



Learning space – the final education frontier

Annie Facchinetti

The landscape of education is shifting. Whereas in the past, schools prepared students for a relatively narrow range of occupations in an industrialised world, 21st century schools must prepare students for jobs that don't yet exist, many of which will use technology that doesn't yet exist either.

With information freely available on the internet, the role of the teacher is no longer to impart knowledge, but to guide students' learning so that they acquire the skills necessary to thrive in the modern world. The new Australian curriculum includes 'critical and creative thinking', 'ethical behaviour' and 'personal and social competence' alongside literacy and numeracy as some of the general capabilities that support students to become successful learners. Understanding concepts has become far more important than remembering facts.

The physical landscape of learning is often overlooked

But amidst all the philosophical, pedagogical and technological changes that are occurring in education, the physical landscape of learning is often overlooked.

As a result of the Federal government's Building the Education Revolution (BER) program, building and refurbishment projects are still occurring at a rapid rate. While many of these projects have been limited by time, budget and regulatory constraints, some schools have taken the opportunity to reassess how learning spaces are structured to ensure that the school's physical environment supports shifts in pedagogy.



curriculum and a range of other aspects within the school,” Cutting explains.

To ensure that the finished product meets not only with the expectations of teachers and the school board, but also with those of the students and the broader school community, the consultation process is made as wide-reaching as possible. Students are involved in the workshopping process, including exploring theoretical questions and working in groups, in a way that allows them to identify what they need from a learning space. Senior management, staff and students are continually involved as the design progresses.

St Joseph’s Primary School in Boronia has participated in this process. As part of an ongoing environmental program – which includes a kitchen garden with chickens, and a wormery, the school worked with Baldasso Cortese to design and realise a contemporary learning space to meet its unique needs.

A key focus of the design was to resolve the issue of parents having to use the carpark as the only place they could socialize and exchange ideas. The solution was the creation of a space which brought the community into the school, which both parents and students could use as a community kitchen, gathering and teaching space and which could also be set up as a dining room. In addition, the project provided a Resource/library/ICT discovery centre, parent lounge, teacher planning rooms, music room, and conference room.

According to Cutting, “The traditional classroom is a barrier to learning.” He has spent time researching educational theories that allow him to challenge school communities to think beyond traditional views of teaching and learning, and as a board member of the Victorian Chapter of the Council of Educational Facility Planners International, he has developed knowledge of all aspects of educational planning. This experience has given him a refreshing appreciation of the dynamic nature of education.

He describes the solutions offered by Baldasso Cortese as “worlds apart from the traditional setting. Our learning spaces cater for a variety of activities and settings not achievable in traditional the classroom. It also involves a completely different set of furniture to enhance student learning. Collaborative learning also

For a school to realise its vision to make the transition from traditional classrooms to effective learning spaces takes collaboration between key personnel within the school and external experts or service providers. Architects and designers who have a genuine interest in and understanding of contemporary learning are a good place to start. There are also many customisable solutions available from a range of companies who will work to meet the unique needs of individual schools. It is critical, however, that the end users – teachers and more importantly students – are considered and consulted. Each of these groups has a significant contribution to make to the direction and success of a learning spaces project.

Architectural skills

Architecture firms now recognise the importance of developing the right learning spaces to support contemporary learning. While the BER has been criticised for its cookie cutter approach to educational environments, many schools have been able to work in partnership

with architects to design purpose-built learning areas.

With more than 15 BER projects successfully implemented in a variety of settings, including Melbourne schools such as St Kevin’s Toorak and Our Lady of the Southern Cross in Wyndam Vale, Victorian-based Baldasso Cortese architects has demonstrated a commitment to and understanding of the changing needs of 21st century schools.

Partner and Manager Education, Hal Cutting, has been involved in educational design since the early 1970s, during which time he has made a point of becoming immersed in the educational rationale of schools that he works with. This is evident in the comprehensive consultation process that the practise undertakes as an integral part of any project.

“We use workshops, conversations, and videos to understand where a school is at and where it wants to be. Half-day to two-day workshops allow us to jointly develop the educational specification that sets out pedagogy,



means collaboration between staff?”

Indeed staff acceptance can be one of the biggest barriers to the successful implementation of a modern learning space. Cutting has seen this first hand and suggests that a phenomenal amount of professional development is needed to help teachers adjust to the change. Baldasso Cortese also considers this when collaborating with schools. Including all key stakeholders from the beginning can also help to overcome this obstacle. “Most people in schools support innovation and new ideas if they can see the benefits to students,” Cutting says.

For instance, while many schools have resources centralised in the library, Cutting suggests reviewing how some of these resources could be disbursed into the learning environment to ensure that student engagement is not interrupted. “You don’t want to trudge off to the computer lab or library. You want it to happen right there and then which creates a very different learning environment.”

Working with existing infrastructure can also pose challenges for schools looking to move towards a more contemporary learning environment, but Cutting suggests that this only limits design up to a point. “The ability to change spaces from one thing to another is a challenge, but we’ve had very successful results with schools in this situation. Hartwell Primary school is a good example of this.”

Both the internal and the external use of space need to be carefully considered when changes to the learning environment are being planned. Cutting underscores the importance of outdoor learning spaces, describing how the design of a Baldasso Cortese project at St Monica’s in Moonee Ponds includes an outdoor learning deck so that the students upstairs are not disadvantaged. A recent project at St Kevin’s Primary School in Hampton Park also incorporated outdoor learning areas in the design, allowing greater flexibility for student groupings.

Making the most of space

If the structure of a building determines to a large degree the organisation of space, the furniture can make or break a learning environment. Teachers have always been creative in re-organising traditional tables or desks to accommodate different learning activities, but this task has been rendered much easier by a burgeoning industry of suppliers of furniture and other tools.

Simon Jones, sales and marketing manager with RM Education, says that the company works with schools in a way that maximises learning opportunities using the available space. Through its involvement in the UK Building Schools for the Future program, valuable experience was gained in designing education environments. He relates how he was surprised to discover that

many of the consortia that tendered for work under the program considered each element of the design in isolation. “We worked hard with our consortium partners to persuade them that there were both financial as well as educational benefits to a more integrated approach and we designed a number of tools and processes that have now been adopted with all our consortium partners,” Jones says.

Like Baldasso Cortese, RM Education has built an understanding of contemporary learning needs that assists them to support the vision of the schools that they work with. “Our approach builds on the work of leading international education planners with whom we have worked and also from our relationships with thought leaders in UK and abroad such as Stephen Heppell,” Jones explains, adding that they also borrow heavily from Dr Kenn Fisher’s *Pedagogy First* approach to architectural design. “We have drawn from this approach and taken it a step further to demonstrate how an integrated approach to ICT, furniture and design can provide a technology rich learning environment.”

To demonstrate the theory in practice, RM Education opened a Re-Thinking Education and Learning Centre in Melbourne at the close of last year. Known as the REAL Centre, the display features five exemplar areas designed to help educators see the possibilities a well-planned learning space can offer. For example, the ‘Creativity and Media’ space demonstrates how a typical classroom can be reorganised to support media-rich activities, while the ‘Collaboration’ space shows arrangements that allow students to work together in different ways. “We have organised the different zones in the REAL Centre to focus on activities and this helps to focus on the function of the space rather than on the equipment or furniture it contains,” says Jones.

Once a school has clearly defined its needs, RM Education offers many solutions to enhance learning experiences. For instance, the RM VerTable-i is a project table that can be used vertically or flipped horizontally, and combines computing, projection and interactive capabilities used with an e-beam and pen. In the vertical position, it is the ideal space for presentations, while the horizontal orientation



allows for effective collaboration between students. Height adjustability makes it suitable for use whether students are standing or sitting, while wheels make it mobile.

As educators strive to provide personalised learning experiences for students, the ability to support a number of different activities and experiences in the available space is becoming more important. Contemporary learning theory revolves around continuous change, and classroom design and resources need to recognise the dynamic nature of teaching and learning to provide maximum flexibility.

According to Simon Jones, "Flexibility and adaptability are a fundamental part of the design process. We need to ensure the space is flexible: i.e. it can be reconfigured on a day by day or hour by hour basis by the students themselves to suit the activities that take place within it. Also we cannot predict how the curriculum will evolve over time therefore the design needs to take account of future needs and have adaptability built in."

Jones explains that the REAL Centre is one way to give teachers the opportunity to visualise solutions that support changes in practice. "Staff have often been brought to the REAL Centre by their leadership team, perhaps not knowing what to expect, and possibly a bit reluctantly. After an hour's tour with an educational guide, so they can understand the rationale for each space and have tried out the furniture and the technology, suddenly you can see 'the light bulb moment' when they start applying what they have seen to their own situation."



"What is pleasantly surprising is the way in which students visiting the centre adapt to the different environment and organise it to suit their needs at the time," says Jones. "They find the spot that suits them best, whether it's on a chair, a step seat or on a bean bag, without any guidance from adults, and this flexibility appears to aid rather than detract from concentration levels. Probably not surprising is the fact that the students

are not fazed by technology they are not familiar with; they will have a go and use their peers for advice, asking an adult as a last resort."

Our digital native students' easy facility with technology often makes it a focal point for schools looking to adopt contemporary learning practices. RM Education's experience has shown that the planning of learning spaces doesn't always take into account the full range of new technology that is available. In primary schools in particular, inquiry learning can take many paths, and it is worthwhile investigating options that go beyond what might be considered standard classroom offerings.

"For many schools, changing their learning environment is a new experience and there can be a tendency to focus on the technology without necessarily considering how it will be used or whether it the most appropriate solution. Our observations of students and staff using ICT-rich learning spaces show that whilst laptop and desktops have their place, so do digital video cameras, mp3 recorders, digital microscopes and other peripherals, but these can often be neglected in favour of a 1 to 1 ratio."

We have come a long way from the classic rows of desks that were the favoured classroom configuration for over 200 years, and are now spoilt for choice in terms of classroom fit-out options. With BER funding coming to an end, schools will increasingly need to find the right balance between function and cost to ensure that learning spaces offer opportunities for engaging learning that meet their curriculum and pedagogical goals.

"They find the spot that suits them best"