REIMAGINING SCHOOL LIBRARIES: EMERGING TEACHER PEDAGOGIC PRACTICES

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Abstract

Agile learning spaces have the potential to afford flexible and innovative pedagogic practice. However there is little known about the experiences of teachers and learners in newly designed learning spaces, and whether the potential for reimagined pedagogies is being realised. This paper uses data from a recent study into the experiences of teacher-librarians, teachers, students and leaders of seven Queensland school libraries built with Building the Education Revolution (BER) funding, to explore the question, “how does the physical environment of school libraries influence pedagogic practices?” This paper proposes that teachers explored new pedagogies within the spaces when there was opportunity for flexibility and experimentation and the spaces sufficiently supported their beliefs about student learning.

The perspectives of a range of library users were gathered through an innovative research design incorporating student drawings, videoed library tours and reflections, and interviews. The research team collected qualitative data from school libraries throughout 2012. The libraries represented a variety of geographic locations, socioeconomic conditions and both primary and secondary campuses. The use of multiple data sources, and also the perspectives of the multiple researchers who visited the sites and then coded the data, enabled complementary insights and synergies to emerge. Principles of effective teacher learning that can underpin school wide learning about the potential for agile learning spaces to enhance student learning, are identified. The paper concludes that widespread innovative use of the new library spaces was significantly enhanced when the school leadership fostered whole school discussions about the type of learning the spaces might provoke. This research has the potential to inform school designers, teachers and teacher-librarians to make the most of the transformative potential of next generation learning spaces.

Reimagining school libraries: emerging teacher pedagogic practices

The role of school libraries is changing in line with social, technological and educational trends (Hay & Todd, 2010). The recent Commonwealth Government inquiry into school libraries and teacher librarians in Australia drew attention to the urgent need for research, whilst highlighting the vital contribution that school libraries and teacher-librarians can make to the learning outcomes of school students (Parliament of Australia, 2011). There are significant gaps in understanding how learners and teachers have transitioned into and are using these spaces, particularly within the context of a new national curriculum and continuous innovation in information and learning technologies. Drawing on recent research that investigated school libraries as sites that have the potential to inspire creative and engaging pedagogy (Bland, Hughes, Willis 2013), this paper focuses on how teachers experienced the new spaces and how these new spaces influenced their pedagogic practices.

In the dynamic, information-rich learning environment of 21st century schooling, many school libraries are assuming fresh identities, being reimagined as learning hubs, iCentres, and information or knowledge commons (Hay, 2010). School libraries that maintain traditional identities as book depositories or information access points, risk becoming unviable (Todd, 2010). Whilst insisting that school libraries are needed more than ever, Todd (2010) proposes the notion of “knowledge commons” as a shared space for all students and the community for the development of a wide range of information handling and using competencies that lead to creating deep knowledge and understanding” (p. 18). Todd (2010) goes on to describe the commons as an intellectual space “that everyone helps build” and as “both a physical and a virtual place we could term an information commons.”
commons, a learning commons, a knowledge commons, where ownership is held in common and construction/collaboration are constants” (p. 18). More widely the term ‘commons’ suggests shared community spaces and a dynamic connection among learners, learning, pedagogies and spaces. Koechlin, Zwaan and Loertscher (2008), in asking how effectively school libraries are used, urge teacher-librarians to create a school-wide learning commons, challenging schools’ administration and staff to invest in this philosophy and help to create a collaborative learning community that would support the best pedagogy. The library is reimagined as a shared learning space that can inspire new pedagogic practice both through the physical design as well as through the pedagogic designs of the teachers who use the spaces.

The concept of “built pedagogy” (Mäkitalo-Siegl, Zottmann, Kaplan & Fischer, 2010) emphasises the close relationship between learning environments and learning outcomes. Markus and Cameron (2002) point out that the design and designing of learning spaces has the potential to manipulate and order the ways in which learners and teachers engage with each other and with cognitive, relational and material experiences of learning. Little research has been done, however, to understand the teaching and learning practices that emerge in new learning spaces and their impact on learning outcomes (Blackmore et al., 2011). Some widely consulted and referenced commercial publications about school planning, building and designing rely predominately upon quantitative evidence. These texts ‘assume that the design of educational spaces must influence student learning and achievement’ (Woolner et al., 2007 p. 48). Many of these texts are replete with potentially valuable design recommendations (Dudek, 2000; Nair & Fielding, 2010). Some texts discuss student learning and mention educational theories and pedagogical practice, such as emphasising critical, creative and inquiring information use, enabling learners to engage with and create knowledge within changing information environments (Asselin & Dorion, 2008; Bruce & Hughes, 2010; Kuhlthau, 2010). However, few publications ‘cite supporting evidence or refer to evaluative studies of their own design recommendations, nor do they explore exemplar cases to discuss the impacts of their recommendations on student learning’ (Elliott Burns, 2011, p. 109).

Pedagogy that promotes quality learning is not an exact science. It is ambiguous, draws from a teacher’s tacit knowledge and expertise, and is understood as an art rather than as a science of didactics (Murphy, 2008). It is interactive and emergent because student actions as well as teacher intentions shape the interactions. Pedagogy can therefore be described as the enacted philosophy or principles that describe how people participate in learning, and the practices that emerge through that participation. Understanding the views of the students and teachers, as actors in the interactions, within their particular learning space, is therefore important. Recently, the Australian Government’s Building the Education Revolution (BER) initiative (2009-2011) injected over $16.2 billion in funding for education facility infrastructure to modernise schools. $3.6 billion of this funding was committed to the building of over 3000 school library projects (DEEWR, 2010). This paper explores the experiences of teachers who used these new learning spaces.

**Research design**

To support this exploration, the research team used an interpretive, qualitative research design to examine the lived-in reality of the participants as it was co-created within the specific cultural and social world of their schools (Guba & Lincoln, 1994). Student, teacher and teacher librarian voices were prioritised. Students created drawings about their ideal library, created iPad video tours explaining their favourite places in the library, and explored their collective experiences in focus group discussions. Teachers and teacher librarians also created iPad video tour commentaries reflecting on the ways the library spaces were imagined and were being reimagined in daily pedagogic practice. These rich visual records provided insights about the spatial influences on pedagogic beliefs, actions and permissions, especially when triangulated with the textual records of the interviews with the 7 teacher-librarians, 7 teachers, 44 students and 5 school leaders. The use of multiple data sources, and also the perspectives of the multiple researchers who visited the sites and then coded the data in team viewing sessions as well as individually, enabled complementary insights and synergies to
emerge.

The research addressed a gap in the existing literature by investigating “how does the physical environment of school libraries influence pedagogic practices?” Seven schools with new library spaces agreed to participate in the research study. The schools represented a variety of school types and were located throughout Queensland (see table 1). A case study approach (Simons, 2009) enabled the experiences of participants to be contextualized, and valued their experiential and practical ways of knowing. The experiences of participants indicate that the transitions into the new spaces are ongoing, and meaning and new practices are still being negotiated.

**Table 1: Case study sites**

<table>
<thead>
<tr>
<th>School</th>
<th>Geographic location of school in Queensland</th>
<th>Approximate school enrolment</th>
<th>Approx ICSEA 1*</th>
<th>High School</th>
<th>Primary School</th>
<th>State School</th>
<th>Private School</th>
<th>BER library $ funding</th>
</tr>
</thead>
<tbody>
<tr>
<td>School 1</td>
<td>Rural outer Brisbane suburb</td>
<td>280</td>
<td>1070</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td>1,070,624</td>
</tr>
<tr>
<td>School 2</td>
<td>Southeast coastal city</td>
<td>400</td>
<td>1090</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td>2,142,000</td>
</tr>
<tr>
<td>School 3</td>
<td>Regional northern city</td>
<td>750</td>
<td>890</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td>1,519,537</td>
</tr>
<tr>
<td>School 4</td>
<td>Rural northern town</td>
<td>700</td>
<td>915</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td>1,800,001</td>
</tr>
<tr>
<td>School 5</td>
<td>Outer Brisbane suburb</td>
<td>580</td>
<td>n/a</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td>New school</td>
</tr>
<tr>
<td>School 6</td>
<td>Regional south-western city</td>
<td>460</td>
<td>930</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td>1,900,001</td>
</tr>
<tr>
<td>School 7</td>
<td>Inner Brisbane suburb</td>
<td>530</td>
<td>1140</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td>1,650,000</td>
</tr>
</tbody>
</table>

Within each school, the teacher-librarian recommended the teacher and students to be interviewed. This often meant that teachers and students who were interviewed were those with a positive relationship with the teacher-librarian, or were frequent users of the library. The benefit was that they were able to provide rich insights based on lived experience (Denzin & Lincoln, 2003).

Interview questions included:
- What is one word you would use to describe the new space? Explain your choice.
- Which of the new spaces do you think work well for your teaching? Why?
- What learning and teaching do you do in these spaces that you would find difficult in other spaces?
- How has the new space impacted on student learning?
- What learner outcomes have you observed in terms of cognition, emotion and participation?
- How has learner engagement changed?
- What pedagogic principles do you think informed the design and use of the new library space?
- What have been the success factors behind the design of the new space?
- If you had the chance to start the design/building process from the beginning, what would you do differently? Please explain why.

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1* Index of Community Socio-Educational Advantage (ICSEA). Averages ICSEA value is 1000 with measures above 1000 indicated above average socio-educational advantage. “The variables used in calculating a value on the ICSEA scale include student-level data on the occupation and education level of parents/carers, and/or socio-economic characteristics of the areas where students live, whether a school is in a metropolitan, regional or remote area, proportion of students from a language background other than English, as well as the proportion of Indigenous students enrolled at the school.” (ACARA Glossary, accessed on 5th January 2012 from http://www.acara.edu.au/myschool/myschool_glossary.html - G2)
As frequent users, they were keen to talk about their teaching practices and learning experiences in the library spaces. However we were not able to identify alternative practices or the difficulties that other teachers or students may have been experiencing in using the new library spaces.

**Findings**

The library is one of the few indoor spaces in a school where students can experience both formal learning during class time, and informal learning and socialising during break times with other children from across multiple grade levels. The newly designed physical spaces had a direct impact on the patterns of participation and learning within the school. In some cases, the practices were expanded experiences that had also occurred within the old library space, but were extended to become richer or more diverse in the new spaces such as personal reading and research. Informal patterns of learning emerged as new practices were inspired by the spaces, such as children reading stories for others, designing electronic games, conducting writer’s clubs and socialising through music or video creation. These occurred outside of the formal curriculum. The space also extended experiences so community members were able to engage in the new library spaces through family reading nights, whole school movie nights, parent evenings and playgroups. While the teacher-librarian, or the students initiated many of these pedagogic practices, the space also enabled new pedagogic practices that were initiated by the teachers.

The teachers who were interviewed were early adopters who were exploring the library spaces with their classes. The new library spaces became an extension of their classroom space that enabled them to expand their repertoire of formal learning activities for their students. The teacher in school 5 commented, “I think that it’s freed up teachers to be able to think of using other methods that they would have normally shut down.” For some the library enabled access to specialist resources such as movie making, a wet space for science experiments, laptops, iPads and interactive white boards, large rooms for guest speakers or working with the librarian as an additional teacher. Traditional library reading and research lessons were still valued, but the teachers indicated that more physical space meant they could design more inquiry-based learning and collaborative learning experiences for their students. The variety of spaces and the glass between learning areas meant that teachers could establish multiple groups each focusing on a different skill, and easily supervise and move between the groups. Mobile furnishings meant the space could be easily transformed for performances (schools 1, 3, 7). Improved learning outcomes were noted in terms of individual students were more focused, the teacher was able to give more individualised help and independent learning and collaborative learning skills improved. Students improved in their reading skills and inquiry skills. Also there was a common experience across all schools that there was a decrease in student stress and an increase in engagement that was directly attributed to the affordances of the space. Teachers appreciated the ease with which they could book spaces online, even booking teacher-librarian time online (5). Planning areas in the teacher-reference section were also identified as improving their own productivity, and that of visiting specialist teachers (1, 4).

Understanding how new pedagogic practices emerge and reflect new patterns of learning in a school library both reflects the opportunities provided within the space, and the ways that people learn to use new spaces. In a recent review of the literature about how teachers learn, Opfer and Pedder (2011) identified that certain preconditions are necessary for new patterns of learning, or pedagogies to emerge in teacher practice. There needs to be a balance between equilibrium and disequilibrium, collaboration and space, and shared beliefs about learning that create new cultural norms. These factors could be observed in each of the case study sites.

**Equilibrium and disequilibrium**

Teachers needed the opportunity to engage in learning that was recursive and included the opportunity to challenge their beliefs and learn new practices in personal, practical and formal ways (Opfer and Pedder, 2011, p. 387). Some disequilibrium is important to provoke new learning and change, but too much leads to rejection of the change. There was evidence from the case studies from teachers who...
were innovative with their pedagogic practices, that they had experienced a balance between personal, practical and formal learning. Janet, the teacher from school 3 reported she “dived straight into the digital pedagogical license when I should have probably just done the certificate” but “by the end of that - and 50,000 grey hairs more - I then found this whole area that I started to explore with the kids - especially a virtual classroom; even knowing how that could be incorporated into my learning.” When the library incorporated a green-screen room, she then used this confidence from her formal learning to learn in practical and personal ways how to make movies with her students in the library green-screen room. She then extended the virtual student parliament into the physical spaces of the library, through events planned by the student parliament. There was equilibrium between her desire to innovate and the opportunities provided by the new learning spaces. Yet Janet recognised that she was learning on her own, and she wanted the opportunity to share ideas and to be taught how to use the multimedia spaces. Janet reported “I think it is under-utilised…[we need] time and, probably, more PD on how to use it…not external PD but ‘this is how I’m using it and this is what I’ve done, and here are some steps you can do’…We are very time poor” (3). Formal opportunities for teachers to be oriented to new spaces and new ways of working occurred infrequently in the case study schools.

For some teachers, a disequilibrium from the demands of the new national curriculum provoked new pedagogic practices afforded by the library space. In school 1 the teacher recalled “with the new curriculum, the Grade 2 teachers have said look, ‘my kids can’t do this on their own’. I’m like great, my kids would love to be mentors. How about we go down to the library, we can spread them out into their groups. My children can read from the book and then your children can do what they need to for the book review.” Prior to the new library space there had been no place in the school that could accommodate this type of collaborative peer learning. In school 5, the new iServices centre was different to any library the teacher had experienced, and she wondered, “Where are all of the books? This is not going to work”. The disequilibrium was enhanced when she noticed that the teacher-librarian encouraged students to move around and be social, and didn’t expect students to be quiet all the time. Fiona commented “I have never seen so many kids in a library at lunch” and that the library didn’t have “that stigma of ‘if you go to the library at lunch you are a nerd”. With the encouragement from Jenny the teacher-librarian, Fiona booked students into the library to create and film news stories in role. The students were able to move between the green-screen room for filming, and the general learning area as a place for editing and small group work. Fiona appreciated that glassed walls enabled her to “see everything and be everywhere as it is really important to know what was going on in all places.” The physical space thus provoked disequilibrium, but also enabled experimentation. In other sites, there was not sufficient disequilibrium to provoke many changes in teacher pedagogic practices, as the teacher-librarians were continuing traditions from their previous libraries, and directing the use of learning spaces through signage and decisions about the use of spaces. Freedom to experiment and make decisions about how the spaces were used was an important principle underpinning teacher innovation and agency.

Collaboration and space

Collaboration between teachers, and teacher-librarians and support staff was an important factor in supporting new pedagogical practices, however Opfer and Pedder note that “too much collaboration is stifling, and too little is isolating” (p. 236). Additional support from the teacher-librarian or the IT helpdesk staff located in the library meant that teachers confidently planned learning around the library’s computer resources: “the computer pod’s fantastic. It’s all there, it’s easy, you’ve got your expert on hand … because they’re new computers, they always work” (4). The teacher-librarian was also a resource, even though the teacher reported “I felt a bit bad booking [her] without asking is it alright for [her] to help me, she said “that’s what I am here for” (5). In some cases, the teacher-librarians found it difficult to find teachers to collaborate with, and the collaborative culture was being built first with the students:

Students are coming to realise that it's a great place to come to for help and assistance, whether it be from issues and troubles that they have with logging on or computer type problems, or in actual assistance; finding a great book to read, help with an assignment that they've got to do...So I think the students probably - it sounds a bit weird to say value
me more effectively, but I think they're probably starting to value what I can offer them, even more than the teachers are at this stage; but I know that they will (5).

Where teachers and students had been invited to collaborate in designing the learning space or suggesting changes of configurations within the space, there was a greater degree of confidence from the teachers and students in using the spaces in new ways. The agile learning spaces enabled teachers to extend relationships of trust with students. Greater choice for students about where to work, and creative group work and inquiry based learning emerged. Quite a few teachers would send students to work in the library independently, knowing that the teacher-librarian was there and able to supervise through a variety of spaces easily as the glass walls and partitions enabled passive supervision.

Close collaboration between teachers and teacher-librarians was not yet widespread throughout the entire school in each of the cases. Teacher-librarians, even though they were recognised as leaders and managers of the spaces, were not part of the structure of the school’s formal leadership team, and did not seem to have significant influence over how the new library was positioned within the whole school learning discourse. In most of the cases, while the school leaders appreciated the new library as an improved asset, the new school libraries were rarely recognised for the potential to inspire whole school innovations in pedagogy. School 7 was an exception that showed widespread innovative use of the new library spaces was significantly enhanced when the school leadership fostered whole school discussions about the type of learning the space might provoke.

Shared beliefs about learning

For significant pedagogic change to occur, beliefs about learning needed to be shared as “school level beliefs about learning influence both individual and collective behaviour by creating norms of action” (Opfer & Pedder, p. 392). In school 7, the new library spaces provoked new cultural norms. Discussions between school leaders, architects, parents and teachers during the design phase about the purpose of the library provoked a wider discussion about pedagogy:

*We were asking ourselves what is the purpose of the library? You know, why are we building a library that is different? Why are we doing things this way! We have to prepare our students to be able to cope with their working environment that far into the future. It is an unknowable future. So the message to staff is, we are not teaching for our past. We are teaching for these people's future so what do we have to do differently?* (7).

There was acknowledgement that learning was ongoing, with the school leader challenging teachers to experiment with the new spaces and share expertise in staff meetings. This was in contrast to another case study school, where whole school collaboration based around the school library had not been part of the library or school culture. The teacher-librarian shared:

*I think it's a culture here. It's never been advocated. I'm only the third library teacher in this school. The first teaching librarian here was here for 21 years. She, basically, did her own thing. I think it was also prior to the collaborative teacher planning. It's hard to break new ground...I'm slowly getting there. This is my fifth year, so I still have quite high hopes that things will change. I think it's because it's just not a done thing. Then teachers here tend to get so overwhelmed with the new curriculum. They don't see how I fit into the whole bigger scheme of things. So I'm just making small steps with a couple of classes.* (2).

The teacher librarians made efforts to influence whole school learning cultures. This leadership occurred through symbolic strategies such as use of innovative names like as “ the Portal - what we call our library - that means Place Of Reading, Teaching And Learning (4)”, cultural events for the whole school, and cultural messages reinforcing “within the minds of everyone within the college, but particularly with the teachers - but with everyone - that this is our central learning hub. This is the place to come if you're needing help finding the information that you need or finding” (5). In most of the schools, school leaders missed opportunities to discuss the pedagogic possibilities within the new spaces and harness the potential within the new libraries to promote systemic and sustained pedagogical innovations.
The challenges in using flexible and open spaces also highlighted individual teacher beliefs about learning. For one teacher (4), mobile furnishings were a distraction inviting silly behaviour from students and she wished for less mobility. For another, mobility was an essential element, and she was frustrated it took too long to move furnishings of the way (3). Interestingly both of these perspectives were informed by a view of learning that recognised children were energetic and “kids will be kids”. The teachers did not have an opportunity to discuss their assumptions about learners with others, and explore the tensions to do with teacher control and student independence created by the mobile furnishings as part of their transition to using the spaces. However all of the teachers described that the more open spaces meant that students had to be taught the expectations and routines to help them learn how to use the collaborative learning spaces. Sometimes the teacher linked these expectations to school wide values (2, 3, 5), at other times, the expectations reflected the teacher’s own vision for learning, such as developing independence (1) or inquiry skills (6).

Discussion

Findings from previous studies have noted that the effectiveness of school learning environments hinged on the alignment between ‘particular pedagogies, curricula, assessment practices and social factors’. Furthermore, effectiveness was influenced by a ‘range of complex interactions’ such as student ownership of their learning, opportunities for students to work autonomously and opportunities for them to engage interdependently with peers, educators, technologies and the physical environment (Cleveland, 2011, p. i). Agile and flexible are descriptors applied widely as desirable qualities of contemporary learning spaces (Fielding, 2004; Hay; 2010; La Marca, 2003 & 2010). Cleveland (2011) argues that while flexibility of spaces may respond in some ways to learner and educator needs, by contrast reflexive spaces invite and suggest ways in which the learners might engage in learning activities ‘and enable them to fine tune learning settings to suit their pedagogical needs’ (Cleveland, 2011, p. i).

In the new library spaces in this study, the multimedia spaces and spaces with glassed areas and agile furnishings operated as reflexive spaces that prompted innovation in pedagogy. Teachers were more willing to experiment with varied activities as the space enabled supervision and coordination of the variety of experiences. Exploratory inquiry based learning was supported through easily accessed resources, wireless technologies and accessible booking systems, which in turn supported a sense of student and teacher agency and ownership. This was further enhanced when technical assistance was on hand, either provided by the teacher-librarian or the co-located IT help desk in the library space.

Experimentation was also constrained by the teaching culture. In school 7, Emma drew on her early childhood teaching pedagogy when teaching her Year 4 students. This meant that she sought opportunities to rearrange learning spaces regularly, and despite being a junior teacher in the school, was instrumental in advocating for and physically shifting the junior fiction mobile bookcases to the upper level of the library one afternoon after a staff meeting. She reflected that she challenged a few assumptions, both teachers who had been at the school for a long time and the teacher librarian who “thinks it is all her responsibility to move [furniture]. We had to move them from that and say ‘no, no, we’ll move it”. Emma observed that even though the library was a new building, for teachers who had been at the school for a long time, “there’s certain thought patterns that exist’ that make it difficult for those teachers to assume they have the permission to experiment with learning spaces. Shared ownership can also be challenging to enact in new spaces where a teacher-librarian may have invested significant energy into the design of the space.

Conclusion

Teachers explored new pedagogies within the spaces when there was opportunity for flexibility, experimentation and the spaces sufficiently supported their beliefs about student learning. However, these early adopter teachers were often experimenting independently alongside their students, with the support of the teacher-librarian. Whole school harnessing of the potential of the new spaces was evident in one school, and emerging in some others as the school leaders recognised the potential to
impact the learning culture of the whole school. Transition to new spaces can be assisted by orientations to the expectations and possibilities afforded by the new spaces, for both teachers and students. Transition plans can be informed by principles of effective teacher learning, such as a balance of professional and personal learning, and whole school discussions. When expectations of how to use the space were linked to discussions about school wide values or the language of shared pedagogical frameworks and shared ownership of communal spaces, it was evident that the newly designed BER libraries had the potential to enhance the overall school learning culture. This research has the potential to inform school designers, teachers and teacher-librarians to make the most of the transformative potential of next generation learning spaces.

References


