

Primary Principals' Sabatical 2015

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MEd 1st class Hons



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Focus: To observe the 'Innovative Learning Environments' of newly built special schools in action, and to explore with leadership teams the change process inherent to their new schools.

Note: There was a change in terminology in NZ from Modern Learning Environments (MLE) to Innovative Learning Environments (ILE) to align with international usage.

Acknowledgements:

Thank you to:

- ✚ the Ministry of Education for giving me the opportunity for Sabbatical Leave.
- ✚ the Sir Keith Park School Board of Trustees for supporting my sabbatical application and subsequent leave.
- ✚ Diane Parry (Deputy Principal), Teeshan Padayatchi, Stephen Doel (Assistant Principals), and Karen White (Specialist Team Leader) who willingly and ably took on additional leadership duties during my absence, and to every staff member who 'went the extra mile' in support of them.
- ✚ the Special Schools in New Zealand, Australia, and England who allowed me to visit. These Principals, staff, and students welcomed me and willingly took the time to share information and experiences.

Personal Comment: Time - a precious commodity – is often the vital, missing element in a Principal's day. I have pursued graduate study as a fulltime teacher, and post graduate study whilst in fulltime management position. I am aware of how privileged I was to receive this sabbatical which enabled me to take time out from the busy, diverse complex duties of Principalship to refresh, observe, learn and reflect – not only on my chosen topic, but also upon my role of Principal and the school which I am privileged to lead.

Reporting: This Report is a summary to share findings from my Sabbatical in term 3, 2015. The main intended audience is the Sir Keith Park School community, fellow Principals and those in the education sector working with students who have significant special learning needs throughout their schooling and who usually have Ongoing Resourcing Scheme (ORS) funding from Ministry of Education. The main topic of study and application for leave was the provision and utilisation of Innovative Learning Environments for the aforementioned learners.

Rationale & Relevance: Sir Keith Park Special School is a decile 1 school situated in Mangere, Auckland. The school buildings comprise a two classroom & admin area originally built in 1975, a series of prefabricated buildings, and several BOT owned facilities such as a hydrotherapy pool, house, hall, meeting and activity rooms. The Ministry of Education has been considering renovations and / or rebuilding the school since mid 2011 when a Ministry survey of special schools highlighted a need to improve infrastructure. During the ensuing prolonged process which resulted, the government provided high fibre cabling to the school – an initiative designed to

promote use of digital technologies in teaching and learning across New Zealand. The school has had a strategic focus related to both improved learning environments and digital technology, which has highlighted the need to further explore possibilities for our student population.

This sabbatical provided an opportunity to learn from the experiences of other school leaders who have led the re-development of their school, and to gather ideas to further support our strategic direction with the use of learning technologies.

Methodology:

Reading of books and web sourced articles

Visit 5 schools in New Zealand

- Wilson School : Auckland
- Kimi Ora School : Wellington
- BLENZ : Auckland
- Arohanui Satellite class @ Hobsonville School
- Mahiniwa School : Wellington

Visit 2 schools in South Australia

- Adelaide West Special Education Centre : Adelaide
- Adelaide North Special School : Adelaide

Visit 5 schools in UK

- Hadley Learning Community: Telford
- The Bridge School : London (Junior and senior sites)
- Richard Cloudesley School : London (Junior and senior sites)
- Beatrice Taite School : London
- Swiss Cottage School : London

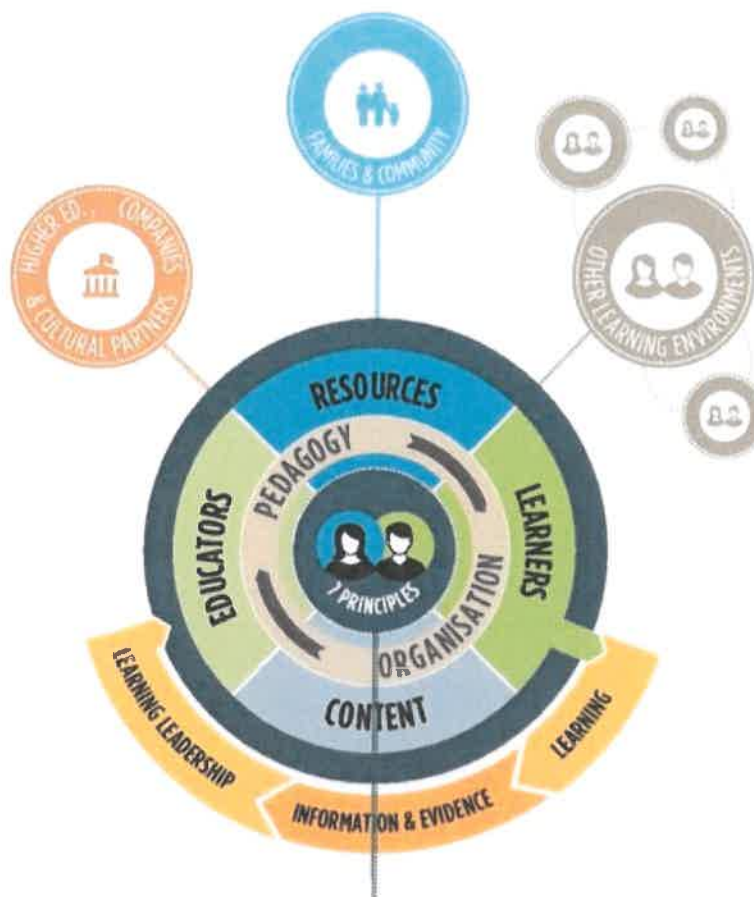
Send information / questionnaire via email prior to visits to ensure staff are prepared for discussion. *Refer Appendix 1: Sabbatical Questionnaire for schools*

Information collation, analysis and write up.

Submit and share Report

Introduction: Where children learn is just as important as what they are taught and who teaches them according to the report "*Education in Australia 2012: Five Years of Performance*" by the Green Buildings Council of Australia (GBCA) which found that just as investing in quality teaching and quality resources is essential, so too is investing in quality learning environments.

OECD researchers have identified 4 core elements and relationships which lie at the heart, or pedagogical core, of every learning environment – learners (who?), educators (with whom?), content (what?) and resources (with what?). They observe that the presence of these core elements does not expediate learning outcomes – it requires the rethinking of them both individually and together in order to address “the deepest core of any learning environment” (pg 23). They expound that organisational and pedagogical relationships can combine the elements together in particular ways in order to effect learning. Furthermore, they concur that seven principles of learning should be easily visible in an effective and innovative learning environment.



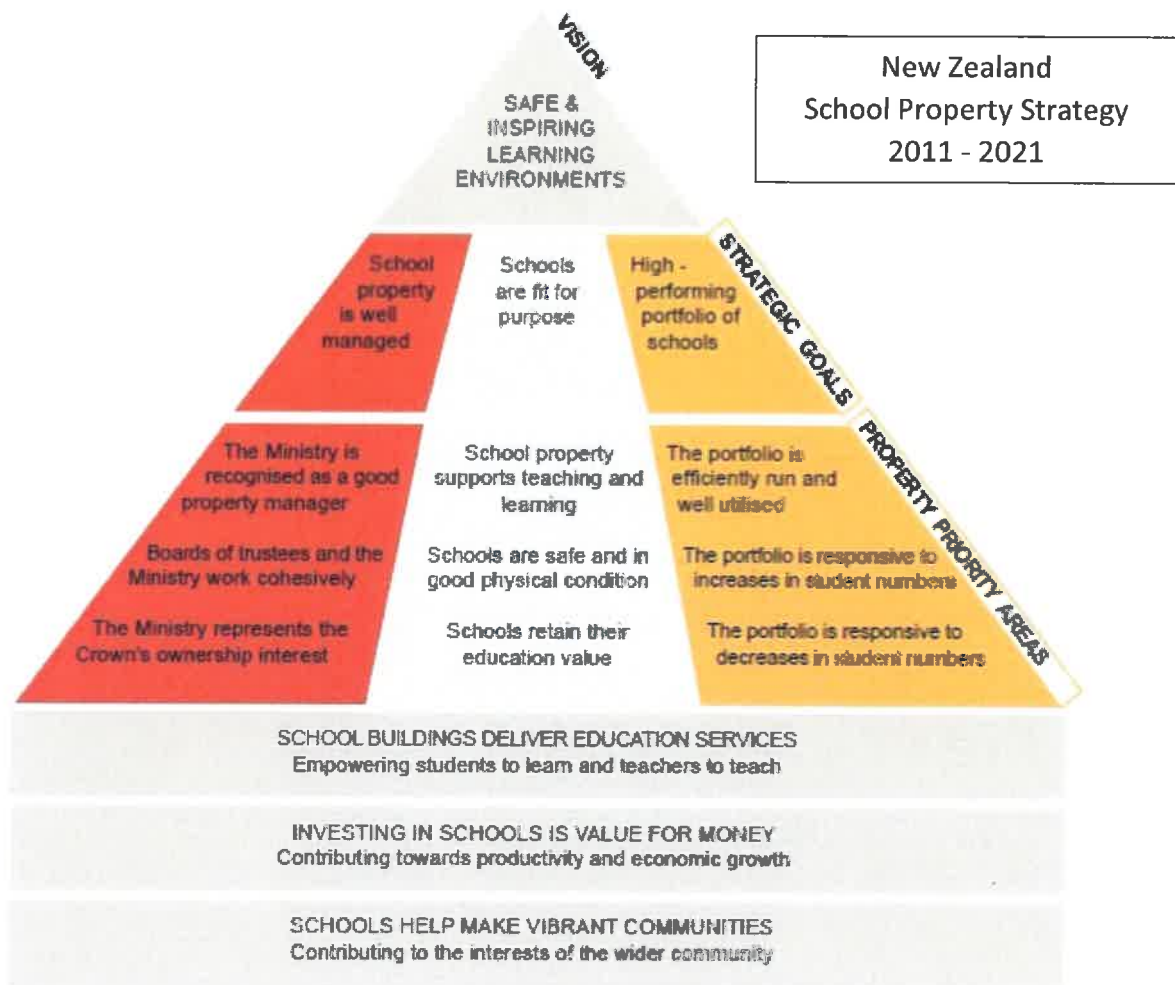
The ILE learning principles

- Make learning and learner engagement central
- Ensure that learning is social and often collaborative
- Be highly attuned to learners' motivations and emotions
- Be acutely sensitive to individual differences including in prior knowledge
- Be demanding for each learner but without excessive overload
- Assessment is critical, but must underpin learning aims & strong emphasis on formative feedback
- Promote "horizontal connectedness" across activities & subjects, in & out of school

During my sabbatical I investigated two components of educational resources which contribute to innovative learning environments, namely facilities / infrastructure and digital technology; and touched on one component of learning leadership – that of change management - in the context of changed learning environments.

Facilities & Infrastructure:

Inherent in the New Zealand Ministry of Education’s (2007) vision that young people “will be confident connected, actively involved, and lifelong learners” (p. 8) is the expectation that learners will change the ways they learn; teachers will adopt new teaching strategies; and that school environments will be adapted / modernised to enable this change of pedagogy to occur. Further evidence of this expectation is seen in the goal of The New Zealand School Property Strategy to have all NZ schools ‘fit for purpose’ - i.e. modern, innovative learning environments – by 2021.



The South Australia State Government has the following vision – “To have one of the best education systems in the world where the workforce is highly qualified, specialty programmes develop young people’s talents and state-of-the art infrastructure encourages teachers, students and school communities to thrive” (P2). With this in mind, the government embarked upon a significant school infrastructure reform agenda through the *Education Works* programme. Six brand new schools were built

in metropolitan Adelaide to replace schools that offered limited curriculum choice, had ageing school buildings and a significant and long-standing backlog of maintenance works. This included new special schools and new special units. I visited two of the special schools.

Similarly, the UK has an aim to modernise all school building by 2020, and has made a commitment to “improving special school provision, most of which will be rebuilt or refurbished by 2020”. As with N.Z., financial constraints have slowed the pace of their rebuilding projects in the last year, however many special schools have been rebuilt or significantly refurbished. I visited 5 such schools.

I found there to be a common understanding throughout literature and in practice across the three countries about what constitutes innovative learning environments. Most articles call for more accessible, open, and flexible use of space to ‘deprivatise’ educational spaces, create visibility and shared usage of learning space, and co-operative use of space. Innovative education facilities should promote active learning involving multiple ‘teachers’ and resources; mixes of pedagogical approaches; and prominent availability and use of ICT.

Dr Julia Atkin (OECD, Pg 59) identified a set of 10 guidelines for consideration to use when reflecting upon learning environments.

1. Promote learning for students, professionals and the wider community through active investigation, social interaction, and collaboration
2. Support a full range of learning and teaching strategies from direct explicit instruction to facilitation of inquiry to virtual connection and communication
3. Support disciplinary and interdisciplinary learning
4. Integrated resource rich, special purpose spaces with flexible, adaptable multipurpose spaces to provide a dynamic workshop for learning
5. Support individual, 1-1, small group and larger group learning
6. Are age-stage appropriate
7. Facilitate learning anywhere, anytime, by any means, through seamless access to ICT, distribution of learning resources for ease of access i learningspaces and accessibility beyond the traditionally defined school day
8. Activate and invigorate learning spaces – indoor and outdoor
9. Inspire participation in, and responsibility for, the learner’s community
10. Enable all aspects of the buildings, building design and outdoor spaces to be learning tools in themselves.

While a one off visit could not yield definitive opinions, I found it useful to have these guidelines in mind when listening to people talking about their schools.

Findings:

All the schools I visited were bespoke, purpose-built special education facilities. Significant / effective features observed were as follows:

Access – Arrival and Departure: One way traffic flow, with designated drop off / collection parking and waiting spaces. Other vehicular parking away from student access. Several schools had a separate student entrance from the main school entrance to avoid congestion. Canopy covered access with sheltered waiting spaces and intercom to reception easily located. Automated outer and inner doors with security control in reception - visibility from reception via glass doors and / or CCTV cameras.



Reception areas provided first impressions of the school's ambience and organisation. A sense of space was important – waiting / seating areas large enough for several people with wheelchairs / buggies. Natural light was best. Several schools also had automated LED lighting that was effective and efficient. Reception counters at 2 heights accommodated both standing and seated visitors, younger and older students. Secure storage area near entrance for car seats / mobility equipment – with power access for battery charging was practical. Unisex accessible toilet facility clearly signposted. Management offices linked to reception but also separately accessible. Digital displays in waiting areas. Wall displays of students' work clearly annotated. Purpose built storage space for administration records, stationery etc.



Access – Circulation Indoors: 2.5 – 3m wide corridors which are wide enough for two wheelchair users and staff / students to pass easily (measuring from handrails) made for ease of transitions. Seating alcoves in circulation areas to provide rest for those with mobility issues, or to provide a place for 1:1 support were well used. Plentiful glazing / natural light were common features. Dual height handrails were effective to support students of differing heights. Colour coding to identify spaces. Differing textures on wall or flooring was used to identify spaces. Clear, easily



understood signage, using text and / or pictures, symbols, objects of reference. Deep kick plates and doorframe protectors to avoid damage by, for example, wheelchairs and walkers. Doors opening into spaces, or sliding, as opposed to out into walkways. Wall displays of students' current work, and curriculum information displays clearly annotated. Wide doorways with glazing on doors. 2m wide stairways. Lifts that are large enough for several wheelchair users and support workers, with adequate waiting space at each level. Lift doors that are wide enough and operate slowly enough to allow wheelchair users to enter and exit safely. Lifts need clear signage; good lighting, mirror to assist reversing out if necessary; hand rails; accessible controls; visual and tactile indicators; visual and audible alarms and emergency communication systems.





Spaces - Learning: Classroom spaces, 60 -65m², which open onto shared area were



common. Most had high levels of glazing which met natural light, visibility and accountability criteria. Surprisingly there were few concerns about accidents and broken glass expressed by any school – toughened glass was used and was functional. Distraction was an issue raised by many staff. To minimise distraction issues for students large panes were 2/3rd frosted or patterned. Additional smaller spaces which were easily accessed, but NOT via

another classroom, were thought to be very useful. Classrooms linked directly to dedicated outdoor spaces were the norm and were often used by students as a quiet space when experiencing sensory overload.



Spaces were made more flexible through the use of furniture which could be used for more than one purpose, and which was easily moved, but also able to be ‘anchored’ when required (brakes on wheels for example). Height adjustable tables were used in some schools, but most appeared to use custom tables. Round tables were not

deemed to be useful for wheelchair users as it was difficult to get the student sufficiently close to the work surface. A range of chairs were used. Some specialist seating was utilised, however mostly moulded one piece plastic chairs were in use. Some spaces had colour coded furniture, taking care for surfaces to be of a colour and surface which did not impede visibility. Furniture used for storage included teaching stations with drawers and cupboards; 'white board cupboards'; mobile cupboard units and trolleys; full height cupboards; adjustable height shelving with containers; and Units with tray storage. Secured screens used both as dividers to create a space, and for display space were used effectively. Minimal furniture was thought to distract less from teaching materials, and ensure more open classroom spaces to support access.

Interactive boards and screens were positioned at appropriate heights to encourage active student participation. Some classes had the luxury of both wall mounted and mobile screens which obviously allowed for much more flexibility including the ability to move the lesson to another area of the classroom which had better lighting at that time of day for example. Some teachers spoke of re-arranging furniture on a regular basis whilst others thought consistency was required for their students to identify with their space and relate to it – particularly students who have ASD and are resistant to change, or become disorientated by it. Blinds were not often used. However where they were required for controlling sunlight, roller blinds were preferred, with cords that were able to be clipped away.



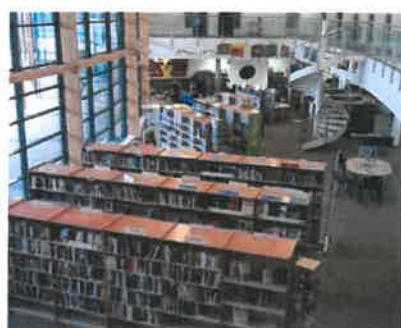
Many classrooms had ceiling-mounted hoist tracking fitted in case future use was required. Some schools used ceiling-mounted hoists exclusively whilst others used a combination, finding portable hoists to be more flexible and instructive. However, portable hoists were an issue when it came to space and storage when not in use.



Classroom spaces in NZ and Australian schools had small built in kitchen-style areas (containing sink, microwave, fridge, crockery and cutlery) which could be closed off when not in use, although this did not seem to happen often! These were not required in UK schools as the students moved to a communal eating area for eating, which is a concept that I believe would be beneficial to adopt in NZ. Eating is a social activity in most cultures, and gathering together in a space for such a purpose can provide role models and social skills learning. It would require an additional kitchen space for storing, heating and serving food. This would allow for a clear demarcation that classrooms are for other types of learning. A large multipurpose space within a school could allow for this and be used for other activities such as dance, drama, music or any combined class activities. It would become a 'social hub'. One such dining space visited also had audio-visual and ICT resources built in.



All schools had a purposeful, communal Library space – some opened onto a circulation area, but most were enclosed. They had a combination of formal and informal seating; books; computers with variable access; video and low tech display areas; and learning resource packs with objects of reference, visual cues, and books – usually thematic. Two libraries also included a toy lending section. Some staff commented on students being distracted when in libraries that were open to circulation while others spoke of strategies they employed to minimise such issues. Unmotivated students were able to 'exit' the area easily and quickly!





Most schools had at least one, often 2 large multi-functional spaces of 120+m² which could be used for PE, assemblies and school performances. In 2 schools this space also doubled as a collection point for school buses at the end of the day. These spaces were usually located centrally within the school or close to the entrance depending on usage. A large storage space for chairs, staging etc and another for PE equipment storage was essential. One or two had a smaller space nearby - usually for the arts – which could be opened up to extend the space. High ceilings with specialist lighting and sound added value to these spaces. Designated music spaces were common to all schools, with one Australian school and two UK schools having dance and drama studios with a range of sound and lighting equipment.



Teaching Kitchen spaces were in most all-age special schools, secondary special schools and three of the primary special schools. Most kitchens had height adjustable bench tops, however staff spoken to indicated that they were seldom used, and thought in hindsight to be an unnecessary expense. A comment was made that a shallower sink allowed a wheelchair user to get closer and use the sink as effectively than the height adjustable model. Having a bank of central power points in work benches / tables was considered extremely effective and safer as power cords were more contained. Mains controller boxes allowed for equitable access to learning activities by enabling switches to safely operate mains powered devices. Clearly labelled (again with text, pictures, symbols, objects of reference), organised kitchen cupboards and storage units.

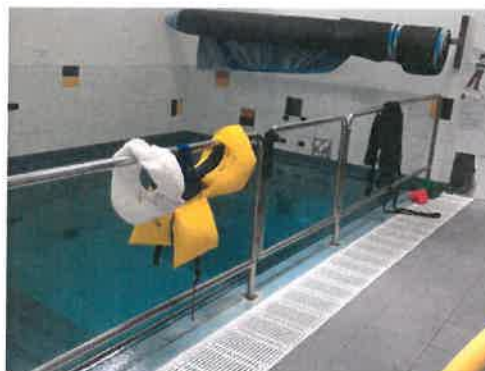


The UK schools visited had a designated space for Art. They mostly had sturdy loose tables which could be moved to suit lessons; some fixed perimeter benching with storage above and below; storage cupboard; plentiful natural light. Some had outdoor access. Two secondary schools had kilns and access to ICT for 2D and 3D art displays.

8 of the schools visited had a Hydrotherapy Pool. All schools spoke about the ongoing running costs and maintenance involved but without fail all said it was one of their most successful and well utilised learning spaces. All consisted of a secure access and reception area; the pool with a wide surround to accommodate staff and student access; student showering / changing / toileting spaces / staff changing / showering / toilet space; teaching equipment storage area; Pool equipment (including chemicals) secure storage area and a control room. Seven used ceiling hoists to transfer non ambulant



students from changing areas to poolside. Some also used poolside hoists. Pool edges with a strong colour contrast to the water gave good visual cues to pool users. Most pools had sloped / graded depth with a shallower end having steps and a handrail for access. Most pool areas had clear lines of sight for supervision, and five had alarm systems with a light outside and an alarm in admin area to call for prompt assistance. Electronic pool coverings were preferred by staff for ease of use. All had specialist supply and extract ventilation systems. The UK school pools also had lighting and sound features – one had underwater lighting and a water fountain, which could be switch activated.



Student Toilets / Hygiene Spaces – need careful consideration



to ensure they provide space for support whilst meeting an individual's need for privacy; are age appropriate, are large enough to work in without wasting precious 'square metres' required for other spaces within a school. Toileting spaces that were clearly located within 15 – 20 metres from teaching spaces / play areas were thought to be 'user friendly'.



Separate toilet provision for boys and girls of all ages using cubicles of a height suited to the age range of users – i.e. screening which allows for both supervision and privacy – but roomy enough to allow for staff assistance if required. Visibility into hand washing areas from both doorways and windows enabled security and supervision without compromising privacy. Colour coding of toilets to match learning areas was used by several schools. Most schools did not have urinals, and none had communal urinals.



'Accessible' toilets for students were included in hygiene rooms, which tended to be unisex. All schools visited used height adjustable changing tables in their hygiene rooms, with only three having Standing change stations available. All used ceiling hoists, which tracked from classrooms. All had showering facilities and had showering table and chair, with 'sloped floor' drainage. Four had sluices in the room. All were heated, and all had artificial lighting. Some used a combination of natural and mechanical ventilation systems, but when visited all were deemed effective! All used lever style tap handles in hygiene spaces, most with 'mixer' taps. Five schools had 'alarms' as already described above 'pool' area.



All but one school had one Laundry and two schools had two. Two schools used them as teaching spaces in addition to general school use. All were purpose built, centrally located with benchtops, cupboards, washing machines (x2) driers (x2) and appropriate shelving. Five also included sluices and large style wash basins. In two schools the laundries opened to an outside area in which to hang items for drying.

Space – Staff: In some of the schools visited, Teachers had shared office spaces between classrooms which had high levels of glazing for transparency. These were deemed to promote co-operative working and collegial support. Teachers had very mixed responses both for and against them. One big issue was sharing an office space with a colleague who had differing ideas of organisation and tidiness! In the other schools, teachers had a desk and designated area in teaching spaces, with secure cupboards. As most networks were accessible wirelessly, planning and preparation occurred in classrooms, staff workspaces, staffrooms or even offsite.



All schools had a separate Staff Workroom & Resource Space. Some were located centrally within the school, whilst others were near the admin area and shared certain resources such as photocopier. All had networked ICT facilities; laminators; audio-visual equipment; storage for specialist equipment and a large area / table for staff to work at. Most had artificial lighting.



Staffrooms varied in size (65 – 75m² average) but all had good natural light, access to an outdoor area away from students, space for personal items, comfortable furniture and kitchen facilities that allowed for easy flow of staff at busy times. 50% had noticeboards and work related materials. Most had outdoor flow. All had staff toilet facilities nearby the staffroom (three schools included showering facilities with these), and a separate bank of lockers for storage of personal baggage, clothing etc in an alcove off the main corridor. Other toilets



were placed throughout the school for convenience of use. Whilst most were separate male / female facilities, all accessible toilets were unisex. Three schools had warm air hand driers which were popular amongst most staff spoken to, although a few thought these were not as hygienic as paper towels and may not be energy efficient. Staff toilets were not used by students.





In most schools visited the Principal's Office included a large meeting area in or adjacent, with dividing doors. All were located near the school entrance and reception area. All had the Deputy Principal's office next door or across a passage way. All had the ability to cover glazed areas to ensure privacy as necessary. Other senior staff offices were located strategically within the school, and were shared spaces. Itinerant Teachers office space was usually a shared space located near to admin. Adelaide and UK Schools had designated office space for Visiting Professionals to use. These also included ICT facilities.

All schools had at least one space large enough for staff Meetings, and were equipped with tables, chairs, audio-visual and ICT facilities. Most had blackout curtains – which were automatically controlled at one school. Two schools had adjacent spaces which could be opened and joined up if further space was required.



Caretakers (Property Managers) all had an office and a workshop area. All the UK schools had electronically controlled services systems. Cleaners had a designated space large enough for secure storage of items and some work benches. Caretakers and cleaners shared staffrooms and staff toilets.

All schools visited employed Technical Support Personnel – some full-time, and couple were 3 days per week. All had a small allocated office space appropriately situated e.g. nearby server room, with a work bench and a small storage area.

Space – Support: First Aid / Sickbay 12m² which is visible from reception via window (if not staffed separately), and with easy access to toilet facilities. One school had a suite of rooms which constituted a sick bay, medical room (30m²) for visiting practitioners to hold clinics; and a toilet / showering change space. Schools in the UK and Adelaide employed a full time nurse. All had window and door security, lockable cupboards and a fridge, ceiling-mounted hoists and ICT.

Three schools had a designated Parents' Room (sited near to the reception area). They were set up with informal seating; tea & coffee making facilities with a small sink and fridge; a work station with computer; information displays and information materials available. They were used to host parent network groups, a space for parents



spending time with their children to retire to other than the staffroom, as a 'drop in' space as needed, and provided parents access to ICT if not available at home. Whilst they were not consistently used throughout the day, all the staff spoken with felt they added value to the school community and would recommend having such a space if possible. A staff member needed to be designated to 'oversee' the space, and this was generally the reception personnel.

Therapy was predominantly delivered within class spaces, however the UK schools and one Adelaide school had one specialist space (20 – 35m²) set out for sensory integration and soft play activities. All staff reported these to be well used and recommended in any building plans. SLTs / OTs / Psychologists were able to utilise another multi-purpose smaller teaching space when required.



Every school had Sensory Spaces. Two schools had small spaces attached to one corner of each classroom, which appeared to have regular, but limited use. The rest had a reasonably sized designated space (20 – 25m²), set out with multisensory equipment, including ICT. One school had a multi-modal sensory studio large enough for a whole class however I could not see the benefit of that for meeting the needs of individual learners – it appeared to overload senses and become distracting when all was working!



None of the schools visited had Calming Rooms (withdrawal rooms) however there were plenty of quieter spaces / outdoor spaces that students could access, including spaces within internal corridors. One staff member only would have preferred a designated area.

Three schools had a designated Domestic Space set up with domestic furniture such as a bed, sofa, and games area for learning related to activities of daily living.

STORAGE Space – It is official – storage is a universally salient issue in all special education facilities! Having adequate and effective storage space is vital to support teaching and learning. Storage of students' clothing and bags varied, often even within schools. Older students were usually furnished with lockers – younger students with hooks on mobile trolleys or in a cloakroom, housed outside the learning space. Mobility Aids, for example take up a considerable amount of space, as each user can have up to 3 bulky pieces of equipment which need to be accessed easily throughout the day and stowed out of general circulation when not in use. Some schools provided storage bays along corridors between classroom spaces (up to 10m²) and / or additional storage cupboards built into the classroom spaces, utilising roller or foldaway doors at either end. Staff attention to tidiness and stacking was highlighted in the success of both of these solutions!



Learning and Teaching Resources and Equipment was another contentious aspect



of storage. Some resources such as PE, Music, Art etc were centrally stored near to, or within relevant activity areas (students did not focus all their learning in the one classroom space, but moved to other spaces for specific lessons). Some classrooms had a wall of built-in cupboards for storage of resources. Two schools had all resources on high shelving outside the classroom above student bags etc which kept classrooms 'clutter free' but had the potential for looking very untidy from a visitors point of view! Others used mobile furniture (as described earlier) which could also be used to create areas within teaching spaces. Storage of Specialist Furniture and Resources, even on a temporary basis, was an issue for all schools. Even therapy storage rooms which were 4-5m² were deemed to be "not big enough"! Despite that, they were conveniently sited nearby the therapy offices and thereby thought of as accessible and more useful. Large play equipment such as



bicycles and some sports equipment, and Horticultural Equipment were usually housed in external secure storage areas.

Toilet / Hygiene Rooms with readily accessible storage for disposables and personal belongings / clothing changes with 'secure options' if necessary.

A purpose built secure storage space within the admin area for stationery, confidential papers and records was deemed essential by all schools, including the most digitally enhanced!

Outdoor Areas: Having the classroom open out to a covered outdoor space of up to 3m², forming a transitional space between inside and outside was observed to be very useful in most seasons. Most schools had outdoor spaces attached to classroom spaces, which in turn opened into larger communal play areas. Some spaces were able to join up together with the neighbouring space.



'Open fencing' with secure gates, appropriately scaled, were used to divide areas, to add variety to spaces and for visibility and supervision. Large scale play equipment usually had its own fenced area with regulation safety ground covering.



Most schools had a grass pitch for sports. Two exceptions were inner London schools which were co-located with a mainstream school. They had a roof-top area with high fencing. They were technically able to use the neighbouring school's facility but found timetabling made this happen rarely in practice.



Schools with secondary aged students had internal and external social spaces with appropriate seating for 'hanging out'.



Most schools had horticultural spaces for growing vegetables in raised box gardens. Many had greenhouses on site for propagation. Several schools had plans for sensory gardens to be created. Landscaped paths were used for mobility training and orientation. Two schools had built nature trails using wide sheltered pathways, with regular opportunities for sitting, to ensure easy circulation. Sensory planting and garden features added value to the overall school environment and sense of wellbeing.



Other Details:

Provision of visual and / or tactile contrast between surfaces and features was deemed to be helpful with both wayfinding and orientation. Some effective examples were between door handles and the door surfaces; between walls and doors; wall and floor surfaces.

Use of colour was a feature of all schools. Some were very bright and busy. Staff either found this stimulating or difficult, both opinions being backed with statements relating to stimulation of students. Pastel or subdued colours were thought to contribute to calm environments as they were more soothing. Bursts of colour were used effectively in some schools. Patterns did not appear to be used much, with some staff mentioning that they impeded clear vision for many students.

Sound absorbing surfaces on ceilings, walls and flooring helped with acoustic issues that arise for many students who have special learning needs.

Natural lighting was deemed to be optimum to enhancing sight, however some schools which were positioned to capture sunlight found that glare from direct or reflected sunlight became an issue at certain times of the day, requiring blinds to be installed. Many schools had sensor activated electric lighting. This is liked by most staff. One principal commented that it eliminated the constant reminders to turn off lights when leaving rooms!

Higher ceilings provided a sense of space, and often gave access to additional light sources.

Under floor heating was a preferred option in NZ and Australian schools, with some supplementing that with heat pumps. In UK schools central heating was favoured. Fan heaters were thought to be a source of background noise which interfered with students' concentration. Effective ventilation was also important features in schools. Most schools had a mix of natural and mechanical ventilation.

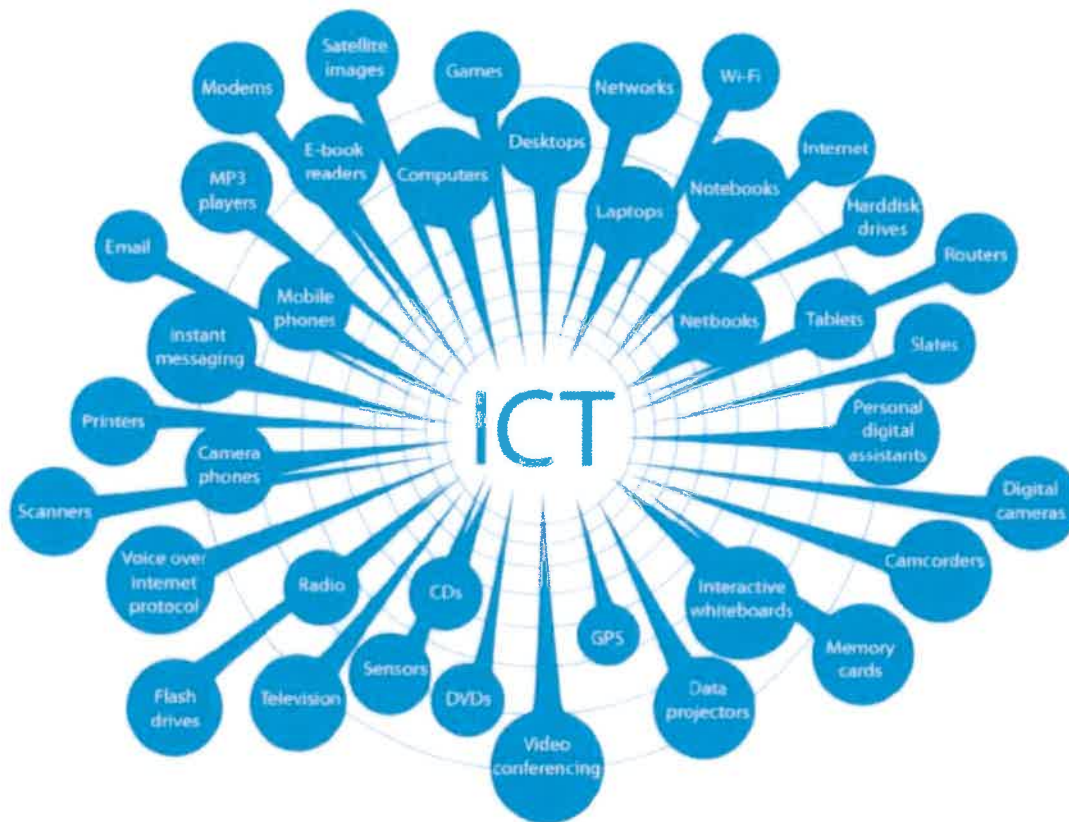
Digital Technologies:

Literature suggests an innovative physical environment does not support 21st century learning without the right kind of teachers, the right kind of relationships, the right kind of pedagogy, and an expansive toolkit of teaching and learning tools that can be utilised to allow for personalised learning.



Digital technologies are a vital tool for supporting and facilitating learning and teaching. While the aging teaching population endeavours to keep up with technology, many students use it constantly in their everyday lives, to the extent that isolated teaching of the skills has practically become an invalid activity. Blending the use of technologies specifically chosen to support learning objectives is more relevant. Teaching in a technologically rich learning environment enables staff to purposefully increase equitable access to education for learners with significant impairments who may not otherwise have such opportunities. With the range of technologies available rapidly increasing teachers need to be constantly upskilling their practice in this area.

Figure 3.3. Common and emerging innovations of technology in learning environments



Source: UNESCO (2010), *ICT Transforming Education: A Regional Guide*, UNESCO Publishing, Bangkok.

Radcliffe (2009) believes that both the real and virtual dimensions of pedagogy, technology and the design of learning space are all vital and there is a relationship between the three. He maintains that each of the three elements influence each other in an interdependent fashion. For example, a desired pedagogy may influence the shape and use of a space, or a space size and shape may affect the technology opportunities (or constraints) offered within it. He suggests that “pedagogy seems to

be the first logical element, then space and finally technology” (p. 14). This does not, however, suggest a hierarchy, but rather an entry point into an iterative process.

Findings:

Digital technologies were used widely throughout the schools I visited for management, safety and security systems, as well as for teaching and learning. Schools were networked and had wireless capabilities, with most being able to deliver flexibility through careful planning. Staff used ICT for internal communications, management and administration, monitoring progress, planning and preparing differentiated learning resources. Platforms such as Google Docs and Office 365 were utilised. One DP explained – *“It’s not about using technology for the sake of technology; it’s about using it to share work easily and to collaborate. It’s supposed to make our jobs easier and better, not harder!”*

In regard to learning, ICT was used predominantly within teaching spaces – only one school visited had a ‘technology suite’ which classes utilised. In some schools ICT was clearly articulated as both a subject for targeted teaching AND a tool to support and facilitate teaching and learning. In other schools this concept was not clear. I saw teachers and students using interactive whiteboards and / or LED screens; computers; laptops; iPads; notebooks; and other specialized technologies - many with switch access. Some articulated the reason for why students were using a particular piece of equipment to support a learning goal – others referred to it as ‘computer time’. In the UK schools, most teaching spaces were fitted with large screens and docking stations for laptops, had several networked computer workstations; whiteboards or other interactive teaching technologies. In all schools students had access to specialist devices to assist them to access ICT. There was often a mixture of wireless and wired technology offering access as and when students need it, within the flow of their learning. Individual work areas or carrels were used when students needed a distraction free area. Both ceiling mounted and short throw projectors were used.

Conversations around the role and use of ICT in their new schools tendered to elicit responses that were issues rather than positive statements. A common concern was increasing costs - both in time and money - for ongoing purchases, maintenance and repair of infrastructure, but also related to professional development. As one Principal honestly reflected it was difficult, but important, to get some teachers beyond the point of technology acting as a very expensive ‘timetable filler’, whereas other teachers were really keen to learn, improvise, trial and modify use of technology across the whole day. One Lead Teacher commented that a school can be seen as a ‘modern 21st century school’ or a ‘good school’ by parents simply because a school has a lot of technology, rather than the technology being purposefully used to improve students’ reading, writing, and mathematics for example. This put pressure on teachers to ensure they were seen ‘using technology’ but did not mean they reflected upon how and why it was used. Issues related to plagiarism and internet security were alluded to but not discussed in any detail. Adelaide and London schools commented on the commitment and support schools received with regards to technology from their local authorities.

Change:

The change to an Innovative Learning Environment (ILE) involves a physical change - and much more. Literature suggests that a change to ILE involves an organisational change, a change in teaching and learning, and arguably, a change in culture. It is debatable whether a cultural change can be made directly or whether it emerges as a result of the other changes. What is apparent is that a change as significant as this requires the change agents, or leader(s), to have an intimate understanding of the culture of the school and the wider school community.

Moss Kanter (1983) has described change as disturbing when it is done to us, but exhilarating when it is done by us and we are included in the momentum and excitement of the change. She propounds that “masters of change are also masters of the art of participation” (p. 241). A corollary of this is that a clearly understood school vision is needed to lead any change to an innovative learning environment.

Woolner et al. (2012) also consider the relationship between the setting and educational activities, and while they conclude that “physical space has been found to entrench practice, making it harder to reflect and make changes ... changes made to the physical environment may not lead to changes in teaching or learning” (p. 45). Good practice is likely to occur where there has been consultation, a sense of ownership, professional development, and openness to new practices and flexibility.

Findings:

Six of the Principals I met were not the leaders who facilitated the new school builds, and there often seemed to be no carry through of the pedagogical rationale for the school building. I regularly heard statements such as “I didn’t plan this building – I can’t see why they created this space - I have no idea of the thinking around this area ... “. Whilst all leadership staff spoken with were happy to discuss physical features and attributes of their school, very few shared pedagogical explanations or rationale – most were personal preferences and aesthetic style comments. Random reasoning for spaces existence as in – “we’ve always wanted a space for” – was common, but seldom expressed within a pedagogical vision.

One Principal did articulate this very clearly and consistently. The new school building was viewed as an important enabler for the change to more learner-centred and personalised practices. Openness of practice and shifting mind sets to the flexible use of teaching spaces, and the concept that the days of ‘shutting the door and teaching within four walls’ were now in the past was discussed. Incorporated in the shift of the mind-set of some staff to a MLE were the challenges that occurred when staff no longer had ‘ownership’ of a space or equipment. Staff who had been used to having ‘their own’ classroom were challenged by the reality of sharing areas and equipment with others. ‘Ownership’ and caring for equipment was another challenge identified. Previously if a teacher / class ‘owned’ a set of Math equipment for example, they would take responsibility for them. Communal ownership was causing angst amongst staff when equipment was lost or damaged. This was a challenge that they were still problem solving through! There was acknowledgement that ‘unlearning’ established pedagogy is challenging. The need for some personalised spaces to meet the personal emotional needs of ownership and belonging for either teachers or students was a compromise that had been made albeit reluctantly on the Principal’s behalf. Interestingly the Deputy Principal at the same school described the Principal as

'somewhat precious and pedantic about the new school' and obviously did not share the same 'bigger picture thinking'.

I am in agreement with Hawley, Miles & Frank (2008) who note that the openness of senior leaders to address macro-organisation to support pedagogical change is crucial to ensure a successful change process. In other words senior leaders need to address the whole 'big picture' issues for the school, allowing their vision to lead the change process and to keep the students at the centre of any decisions regarding practices and structures.

It appeared that some of the school leaders were continuing to progress their school towards being an ILE, despite not having initiated the change, albeit piecemeal and slowly. One principal acknowledged the concept of ILE as an 'ideal' situation, but admitted it is not one that they were actively following at their school. While they had a ILE in some ways, they felt that staff had largely 'retrenched' into teaching their own classes separately. The difficulties in changing some ingrained staff mind-sets to being open, visible, and truly collaborative was a common barrier to change across all schools. Perseverance on behalf of the leadership team appeared to be a key difference to how much this barrier impeded progress towards being an ILE.

All leaders made reference to the relationships between staff as being highlighted by the move to their new facilities. The shared practice of an ILE relies comprehensively on relationships of trust and mutual respect between staff. Having more visible classroom spaces, combined with the fact that staff were expected to share office spaces, teaching spaces and to work together to plan, teach and assess work created difficulties for some staff initially. Being an open practitioner necessitates being open to critique, taking and receiving complements and having difficult conversations. These are aspects which reflect the culture of a school and need to be worked with and monitored continually as dynamics can change with staff changes.

On a less theoretical level, there were also practical day to day issues that required addressing when finally occupying the new buildings. The timing of a move is significant and should be carefully planned for if possible. Giving staff enough time to familiarise themselves with new layouts and equipment was highlighted. Some schools who were rushed into the move found the confusion of staff and students not knowing where to go contributed to anxiety and stress, which was also present simply when items could not be found or would not work. Whilst social scripts and visits to building sites went some way to preparing students for their changed environment most were not completely at ease in the new school environment. Anxious staff and stressed students was not a good combination.

Several Principals mentioned that the quality of school accommodation can affect staff performance and they felt their new buildings had a direct correlation to recruitment and retention, and staff wellbeing. They observed that their new environments in the main did help to minimise stress and contribute to the effective and efficient running of the school.

One parent from Beatrice Taite School in East London actually commented that she had never expected her child to be able to attend such a wonderful, modern school. She said she had had to bring the whole family to see it as no one had believed such a school would be built in their area. What a wonderful legacy to be able to leave your community!

Concluding Thoughts:

A well designed environment enhances the educational experience for all – staff and students. I concur with the literature that advocates good spaces enable, but do not guarantee, good educational outcomes whilst poor spaces will adversely impact educational outcomes.

Schools need to be flexible for everyday use and adaptable over time to meet the current and future needs of students attending them. School environments should promote safety & security, health & wellbeing, dignity and respect, in addition to supporting learning therefore the pedagogical vision upon which the building is founded needs to be jointly determined, gaining input from staff, students and the wider community. That is surely a component of effective leadership.

The school buildings and grounds, furniture and fixtures provide a context for effective teaching and learning. My sabbatical has provided me with much to think about with regard to future development in the environment of Sir Keith Park School. The challenge will be how we upgrade our old site to a more an innovative learning environment should the Ministry of Education fail to follow through with the plan of rebuilding. Either way, the whole school community will need to be involved. Obviously the new building will exist for many future learners, educators and leaders, not solely for those who have the good fortune to create it. It will be a legacy for our educational community.

Ultimately - one needs to remember that a school is more than a building – it is the people in the school that are essential to its success. As one principal said “ we had a successful school in poor buildings; the new building has enabled people to be more effective due to the resources available to supplement their work.” It is not just the spaces, but how teachers (and learners) use the space, how they develop innovative and engaging learning experiences that really make the space come alive. It sometimes takes time for teachers to get their heads around this, as it involves changes beyond not just the four walls of their old classroom but their "mental" walls - how they perceive teaching and learning to be and the strategies and controls they are used to. Embedding the vision is the ongoing work once the building part is completed.

Sabbatical Questionnaire For Schools:

1. Planning your new school:

Who was on the building project team?

How were staff, students, parents involved in / and supported during the process?

Can you recommend any good literature / websites / schools to visit?

In hindsight, would you have done anything differently?

2. Learning Space Design:

How does your building reflect and promote your school vision and pedagogies.

How are the learning spaces configured / used? In what ways do they, or their use, support or hinder effective teaching and learning

What furniture works to promote your pedagogies? What doesn't?

Does the new environment promote collaborative approaches to teaching and learning?

In hindsight, would you have designed the building differently / changed any aspect?

3. ICT:

What digital technologies are used in your school to promote teaching and learning?

How did you support staff to utilize digital technologies in their teaching? What works well? What doesn't?

What are the ongoing liabilities connected to the use of digital technologies? How do you manage them?

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