and 'campfire' categories of our design idea.

### **Physical Requirements**

Must have doors, sound-proofing, screens, low seating and wall shelving so students are surrounded by fiction

#### How we use them

These two rooms are in the base of the library, in the quiet zone adjacent to two-person study tables, sound-proofed senior seminar rooms and the silent study hall. They are reading lounges in the best tradition: low, comfortable seating in bright coloured lounge chairs and bean-bags, surrounded by genrefied fiction arrangements and posters about 'awesome' reads and ten most-read titles in each genre. Each has a large digital wall screen for book promotions. English classes in years 7-10 are timetabled into the rooms each fortnight, and they are also used by classes needing reflective spaces and students wanting quiet areas for break time reading and study.

#### What is best?

The quiet of these rooms, with lack of visual and noise distractions enables us to give the students the experience of about 40 minutes of uninterrupted silent reading, and their look and feel invites the behaviours we seek.

#### What would we change?

There is little we would change except for the predictable problem associated with bean bags – even with the structured style we chose, they are noisy and untidy and already need topping up as the beans have flattened. However, they are worthwhile for the way they bring a 'wow' and 'cool' impact for all students, from little ones visiting to Year 12s looking for a quiet nap.

## Conclusion

Several key points emerge in reflection about 'The things I now know' about school library design. The first is rigorous research about theories of learning which apply to this situation, followed by research about how those theories are being interpreted and applied, then investigation via action research about what physical space, furniture and shelving arrangements best suit the learning that takes place in my own school learning community.

The second is to find the best way to bring that research into the design process with all interested parties – and that often means rewriting it in terms that best suit the intended audience, and it also means sometimes giving up on viewpoints and finding a path to acceptance and incorporation of some rather than all the preferred points. But even in that, if there is solid research on which to rely, then the design participant can speak up with confidence and if the submission does not gain ground, at least it has been presented for consideration and it will give evidence of a proper process being followed.

The third is to have confidence in the amazing professionalism of good architects who can provide vision, take on the needs of clients, and deliver highly functional spaces which also inspire innovation and creativity.

At Carey Baptist Grammar School, we have those library spaces, and they are delivering far more positive learning and relationship results than originally imagined. We believe we are providing the best possible experiences of learning with information and fiction as our students become independent, motivated learners.

## References

Hughes, H. (2015) 'Participatory Library Designing', FYI, 19 (2), pp. 4-6, 13.

Thornburg, D (2004) 'Campfires in Cyberspace: Primordial metaphors for Learning in the 21st Century', *International Journal of Instructional Technology and Distance Learning*, 1 (10), Accessed 2 April 2014: http://69.36.77.223/Journal/Oct\_04/Oct\_04.pdf#page=7

# **Previous Learning Landscape articles**

Whisken, A. (2011) 'A Journey to iCentre Thinking', *Synergy*, 9 (2), Accessed 10 April 2012: http://www.slav.vic.edu.au/synergy/volume-9-number-2-2011/perspectives-local-/172-a-journey-to-icentre-thinking.html.

Whisken, A. (2012a) 'iCentre's Virtual Dimension – One School Library's Use of Digital Spaces', *Synergy*, 10 (1), Accessed 10 April 2014: http://www.slav.vic.edu.au/synergy/volume-10-number-1-2012/learning-landscapes/230-icentre-s-virtual-dimension-one-school-librarys-use-of-digital-spaces-.html.

Whisken, A. (2012b) 'Learning Landscapes: One School Library's Initial Design Brief', *Synergy*, 10 (2), Accessed 10 March 2013: http://www.slav.schools.net.au/synergy/vol10num2/vol10num2.htm.

Whisken, A. (2013a) 'Learning Landscapes: Data Gathering to Inform', *Synergy*, 11 (1), Accessed 1 April 2014: http://www.slav.vic.edu.au/synergy/volume-11-number-1-2013/learning-landscapes/288-library-learning-spaces-data-gathering-to-inform.html.

Whisken, A. (2013b) 'Library Practice and Information Commons Understandings', *Synergy*, 11 (2), Accessed 3 April 2014: http://www.slav.vic.edu.au/synergy/volume-11-number-2-2013/learning-landscapes/332-library-practice-and-information-commons-understandings.html.

Whisken, A. (2014a) 'Learning Landscapes: Teacher-librarians in the Design Process', *Synergy*, 12 (1), Accessed 4 March 2015: http://www.slav.vic.edu.au/synergy/volume-12-number-1-2014/learning-landscapes.html.

Whisken, A. (2014b) 'Learning Landscapes: Dewey, Retailing and Library Learning Spaces', *Synergy*, 12 (2), Accessed 4 March 2015: http://www.slav.vic.edu.au/synergy/volume-12-number-2-2014/learning-landscapes.html.

Whisken, A. (2015a) 'Learning Landscapes: Library collections as learning experiences', *Synergy*, 13 (1), Accessed 14 April 2016: http://www.slav.vic.edu.au/synergy/volume-13-number-1-2015/learning-landscapes.html.

Whisken, A. (2015b) 'Learning Landscapes: Students at the centre of learning – a library design panel', *Synergy*, 13 (2), Accessed 14 April 2016: http://www.slav.vic.edu.au/synergy/volume-13-number-2-2015/learning-landscapes.html.

Whisken, A. (2016a) 'Learning Landscapes: Successful Library Design Attitudes', *Synergy*, 14 (1), Accessed 5 Sept 2016: http://www.slav.vic.edu.au/synergy/volume-14-number-1-2016.html.

Whisken, A. (2016b) 'Learning Landscapes: Library Learning Intentions and Descriptors for Ongoing Action Research, *Synergy*, 14 (2), Accessed 15 April 2017: https://www.slav.vic.edu.au/synergy/volume-14-number-2-2016.html.

Whisken, A. (2017) 'Learning Landscapes: Design Thinking for Ongoing Library Transformation, *Synergy*, 15 (1), Accessed 15 June 2017: https://www.slav.vic.edu.au/synergy/volume-15-number-1-2017.html.

**Anne Whisken** has been a teacher and teacher-librarian for over 30 years, leading major secondary school libraries in Victoria and Queensland. Anne is a PhD student at Charles Sturt University. She chose action research to investigate ways to work with teachers to model and develop student learning of skills and dispositions for 21st century information literacy. At her current school, Anne has been involved in the design of a new library, part of the recently completed Centre for Learning and Innovation at Carey Baptist Grammar School. Her Learning Landscapes articles provide a six-year case study of the way school libraries can transform their spaces, collections and service models to meet the needs of school learning communities in evolving information and education environments.