iCentre's Virtual Dimension – One School Library's Use of Digital Spaces

By Anne Whisken

The Learning Landscapes section of *Synergy* was started by Camilla Elliott as a series of excellent articles in *Synergy* about emerging trends in the learning environments within which school libraries operate. This article looks at a particular aspect of learning landscapes: digital spaces - those places in a school's learning and information architecture where library teams work with teachers to provide engaging, relevant, guided navigation to the best resources for learning. It is a report of practice in one school, Carey Baptist Grammar School, where the library has used available digital spaces to incorporate good information use into the context of daily learning experiences. The iCentre concept (Hay, 2012), of a centralised focal point for learning with evolving technologies and resources, is examined here in its virtual sense. The spaces available to this library will be different to those at other schools – the teacher-librarian's particular skill and challenge is to find the best solution for the people in each learning community. Added to that is the expertise to undertake collection development of the digital resources for those spaces – and an understanding that those collections in themselves are not as we used to know them.

... digital spaces - those places in a school's learning and information architecture where library teams work with teachers to provide engaging, relevant, guided navigation to the best resources for learning. Every school has different learning architecture, although there are likely to be common elements: a central database for official data and reporting, a portal intranet and/or a learning management system or virtual learning environment, timetabling software, library system, digital video

storage, etc. Some schools have a tightly controlled brochure-style web-page, while others have a more open approach. How can teacher-librarians use those spaces to have a powerful input to use of information for learning? Teacher-librarians need to find ways and spaces in these digital learning landscapes to create a vibrant presence. If they are not available or suitable, then external spaces become an option – although many library teams use both. By becoming adept and skilled in a school's eLearning technologies, the teacher-librarian with the library team can bring important pedagogies and expertise to collaboration with teachers. The teacher-librarian becomes a valuable resource in a broader pedagogical sense.

Often schools opt to go with open source solutions for their learning architecture, or to make use of the many Web 2.0 applications that provide for exciting interactive experiences. At Carey Baptist Grammar School, although staff use many Web 2.0 options, and enthusiastically explore

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emerging learning technologies using a wide range of portable learning devices, the preferred choice at this stage is for formal learning to be provided via the school's own learning architecture. Accordingly, the Carey library teams at the two junior campus libraries and one 7-12 library sought to find spaces for good information use practice within the internal learning architecture. The three libraries operate independently, but work effectively at several levels to ensure cohesiveness, and this was particularly the case when the teams moved from three independently operating library catalogues to a new combined system. Similarly, in the development of eBook collections, the libraries co-operate to ensure maximum return from investment.

At the 7-12 campus, Mellor Library's plan for a virtual learning presence for 2012-2015 sees it centred within the whole school information architecture, the virtual dimension of the iCentre concept (Hay, 2012; Whisken, 2011a) providing:

- a centralised locator for information resources used in teaching and learning
- an integration into main online learning spaces to bring users easily from and to other learning spaces and main portal

It sits alongside and works with the whole school knowledge management indexing and search capacity:

- utilising the school's mobile learning technology to enhance student ownership and management of learning, and
- consisting of a dynamic interplay between a library management system, portal space, digital assets including eBooks and subscription databases and learning management system and links to external ' cloud' cooperative learning spaces.

Learning landscapes are, of course, more than the physical and virtual spaces in which the learning takes place. There are whole sets of ever changing and evolving behaviours and skills required by the teachers, students and library teams in those spaces – many of them driven as much by ICT memes as by curriculum direction. School Library Association of Victoria's March 2012 Conference asked how we in school libraries might act, think and behave differently to cater for them (E-literacy: Think differently, act differently, learn differently conference 2012). Dr Ross Todd from the Center for International Scholarship in School Libraries at Rutgers University presented research findings indicating trends to look for when charting the future of school libraries and learning. Key amongst those are:

- Educational preparedness of young people for living and working
- Transformation of information provision and access: digital devices/mobile technology
- Changing arena of content publishing/delivery: apps-driven content delivery; questions centering on content production, purchase, distribution and usage rights;
- Changing culture of reading/literacy in digital environments
- New technology frontiers for learning: virtual learning worlds, online schooling, virtual gaming
- Creative pedagogies centering on information-based inquiry and development of intellectual engagement and intellectual rigor in learning
- National Curriculum
- The ongoing closure of school libraries: questions of future, function, format, facilities, funding (Todd, 2012).

He said that the young people in Gen Next are and will be a digital youth, and asked how can we provide an information and learning future for them that is better than today? What do we want for these kids?

This poses a serious and important challenge for educators and those whose specialisation is information. It calls for provision of transliteracies, involving full engagement with all the media in the production of knowledge, with a stress on intellectual engagement, intellectual agency and engagement with media in all its forms (Todd, 2012).

What is the role of the teacher-librarian and the library in this learning future? How is our role viewed by our teacher peers?

Dr Todd pointed to research (*The 2010 CISSL New Jersey School Library Survey & Report,* 2012) which revealed that principals and teachers in those schools valued the competencies which teacher-librarians bring to a school. The stress was on how the teacher-librarian worked with teachers in collaborative teams to bring specialist expertise and knowledge to curriculum to improve student learning outcomes.

Todd says this provides a strong basis upon which to build our futures: we are valued for our inquirybased pedagogy and leadership in new technologies, and accordingly we must ensure that the school library is a pedagogical centre making a significant contribution to the development of intellectual quality and contributing to the pedagogy of the school.

How and where does the teacher-librarian provide a digital learning space that is valued by teachers and students? Is it to be a particular space, or is it rather a presence across the learning architecture (Elliott, 2010)? What are the digital resource collections we should provide? How are teacherlibrarians to position themselves as specialists in a new area of teaching: a pedagogy of information literacy that provides for expert and ethical information use in digital as well as traditional learning landscapes?

... we must ensure that the school library is a pedagogical centre making a significant contribution to the development of intellectual quality and contributing to the pedagogy of the school. This last question about preparation for 21st century learning capabilities is a key element in the author's PhD research through Charles Sturt University. In a yearlong action research project with 25 teachers (Whisken, 2011b), it investigated a way that teachers might examine their

practice to ensure that students are learning expert and ethical information practices as they use information in the context of subject learning. This is based on Christine Bruce's *Informed Learning* (Bruce, 2010) which proposes pedagogy of information literacy in which information specialists work with educators to provide a series of concept templates (Six Frames) of information literacy capabilities through which to view discipline course design – an epistemology of information literacy? Further, it suggests that the course designers then look at student experiences of learning in that subject discipline and ask whether there will be repeated variations of specific expert and ethical information use (Seven Faces) – if you like, an ontology of information literacy.

For the author, it provides a crucial question to ask as each new eLearning technology or resource or application emerges: what learning is taking place as this information is accessed, selected, used and created? What is the information literacy intention in this learning design? What is the information literacy experience to be? It is a view that the responsibility for information literacy teaching is not the sole preserve of teacher-librarians – and is a significant step away from a longheld, self-perceived (and some might say self-defeating) 'ownership' by many in the profession in the past. Along with the calls from our key Australian school library leaders and professional bodies (Bonanno, 2012; Elliott, 2011a) it has provided a powerful vehicle for this author to move away from old ways of thinking.

Jason Clarke (2011) also says we should think innovatively if we are to develop the best future outcomes for our libraries in new learning landscapes. We must be prepared to leave behind the ways we have always done things and take on ways we have never done things before. He asks,

'Are you keeping a microchip out of a job? If you are, perhaps you should be replaced!' (Clarke, 2011). Think:

- What do you have and what can you do, that no-one else can do?
- What is the thing that library teams can do that others cannot?
- How can we be intermediaries in the new environment?

It means that the Mellor Library team needs to ask itself:

- How does our work add to teaching and learning 21st century skills at Carey?
- Where are we the intermediaries?
- What spaces are available to us?
- How do we work in those spaces?
- What professional development do we need to undertake? (Elliott, 2010a).

In the digital spaces of our learning landscapes, what can we do that a microchip can't do? At Carey, the library team installs, develops and manages:

- a Library Management System with interactive interface for one search location to bring together all resources including eBooks and loan platforms for DRM
- visual social platforms: VLE library spaces for resource and reading interaction blogs, discussions, journals, chat, wikis

Team members

- work with curriculum teams to incorporate book and digital resource collections and provide VLE course design support
- undertake curation using VLE space, focus collections and QR codes
- investigate use of library apps for learning

As Dr Ross Todd indicates, the specialist pedagogies brought by teacher-librarians to teaching teams and professional development within the school are valued by principals and schools. At Carey, the

The library team helps develop a learning environment that is open, blended, ubiquitous and 'flipped' . . .

Head of Library works on key committees to develop curriculum and information policy and procedure and is also an eTeacher Advisor for ClassE, helping teachers build courses, find and link resources, and work as part of teaching teams to develop courses within the learning management system. The library staff are active contributors to the English department's ReadMe Ning, design and deliver online Study Skills lessons and undertake online unit planning and teaching with teachers. The library team helps develop a learning environment that is open, blended, ubiquitous and 'flipped' using:

- centralised federated search software (catalogue) for online resources indexed with good meta-data and results delivered in a faceted navigation format
- · information resource links, information skills embedded into online courses
- information literacy skills criteria embedded into assessment criteria rubrics

Views of what great library digital spaces can look like are fortunately many, with Joyce Valenza's (2012) spaces a leading overseas embodiment of applied theory, and locally – well, it is dangerous to list, but Toorak College (Toorak College Libguides, 2012), Melbourne High School (2012) and Scotch College (2012) are generous with their open sharing of library spaces.

Digital Spaces at Carey: A Tour

What are the digital spaces Mellor Library can use in Carey's Learning Architecture?

Carey Baptist Grammar School Website

The website is the School's public face, providing amongst other things a very detailed overview of the curricula offerings via Pathways. The library has a small brochure space, but use is made of the news area to promote and celebrate library events such as the Carey Celebrates Literature Festival in May. A link from here takes the user to CareyLink.

CareyLink

SharePoint software has been used to tailor a specialised solution for this key Carey community password entry portal, where links are made to all the essential operational information for students, teachers and parents.

The library wanted a key presence in this space, so a prominently positioned link called 'Find a Library Resource' gives instant access to searching for learning resources in the Spydus Library Management System.

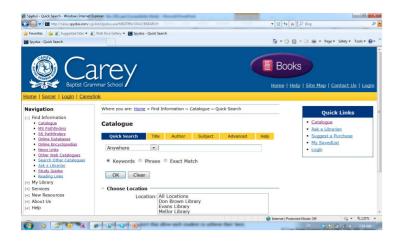


Carey Baptist Grammar School intranet portal CareyLink)

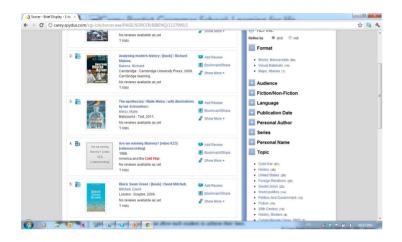
Spydus

Civica's Spydus Library Management System is an interactive interface for one search location for all resources including eBooks and Databases. It provides an obvious central search box for all paper and digital resources, and a side menu to pages containing links to subject-grouped eBooks, databases, online encyclopaedias, news links, study guides, other library catalogues. Its discovery layer, Sorcer, gives the user a more webpage experience with a faceted navigation view of search results to enable an easy narrowing to the most relevant resources.

The menu also links to even more detailed material sitting in the library space on the school's Blackboard Learning Management system called ClassE.



Spydus catalogue home page



Sorcer faceted navigation discovery layer

ClassE

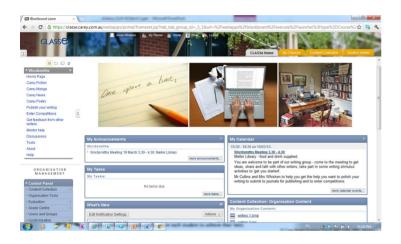
Blackboard software is used for the school's Virtual Learning Environment (VLE) or Learning Management System (LMS) badged as ClassE at Carey. Its powerful software (recently Blackboard has brought Moodle under its wing so it can extend into the open source arena) gives ease-of-use course and community spaces as well as an excellent content management system for the huge file storage required by a school. It is easy to set up a very visual and attractive library space for resource lists and links, and to make links to and from courses.

ClassE's collaborative tools enable large or small group publishing spaces with synchronous and asynchronous communication: discussion forum, journal, blog, chat, wiki, lecture hall, etc. Linked into the school's key data software, Synergetic, it is easy to draw in users for particular group purposes. For example, special purpose groups can be set up for writing and reading clubs, chess, competitions etc., and each group will have its own collaborative tools for in-group communication, including email.

Mellor Library space within ClassE is called Learning Resources, and everyone in the School is a member so that when announcements are posted, all people see them any time they click the link from CareyLink to their ClassE landing page which lists their course links as well as Learning Resources. An announcement can link to more detailed information contained in other areas of the site, such as Reading, Competitions or Displays.



ClassE Learning Resources Homepage



ClassE Wordsmiths Page

Digital Collections

Clickview

As both ClassE (Blackboard), Spydus and Clickview are web-based products; links can also be made to and from Clickview digital video library, as well as items being catalogued in Spydus and thereby searchable.

How can we 'upsize that?' i.e., what can we add as information pedagogues? As the expert information intermediaries? What can we do to go beyond the computer chip?

We can work with teachers to find the best Clickview items, show them how to incorporate a link within their ClassE course site at the particular point of learning (or do it for them).

eBooks and Databases

Carey libraries at this stage have developed non-fiction eBook and database collections (Whisken, 2011c), but not fiction eBooks or a collection of eReaders, as explained below.

Non-fiction eBooks

For selection of non-fiction eBook resources, reliance was placed particularly on advice from Campion, Warner Books, Booklegger, Gale, Wheeler Books and INT Books. Australian content was found to be limited and other material developed mostly for the US market. In that, much was tertiary or senior secondary level. From there a distinction was made between the single title eBook

offerings, which were mostly PDF versions of paper print publications, and subscription subject databases.

A number of non-fiction PDF eBooks in particular areas were chosen from InfoBase and Gale – chiefly history, modern global issues, science, physical and health education, as that complemented and expanded the library's paper print collection. Now it is possible for Mellor Library to actually loan out books on those topics without running short of good quality materials for the students to consult – they can go online to the eBooks. Previously, when a whole year level was studying a topic, loans of books were not possible as there were not enough to stretch across eight classes.

Care was taken to check the original publication date of the book from which the eBook PDF was generated – it would be easy to think that because it is an eBook that it is a recent publication.

Are the eBook PDF formats attractive and engaging? Often not when the original is mostly text, but there are a lot of positive features added to the format: the text is searchable, there are tabs for chapters, side buttons enable printing, mark-ups, citations, etc. If it is offered via a platform, and most of these are, then a user can create an account and save notes into a workspace. Additionally, it does provide students with good quality material to add to or counter the often shallow information available on the Internet.



Spydus eBooks page

Databases

Despite an initial preference for single title eBooks, which could be bought and 'owned' by the school (old thinking?), the subscription databases on the supplier platforms at Gale and InfoBase were found to be far more engaging and regularly updated, as opposed to the print-heavy, not-updated eBook PDFs.

The change of thinking required there is to become subscription-focused, and that means having the funds each year to pay for that – perhaps OK in an environment of funding continuity, but many school libraries face uncertain times and cannot be sure year to year that they will have those funds. There might be a preference to buy and 'own' the paper print or eBook PDF when the funds are available so that at least in a funding deficit year there is still some material available via the library for the students.

An additional consideration in both the eBook purchases and database subscriptions was whether they were whole-site licence or restricted access. Over 90% of those chosen are whole-site licence,

and those which are not have been purchased on a 'five-user at a time' basis, expandable at any time if popularity indicates a need. The platform manages access.

The Demand-driven Acquisition option offered by Electric Book Library was also considered. It is particularly well-suited to large academic libraries. In that situation, the patron sees the whole title offering on the platform, whether or not the titles have been purchased by the library. When a patron wants a book, she selects it for download loan. If the book is not owned by the library, two things can happen: the book cost is immediately debited from a pre-determined budget area with a particular limit and the item delivered for download; or a request is sent via an acquisitions officer who reviews and approves the purchase or not. If the licence is whole site, then the book is purchased once only. If the licence is one/limited use at a time, and this is the second patron wanting the title, then permissions might be given for another title to be bought, or the reservations facility kicks in.

It was decided that as Carey was still taking eBooks baby steps, the EBL offering would be considered at a later stage. Additionally, much of the material was tertiary level.

INT Books were instrumental in supplying suitable eBook PDFs for the primary and middle school students – and from suppliers of a generous mind when it comes to whole-site access.

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Spydus Databases page

How can we 'upsize' our eBook collection? What can the library team add as information pedagogues? As the expert information intermediaries? What can we do to go beyond the computer chip?

We can work with the teachers to 'grab' the URL of particular chapters or pages in eBooks or databases and paste that into the relevant ClassE course site (or library pathfinder) at the point of learning. For a teacher wanting to provide a 'flipped classroom' experience for prior or after class learning, this gives opportunity for embedding links to quality reading. We can ensure that each title is catalogued well in our library management system, with good indexing and tagging so that a search by a teacher or student brings rich results in terms of paper-based books and digital video and print resources and engaging subscription platforms.

Fiction eBooks and eReaders

As the eBooks and eReaders market developed over the past few years, Carey Libraries decided not to go down the track of buying in eReading devices. The students in both primary and secondary schools are increasingly owners of multiple mobile devices able to support eBook reading, and to buy into a particular reader format was not seen as an effective use of funds. Further, any eBook

collection must contain titles or material which could be read on any device – not locked into a particular model. Accordingly, the non-fiction eBook and databases collection can be accessed and read on any device.

... any eBook collection must contain titles or material which could be read on any device – not locked into a particular model.

Carey has yet to develop a fiction eBook collection, as many of the titles have strict Digital Rights Management (DRM) issues when third party rights becomes involved in library loans of single user items. Similarly,

many titles are still locked into being read on particular devices, such as Kindle, which does not accord with a policy of a collection which has readability **across** multiple **devices**.

DRM

It is hoped that the Blis digital assets management software developed by Civica to supplement Spydus catalogue and its Sorcer faceted navigation discovery layer will provide the capacity to manage those rights. That, however, depends upon the willingness of suppliers to 'trust' their product to an intermediary to do the DRM for them. It is a an issue across the world at present with companies moving across management platforms or trying to set up their own – often with a significant price tag attached.

Currently Carey is investigating companies which provide intermediary DRM management platforms as we wait to see what Civica will provide. Such a company would usually charge a fee for using its platform, plus the cost of each individual title which must be accessed via the platform each time. Often a per loan/download charge is made in addition to 'purchase' of the title or perhaps built into the overall annual platform subscription cost.

A possible difficulty is that if you cease to pay the annual subscription to the management platform, then you lose access to the title which you have purchased! In other cases, the company producing the product – an eBook or a digital audio book for example – might set up its own platform to provide the product and manage the DRM for loans, charging a platform management fee as well as the cost for each individual title and a cost each time it is loaned/downloaded. Again there is the problem of being able to afford both the management platform annual fee as well as afford to buy the titles and the small fee per loan/download.

A school library might well be faced with having to access many different DRM management platforms to access the eBooks which are locked into being provided by that particular platform. And each will charge annual management subscriptions. Even for well-funded libraries, such as Carey, the costs become prohibitive – and heaven help the many small schools, or poorly-funded school libraries.

Seamlessness in digital spaces

Spydus and ClassE and Clickview and the non-fiction eBooks and Databases are used interchangeably, and users would be mostly unaware of which software is operating the resource page they are viewing. For example, people might click on Senior School Pathfinders link in Spydus and land in ClassE for resources on *Macbeth*, then click on Blooms Online Literary Reference in the pathfinder and find themselves on that external database platform. A click on the catalogue search would take them back to Spydus search space. Further, they might have arrived at any of those locations via a link from their own English literature ClassE course site.



ClassE English Pathfinder

Present-Future

While this 'state-of-play' at Mellor Library, Carey Baptist Grammar School perhaps presents a picture of somewhat conservative practice, focus has been on preparing the groundwork for a new paradigm. It was felt that the library team should work with eLearning teachers, curriculum leaders and the ICT department to set up the infrastructure and practices to maximise best return on investment in high quality library and learning systems and digital resources.

With these in place, the library's next move is to work with teachers as they incorporate more engaging and creative eLearning techniques and pedagogies into the school's learning landscape, with a particular eye to mobile learning devices. Lyn Hay's iCentre vision and its implicit practices (2012) are very much to the fore as new learning spaces are developed within existing physical and virtual domains (Whisken & La Marca, 2012), and requisite skills learned by the eLearning and library teams (Elliott, 2011b).

There will be:

- greater use of curative software to bring constantly updated information feeds into learning spaces to reduce in-house workload as well as maintaining freshness of presentations
- · increased involvement by teacher-librarians in online course design
- a process of job description changes and matching professional development as the library team profile moves into a new iCentre way of operating to meet the support and resource demands of online and mobile learning

A question still unanswered: How will the need for equitable access to relevant nonfiction eBooks, eTextbooks and fiction eBooks be met by suppliers and managed

There will be . . . increased involvement by teacher-librarians in online course design

by school libraries? Close monitoring, key lobbying, and sharing of evolving understandings will stand the profession well in that aspect of learning landscapes in the near future.

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